Mental Health and Illness Worldwide
Series Editors:
Norman Sartorius · Ee Heok Kua

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Marc H. M. Hermans · Tan Chay-Hoon
Edmond Pi *Editors*

Education about Mental Health and Illness

Springer

Mental Health and Illness Worldwide

Series Editors
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Association for the Improvement of Mental Health Programmes (AMH)
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Most books on mental health and illness are published for readers in North America and Europe, and not much is known about psychiatric practice, services and research in Asia, Africa, and South America. This series will include contributions of clinicians and researchers worldwide. Each volume will cover broad issues including epidemiology, cross-cultural comparison, clinical research, stigma of mental illness, cultural issues in mental healthcare, health economics, innovative services, preventive programs and health service outcome research. The volumes will find a wide readership among psychiatrists, psychologists, sociologists, health policy makers, social workers, health economists, anthropologists and philosophers. It will provide the readers a broader perspective of mental health and illness worldwide and also future research initiatives.

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Editors

Education about Mental Health and Illness

With 15 Figures and 30 Tables

Springer

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Preface by Series Editors

Psychiatry lives exciting and challenging times. Advances of knowledge stemming from basic sciences and epidemiological and clinical research have provided a better understanding of the etiopathogenesis, psychopathology, and natural history of mental disorders. Improved methods of treatment have changed clinical practice and prolonged the life of people with mental illness. Economic consideration and the emphasis on human rights of people with mental illness made a profound impact on the way in which psychiatry is to be practiced.

Regrettably, however, psychiatry is not practiced in the same manner around the world. Undergraduate and postgraduate education in psychiatry varies in content and duration from country to country. Psychiatrists use different doses of medication for the same disorders. The systems of care for people with mental illnesses differ in the organization and content of their interventions. Support to scientific investigations of matters related to psychiatry fluctuates and in many countries amounts to very little.

Information about the function of psychiatric services varies in quantity and quality. The series of seven books on Mental Health and Illness Worldwide aims to help in reducing these differences and facilitate international collaboration in psychiatry. We have invited top experts from different countries to edit the volumes, and they have in turn selected authors from different parts of the world. We have also decided to approach the body of psychiatry from a public health and epidemiological perspective rather than have books dealing with different groups of diseases. The series includes books examining and presenting knowledge assembled according to social and public health variables – gender, urbanicity, migratory status, age, and education. Each of the volumes has adopted a wide perspective and included chapters based on knowledge stemming from epidemiology, on results of the investigation of cultural issues, on the best of psychopathology, on the results of the investigation of biological factors, mental health care and its innovations, health economics, and experience gained in preventive programs. The volume editors have agreed to aim at producing volumes marked by the balance of information and knowledge from basic social and behavioral sciences and from clinical practice.

The seven volumes of this opus are:

1. Mental Health and Illness of the Elderly
   Editors: Helen Chiu (Hong Kong) and Ken Shulman (Canada)

2. Mental Health and Illness in the City
   Editors (Denmark): Povl Munk-Jorgensen, Niels Okkels, and Christina Kristiansen
3. Mental Health and Illness of Women
   Editors: Prabha Chandra (India), Helen Herrman and Jane Fisher (Australia)
4. Mental Health and Illness in Rural Communities
   Editor: S. Chaturvedi (India)
5. Mental Health and Illness in Migrant Populations
   Editors: Driss Moussaoui (Africa), Dinesh Bhugra (United Kingdom), and Antonio Ventriglio (Italy)
6. Mental Health and Illness of Children and Adolescents
   Editors: Eric Taylor (United Kingdom), John Wong (Singapore), and Frank Verhulst (Netherlands)
7. Education About Mental Health and Illness
   Editors: Marc H.M. Hermans (Belgium), Tan Chay-Hoon (Singapore), and Edmond Pi (USA)

We were delighted to see that the volume editors have succeeded in recruiting outstandingly knowledgeable authors for the chapters of their books. Most of them have received worldwide recognition for their contributions in their fields of specialization, and all of them have written their texts with authority and excellent judgment concerning the materials to be included.

We believe that this series of books demonstrates the importance and value of interdisciplinary and international collaboration and that it will provide readers a global perspective of mental health and mental illness. We also hope that it will help to make our discipline more homogenous and bring its practitioners worldwide closer together in the pursuit of helping people with mental illness worldwide.

It is our pleasure and a privilege to thank Dr. Hermans, Dr. Chay-Hoon and Dr. Edmond Pi, editors of this volume dealing with Education about Mental Health and Illness – the seventh of the series – for their hard work and for their insights and dedication to excellence.

Norman Sartorius
Ee Heok Kua

Preface by Volume Editors

This volume on educational aspects of mental health and more particularly illness focuses only on some out of a broad spectrum of possible subjects.

The first chapters address more general aspects like resilience and hope (Catapano et al.) and leadership style (Ventriglio et al.). The next ones focus on subgroups: intellectually disabled patients (Courtenay et al.), geriatric patients (Vahia et al.), a culturally inspired approach from Central Africa (Ndetei et al.), and medical specialists (Kamalika et al.) and psychologists (Hodiamont).

Chapters about ethics (Groß et al.), family therapy (Raes et al.), forensics (Goethals), global perspectives (Tasman et al.), and nursing (Chan) offer a view on the broader field of our profession before teaching aspects about e-learning (Caputo et al.), psychiatry in general practice (Hersevoort et al.), psychodynamic psychiatry (Botbol), and neurobiology (Sabbag et al.) enter the scene.

Two chapters describe the actual status in postgraduate (Hauff) and undergraduate (Mahendran) training followed by some addressing more specific subjects such as exchange programs (De Picker et al.), psychopharmacology (Baumann), psychotherapy (Schweiger et al.), and telepsychiatry (Mucic et al.). Last but certainly not least, the word is given to patients: what do they expect from a psychiatrist (Arteel)?

The volume editors want to thank all authors for their willingness to contribute to this volume. Providing a dynamic version of all chapters on the publisher's website might be welcome for those readers looking for updated information.

Marc H.M. Hermans
Tan Chay-Hoon
Edmond Pi

Contents

Series Editor Biography

Professor Norman Sartorius obtained his M.D. in Zagreb(Croatia). He specialized in neurology and psychiatry and subsequently obtained a Master's Degree and a Doctorate in Psychology (Ph.D.). He carried out clinical work and research and taught at graduate and postgraduate levels at the University of Zagreb, at the Institute of Psychiatry in London, at the University of Geneva, and elsewhere. Professor Sartorius joined the World Health Organization (WHO) in 1967 and soon assumed charge of the program of epidemiology and social psychiatry. In 1977, Professor Sartorius was appointed Director of the Division of Mental Health of WHO. He was the Principal Investigator of several major international studies on schizophrenia, depression, and of mental and neurological disorders. In 1993, Professor Sartorius was elected President of the World Psychiatric Association (WPA) and served as President-elect and then President until August 1999, after which he was elected President of the European Psychiatric Association. Professor Sartorius is currently the President of the Association for the Improvement of Mental Health Programmes, and he is a member of the Geneva Prize Foundation, having been its President from 2004 to 2008. Professor Sartorius holds professorial appointments at universities in different countries including China, UK, and USA.

Professor Sartorius has published more than 400 articles in scientific journals, authored or coauthored 12 books, and edited more than 80 others. He is the coeditor of three scientific journals and is a member of editorial and advisory boards of many scientific journals. Professor Sartorius is also a corresponding member and fellow of a large number of international

organizations and advisory boards. He has several honorary doctorates and is a member of academies of science and of medicine in different countries. He speaks Croatian, English, French, German, Russian, and Spanish.

Ee Heok Kua is the Tan Geok Yin Professor of Psychiatry and Neuroscience at the National University of Singapore (NUS) and Senior Consultant Psychiatrist at the National University Hospital, Singapore.

He was trained as a doctor at the University of Malaya and received postgraduate training in psychiatry at Oxford University and geriatric psychiatry at Harvard University.

A member of the World Health Organization team for the global study of dementia, he is the previous Head of the Department of Psychological Medicine and Vice Dean, Faculty of Medicine, at NUS, and the Chief Executive Officer and Medical Director at the Institute of Mental Health, Singapore.

His research interest includes depression, dementia, and alcoholism, and he has written 23 books on psychiatry, aging, and addiction. A novel he wrote, *Listening to Letter from America,* is used in a module on anthropology at Harvard University.

The former President of the Pacific-Rim College of Psychiatrists and President of the Gerontological Society of Singapore, he was Editor of the *Singapore Medical Journal* and *Asia-Pacific Psychiatry* journal.

About the Editors

Marc H. M. Hermans graduated from medical school at Katholieke Universiteit Leuven (KU Leuven – Belgium). He went into general practice for about 10 years (1979–1990). He started his psychiatric training at the University Psychiatric Centre (Kortenberg, Belgium), and after 1 year neurology training in the general medical hospital, Imelda (Bonheiden, Belgium), he finished his training at the residential adolescent psychotherapy center, De Viersprong (Halsteren, the Netherlands). He became accredited psychiatrist in 1995 and accredited child and adolescent psychiatrist in 2006.

He started his career in the Community Mental Health Care Center in Mechelen next to a private solo practice in Mechelen. He later initiated a group practice in Sint-Niklaas (Belgium), now working together with two other child and adolescent psychiatrists and five child psychologists-psychotherapists.

He is a certified family and system therapist and certified psychoanalytic psychotherapist. He took supplementary training in group therapy, transactional analysis, and hypnotherapy.

He is founding member of the Belgian Professional Union of Medical Specialists in Psychiatry and of the Flemish Association of Psychiatry. He has been board member of the Flemish Association of Psychiatrists-Psychotherapists; the Flemish Association of Neurologists, Psychiatrists and Neurosurgeons; and the Flemish Association for Psychoanalytic Psychotherapy. He is founding and board member of RINO Vlaanderen, a foundation offering postgraduate training on child and adolescent psychodynamically inspired psychotherapy.

He recently became a member of the board of the Flemish Association for Child and Adolescent Psychiatry.

He is immediate past president of the UEMS Section of Psychiatry and vice president of the Union Européenne de Médecins Spécialistes.

He was involved in numerous educational activities in Belgium and on an international level as member of the Committee on Education within the European Psychiatric Association and the Operational Committee on Education of the World Psychiatric Association.

His main fields of interest as reflected in publications and lectures at congresses are promoting high standards for psychiatric training and practice and psychotherapeutic approaches in psychiatric practice.

Dr. Tan Chay-Hoon, President elect and council member of Asian College of Neuropsychopharmacology (AsCNP), is a visiting consultant psychiatrist at the National University Hospital as well as Associate Professor at the Department of Pharmacology, National University of Singapore.

Dr. Tan was trained as psychiatrist in Singapore. Subsequently she received multiple fellowships that enabled her to acquire expertise in neuropsychopharmacology at Kansai University, Osaka; University Health-Science Center, University of Texas; Massachusetts General Hospital; and Harvard Medical School. She conducted research on signal transduction and psychotropic medication in subjects with psychiatric disorders and was awarded a Ph.D. in Pharmacology.

She is one of the founding coordinators of the REsearch in Asian Psychotropic Prescription (www.reap.asia) since 1999, mentoring psychiatrists and contributing to the prescribing practice of psychotropic drugs in Asia. She is also member of World Psychiatric Association, Section on Urban Mental Health.

Dr. Tan is passionately known for her contribution to medical education. In addition to being an "Excellent Teacher," she conducts medical education workshops both locally and internationally and has mentored numerous health professionals. She has received multiple University Excellent Teaching Awards from 2002 to 2017 and has been named the National University of Singapore Faculty Outstanding Educator in 2016.

Edmond Pi M. D. is Professor Emeritus of Clinical Psychiatry and the Behavioral Sciences at the University of Southern California (USC) Keck School of Medicine, Los Angeles, California, USA. Professor Pi previously served as Executive Vice Chair, Associate Chair for Clinical Affairs, and Director of Residency Training Program of the Department of Psychiatry at different medical schools in the USA. He is a Clinical Professor of Psychiatry at the University of California Los Angeles (UCLA) David Geffen School of Medicine. Dr. Pi is certified in the specialty of Psychiatry and the subspecialty of Psychosomatic Medicine. Dr. Pi is former Medical Director of the Department of Mental Health (DMH), State of California. He was the department's highest-level psychiatrist and was responsible for ensuring the development and implementation of statewide mental health treatment services.

Professor Pi has been consistently acknowledged as a valued educator and received many outstanding teacher awards for his excellent teaching and clinical supervision. He is an accomplished researcher in the fields of cross-cultural psychiatry and psychopharmacology with more than 150 publications including authorship in psychiatric textbooks.

Professor Pi has been very active on both the national and international mental health scenes in the past 40 years, including President of the Association of Chinese American Psychiatrists, Vice President and Treasurer of the Pacific Rim College of Psychiatrists, Chairperson of the Committee of Asian American Psychiatrists, Chair and Vice Chair of seven Minority and Underrepresented (M/UR) Groups, and Member of the Assembly Executive Committee of the American Psychiatric Association (APA). He is a Distinguished Life Fellow of APA; International Associate Member of the Royal College of Psychiatrists, UK; and Honorary Fellow of World Psychiatric Association (WPA). Currently, Professor Pi serves as the Representative for Zone 2 (USA) within the WPA Board. Among his many honors, he is the recipient of the 2009 Asian American (Kun-po Soo) Award of the APA for his significant contributions toward understanding the impact and import of Asian cultural heritage in areas which have relevance to psychiatry. Dr. Pi is listed among the Best Doctors in America and America's Top Doctors.

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Global Perspectives on Psychiatric Education

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Allan Tasman and César A. Alfonso

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Abstract

This chapter provides comprehensive global perspectives on psychiatric education. The chapter is organized by presenting historical background information, some key aspects of the current context, specific review of medical student undergraduate and resident graduate education, and emphasis on the importance of educational research. The authors have been actively participating in psychiatric education for more than four decades throughout the world. They consider the cultural context as primordial in understanding and implementing educational initiatives. The authors discuss experiences with detailed review of the evolution of psychiatric education, through formal involvement in the leadership of the World Psychiatric Association (WPA) as Secretary of Education (Tasman), Chair of the Education Section (Tasman), and Co-chairs of the Psychotherapy Section (Alfonso and Tasman).

Keywords

Residency education · Medical student education · Low and middle-income countries · Psychiatry education · Cultural adaptations of educational models

Introduction

Any discussion of psychiatric education must begin by exploring the context within which psychiatric training and education occurs. This should be an obvious point, since training must reflect the current state of knowledge and treatment availabilities as well as the nature of the system of care within which practice occurs. In addition, a global perspective especially requires an appreciation of the resources available to support education in various locations and of the role of cultural influences of psychiatry within any particular country or region. The chapter is organized by providing a brief historical review, a discussion of some key aspects of the current context, specific review of medical student and residency education, and a brief exhortation to substantially increase educational research in psychiatry.

The Historical Context

One thousand years ago, in most cultures, people with psychiatric illnesses were widely believed to be suffering from afflictions by evil spirits or gods. Thanks to pioneering physicians in Central Asia such as Avicenna, Rhazes, and Ali Ibn Tabari (Javanbakht and Sanati 2006), the preservation of the rational and humane treatment of the mentally ill that had been championed by the Greeks was re-introduced into many cultures around the world.

Just over one hundred years ago, at the end of the nineteenth century, the themes that would occupy psychiatry in the coming century and thus influence educational programs were already in evidence. One theme has been the emphasis on understanding brain pathology in psychiatric illness, built on the work of Bleuler and Kraepelin in Europe. And, of course, 1899 marked the publication in Europe of Freud's *Interpretation of Dreams*, and the beginnings of modern psychoanalysis.

Less well known, however, is another work on which Freud was working at the same time. In the *Project for a Scientific Psychology*, Freud (1895) was attempting to understand the neural basis for psychological processes. While this work was not discovered or published until 1953, many years after his death, his century-old quest has marked one of the important preoccupations of modern psychiatry to explain psychic phenomena in neurobiological terms (Glucksman 2016).

What were the other preoccupations a century ago? Providing humane treatment for psychiatric disorders, understanding reasonable diagnostic classifications, overcoming substantial societal forces working against rational diagnosis and humane treatment, and developing effective treatments were clearly at the forefront. Building on the tremendous scientific advances of the late nineteenth century, the beginning of the last century marked a time of great optimism for what twentieth-century science would bring for psychiatry.

We are still preoccupied with many of the same issues as were our colleagues a hundred years ago, but, of course, in a way transformed by a century of experience and knowledge. We are still concerned with how the psychiatrically ill suffer irrational discrimination in many ways. Social ostracism, stigmatization, discriminatory governmental policies and corporate policies, discriminatory limits on access to care, and reimbursement for care are but a few manifestations of these ongoing worldwide concerns. And we are still working to develop more effective treatments based on an etiologically based system of diagnosis. The recently published WPA-Lancet Psychiatry Commission on the Future of Psychiatry (Bhugra et al. 2017) provides a look into how these current concerns may evolve in the coming decade.

The Current Context

Research Advances

Two of the most important discoveries of the recent decades are in the areas of neural plasticity and brain cell generation.

In 2000, the Nobel Prize in Medicine was awarded to Eric Kandel, the New York-based psychiatrist whose work established the fact that the brain is being continually remodeled, partly in response to developmental and environmental influences, a process we now call "neural plasticity" (Bennett et al. 1964; Pascual-Leone et al. 2005). This remodeling occurs via genetically controlled new synapse formation, as exemplified in the transition of information from immediate to long-term memory storage (Kandel et al. 2013).

Also, contrary to long standing previous belief, there is convincing evidence that new brain cells are continually formed from stem cells in the brain (Clarke et al. 2000). Both of these important findings open up many new avenues for research into brain function and dysfunction and development of new and more precisely targeted treatments.

At some point into the future, psychiatrists will learn to control these processes with more precision than is now possible. It is also true, however, that interpersonal experiences, such as a therapeutic relationship in psychotherapy, can alter brain function in the same way as medications (Roose et al. 2015; Linden 2006), as we have seen in studies of obsessive compulsive disorder (Baxter et al. 1992), generalized anxiety disorder (Jockers-Scherübl et al. 2006), social anxiety (Furmark et al. 2002), posttraumatic stress disorder (Linden 2006), and major depressive disorder (Brody et al. 2001, Goldapple et al. 2004).

Research on the "Recovery Model" of treatment (Anthony 2000) has shown that superior outcomes are seen when we both treat symptoms *and* work to enhance our patients' resiliency and their individual coping and adaptive capacities (Herrman and Harvey 2005). In addition, findings of the 2015 REACH study (Researching the Effectiveness of Acceptance-based Coping during Hospitalization) (Gaudiano et al. 2017) confirm that even for the most serious of all psychiatric illnesses, schizophrenia, treatment outcomes are better than with pharmacotherapy alone when psychosocial and psychotherapeutic interventions are part of the treatment. The REACH findings reinforce findings from other studies (Öst 2008; Powers et al. 2009), the subject of a review by Michael Balter in *Science* in 2014, which illustrated the superiority of treatment for schizophrenia when psychotherapy was a component. The Recovery After Initial Schizophrenia Episode (RAISE) study is a recent large multicenter study conducted in the USA examining the impact of having a multidisciplinary team that provide integrated medication and psychosocial treatments for patients with first episode psychosis. Psychotic patients who received psychotherapy and medication combination treatments had marked clinical, functional, and symptomatic improvement when compared to patients who received medication only treatments (Kane et al. 2015). When the same team of investigators examined the cost effectiveness of these interventions, they found out that benefits exceeded costs (Rosenheck et al. 2016). These advances reaffirm the position that for the foreseeable future, psychotherapeutic skills and the ability to develop and utilize a therapeutic relationship remain essential parts of psychiatrists' treatment skills and thus must be part of education programs.

With the continued expansion of our knowledge base, our roles in providing sophisticated psychiatric care will be enhanced. For example, ongoing neuroscience

and genetic advances will ensure that our pharmacologic interventions will continue to become more and more effective. A good example of this is the application of our knowledge of the cytochrome P450 enzyme system in clinical decision-making (Cozza et al. 2003). The cytochrome P450 enzyme system effects hepatic metabolism of many of the medications we use in psychiatry. This enzyme system has multiple alleles, and depending on the allele in an individual, metabolism of medications is affected. Poor metabolizers can have unusually long half-lives for drugs and thus a higher risk of toxicity or side effects. Extensive metabolizers may have great difficulty in achieving therapeutic levels with standard doses of medications. Understanding an individual's genotype will, in the future, allow better choice and monitoring of medications and will clearly improve clinical outcomes.

Another illustration of our advances in understanding of brain function and the interaction of genetic, environmental, and developmental influences involves our present day understanding of personality development. Psychiatry has traditionally defined personality from a categorical perspective. In this model of understanding personality, a set of characteristics, which cluster around certain traits, is defined as a specific personality type or a specific personality disorder. Over the last several decades, however, a more complex model of personality development has been emerging. This model has come to be known as the dimensional model (Widiger 2007). In this model, specific personality characteristics, which are generally identifiable very early in development and probably the result of genetic transmission, are modified depending upon the developmental environment of the individual. The genetically transmitted characteristics are referred to as temperamental traits. Examples of such traits in the Cloninger model (Cloninger 2000; Cloninger 2003) include novelty seeking behavior, risk tolerance, responsiveness to emotional stimuli, and aggressiveness.

No matter how advanced our pharmacotherapy practice, however, it is clear that for the foreseeable future, many patients with the most severe psychiatric illnesses will still require psychosocial and psychotherapeutic treatments for optimal outcomes. In fact, clinical outcomes research indicates that for many patients with depressive and anxiety disorders, for example, combined medication and psychotherapy treatment modalities provide better outcomes than any single modality alone (Cuijpers et al. 2014). The recent experience when clozapine was first introduced further illustrates the superiority of combining these treatment modalities (Ranasinghe and Sin 2014). Many institutionalized patients with chronic schizophrenia treated with clozapine had, for the first time, a positive response to medication treatment, with significant symptomatic relief. But the symptom relief alone did not allow for discharge from the hospital. Substantial psychosocial and psychotherapeutic treatment was needed to help them live in a new world of perception and experience no longer affected by the filter of their psychiatric symptoms.

Resource Discrepancies

The ability to construct and operate education programs is highly dependent on available resources. These resources include adequate clinical facilities, patient

access including diversity of diagnoses and demographic characteristics, faculty with both a wide range of knowledge and skills and support for teaching time, access to educational materials in a range of media, and a pool of potential trainees from which to recruit a group with a high likelihood of becoming skilled clinicians.

The World Health Organization (WHO) has published several reviews of the availability of both psychiatric resources and educational resources by country, the most comprehensive of which was published in 2005 (WHO 2005). While a later update in 2015 did not attempt to provide as much detail (WHO 2015), it shows that there have been almost no significant changes in distribution of resources over the course of a decade. Resource differences have a significant influence not only on the roles of psychiatrists in any particular country or region, but also on the educational programs. When there are few psychiatric treatment facilities available, the quality of the psychiatry education programs for either medical students or residents is significantly impaired. Thus, in a country where there are few psychiatrists and/or treatment facilities, those medical students who do not become psychiatrists will have had little exposure during medical school to well-supervised clinical experiences. And those students who might be interested in psychiatry as a career will be less likely to choose it for their professional training. These factors seriously impair delivery of psychiatric care to all but a few of the population as well as education programs. Many authors have discussed the impact of these resource discrepancies (Tasman et al. 2009; Alfonso et al. 2017).

Health Systems Changes

One of the challenges for psychiatric educational programs significantly involves the manner in which healthcare is delivered. No matter which system exists in any country, however, psychiatry and general health care almost always operate as separate systems with highly variable national or local integration.

Collaborative and integrated medical/psychiatric care appears to be the most desirable model for several reasons. There is a high co-morbidity of medical and psychiatric disorders in clinical practice. Additionally, a growing body of research demonstrates that collaborative medical/psychiatric care produces better clinical outcomes and results in lower death rates from medical illnesses (Katon et al. 1995, Roy-Byrne et al. 2001). Cost effectiveness, with reduced hospital length of stay, maximization of out-patient services, and overall reduction in total costs make integrated care systems the most desirable future model (Blount 1998; Schulberg et al. 2002; Gröne and Garcia-Barbero 2002).

Several factors, in addition to the severe shortage of mental health clinicians in nearly all parts of the world, though, make implementing integrated care delivery unique. Medical and psychiatric clinicians have different educational backgrounds and practice models. The language clinicians use, how they communicate, the workflow, how the clinical problems are conceptualized, and how treatment goals are prioritized in an integrated system require cultural and operational shifts which change the nature of practice for all clinicians. The new health care reform being

implemented in the USA now requires that the entire system of care move to an integrated model (Shim et al. 2012). Because of the improved clinical outcomes and lower costs in and integrated system, many other countries, if they do not already have an integrated system, will soon be moving in the same direction. Significant attention to the impact of the system of care is generally not a major explicit focus in education programs. Due to the specific complexities of working in an integrated care system, however, more curriculum time may need to be added in this area.

Diagnostic Classification Evolution

There is little doubt that there have been tremendous strides over the last 30 years in advancing the ability to make reliable and valid diagnoses of psychiatric illness. DSM 5 and ICD 10 represent the latest step in this record of advances in our approach to clinical diagnosis. These newest versions, with ICD-11 not too far in the future, have had an incredible impact on the ability to conduct clinical research, one of the major goals of the DSM revisions. But the nature of our current classification systems also illustrates one of the dilemmas that concern our field.

The DSM and ICD, and all other systems in use around the world, are still symptom-cluster approaches, and psychiatric nosology is still a long way from an etiologically based categorization of illness. This is of course due to the complexity of the pathogenesis of psychiatric disorders and the need for substantial further etiological and pathophysiological research.

Because these diagnostic systems are nonetiologic, in few places in the DSM, or in the ICD, is provision made for understanding the role of trauma, psychological conflict, or developmental distress in the development of the symptoms we see. Unfortunately, the many, natural disasters, civil wars, and international conflicts around the world make attention all too necessary to the effect of physical trauma, starvation, poverty, torture, and forced migration. In only a few places in our present diagnostic nosologies is the capacity for symptoms to have symbolic meaning taken into account. And, very importantly, cultural influences on either normal development or psychopathology are not given much attention. These omissions cause a great problem. Because while we are training psychiatrists to become competent in carrying out diagnostic evaluations based on DSM, ICD, or other similar systems or disease symptom cluster checklists, we are not doing as well, especially in training the next generation of psychiatrists, about these other aspects of understanding. And what is the impact? It could become problematic to emphasize a symptom cluster approach as our primary framework for both understanding psychiatric illnesses and determining treatment. This approach risks training a generation of psychiatrists who may lack even the most basic framework for understanding mental functioning from psychological, social, or cultural perspectives.

Some might say that this is not too important, that with our increasing understanding of brain structure and function, future psychiatric practice relies primarily on somatic, not psychotherapeutic, interventions. And the severe shortage of mental

health clinicians around the world and the very large demand for psychiatric services even in countries with significant cultural impediments to seeking care would also seem to support a less complex approach to diagnosis and treatment. When we underemphasize the value of empathic listening to understand the role of developmental distress, psychological conflict, cultural influences, the role of trauma, and the symbolic aspects of symptoms, we lose essential information necessary to fully understand our patients.

Information Technology and Genetics Modification

We are on the cusp of a dramatic transition to a new, human-created electronic and technologic environment. We also know of the tremendous advances being made in genetics and the likely impact on physical status. We should also anticipate a parallel ability to recreate, and modify, ourselves mentally through advances in both genetics and information technology. Direct human brain-computer interfaces now exist and are rapidly becoming more sophisticated. While now only in the realm of science fiction, development is occurring in animal studies now of devices to modify memory or change patterns of emotional responsiveness. Someday we may be able to use genetic manipulation to accomplish the same goal. These techniques will likely be developed within the careers of young psychiatrists already in practice. Control of such technology will become one of the most critical societal decisions of the information and genetic age.

Thus, we have an unparalleled set of opportunities and challenges as information technology, genetics, and psychiatry intersect. There is tremendous excitement as we explore meaningful ways of using present technology in our research, education, and clinical missions. At some point, however, as more and more of our world is formed and modified by electronic information or genetic manipulation, we will have to face the issues that this increased technological capacity entails. In the 1950s, the American science fiction writer Philip K. Dick (1989) continually investigated the nature of reality and its potential modification via technology. In his imagined universes, machines designed to mimic humans often show themselves to be more "human" than their flesh and blood counterparts. Our profession of psychiatry, placed in the role of arbiter of sanity and reality, both by virtue of our training *and* by societal sanction, must face the challenge of preserving the "human" within an increasingly mechanistic world. This task will become of more and more central importance as our world undergoes what is an increasingly chaotic and often painful transmutation into the next iteration of the information and genetic age.

Even with these changes, however, and undoubtedly for our own practice lifetimes, therapeutic transactions in psychiatry will occur in the context of a relationship between a physician and a patient, and we must ensure that our educational programs equip young psychiatrists with the full array of knowledge and skills required, for resources to be made available to provide sophisticated and comprehensive treatment (Bhugra et al. 2017).

Culture and Stigma

Culture has a well-recognized impact on individual and group emotions, thinking, and behavior. There is a vast body of knowledge supporting this understanding. Especially at present, with an exceptionally high level of population migration occurring, it is more important than ever that clinicians recognize this dimension of clinical care. Clinicians recognize cultural influence within a specific patient, but also how culture influences a variety of aspects of the therapeutic alliance and the likelihood not only of a patient coming to treatment but also adhering the psychiatrist's treatment recommendations.

Culturally influenced discrimination against those with psychiatric illnesses, their families, and those who provide treatment for them has been known for centuries in essentially every society or culture on earth to a greater or lesser degree. This stigmatization in modern times has effected not only the place of psychiatry in the health care system, but also governmental willingness to support adequate facilities, nondiscriminatory policies regarding access, training of clinicians, and reimbursement for psychiatric care compared to all other components of the health system, even in well-developed health care systems (NIMH Office of the Surgeon General 1999). Further, there is good evidence that significant stigmatization exists at present within other physicians (Gaebel and Zielasek 2014). While there is current impressionistic information from many clinicians around the world that stigma in the psychiatric sphere of concern has been diminishing in recent decades, there is little formal psychiatric research devoted to this topic. It still seems clear that stigma from any source and culturally influenced stigma has an adverse impact on patients' willingness to seek care (Fink and Tasman 1992; Abdullah and Brown 2011). Programs to reduce stigmatization have been implemented in many countries in academic institutions by psychiatric and other mental health related organizations and by governments. Psychiatrists in training and during their careers must be equipped with the knowledge and skills needed to help patients and their families overcome the resistance to seeking and staying in treatment, which flows from stigma.

A final point to emphasize is that just because we are now learning about the intricacies of genetics and the biology of brain function, this by itself is not dehumanizing. Human beings have not suddenly lost the capacity for symbolic meaning, or the capacity to suffer from the vagaries and vicissitudes of trauma, developmental conflict, and developmental deficit. In fact, our increasingly sophisticated understanding of the complex interplay between genetic endowment and developmental experiences supports the critical importance of a therapeutic relationship and its effect on the process of psychotherapeutic change.

Why Continue to Emphasize a Biopsychosocial Approach?

While psychiatrists work in a global environment with severe shortages of psychiatrists and substantial economic constraints, where our time with patients is

extremely limited, and where the majority of individuals in need go without sophisticated care or even have access to psychiatric medications, why emphasize the standard of providing comprehensive care within a biopsychosocial model? (Engel 1977). Because decades of substantial clinical experience and emerging research support the view that it remains the ideal toward which we should strive, it is the best model to understand both what is the diagnosis and who is the person that suffers from the illness. Knowledge of both is essential because while our goal is to treat the illness, we work with the person who has the illness. And in working with the person we seek not only to reduce the symptoms of the illness but also work to improve resiliency, which maximizes the ability to cope with stress and reduce maladaptive coping patterns of response.

The Current Global Educational Environment

In the years just before and after the turn of the twenty-first century, the World Psychiatric Association (WPA) produced its first set of curriculum recommendations for both undergraduate (medical student) and graduate (residency) psychiatric education (Tasman et al. 2011). The goal was to improve the quality of education and, consequently, the quality of care for patients with mental disorders. These efforts marked the first time an attempt was made to develop training standards that could be used globally, with the appropriate modifications in various countries.

The period since the publication of these initial recommendations has been marked by a significant growth in the field of psychiatry. Advances in all aspects of the field, ranging from basic understanding of the function of the brain, to diagnosis, treatment, and development of systems of psychiatric care, stimulated an evolution in our profession and the care we deliver. In addition, remarkable advances occurred in medical and psychiatric education, in response to the progress in our knowledge of illness and the development of new treatments and systems of care. The need for a new WPA core curriculum project for undergraduate and graduate psychiatric education was therefore identified.

A task force under the direction of Allan Tasman, then the WPA Secretary for Education, carried out the development of this project. The project was developed with the task force's appreciation of the tremendous diversity in psychiatric education across the globe. In the field of medical student education, we are aware of the broad range of expectations across continents and countries, ranging from formal continent wide requirements for medical student education in psychiatry to countries in which there are no national requirements that psychiatric education be included in the medical student curriculum. A parallel situation exists for residency education in psychiatry. Further, the great diversity of educational resources was an ongoing focus as the task force developed the recommendations. Moreover, in order to be useful throughout the world, recommendations needed to be constructed in such a way that local or national educational leaders could modify them based on their own requirements and resources, while considering

the role that culture plays in both psychiatric diagnosis and treatment and in medical and psychiatric education. In addition, there are significant influences on program structure, content, and design related to the size of the program and the institutional resources available. Thus, specific teaching content and methods must be compatible with all of these factors.

Recommendations regarding content, design, structure, methods, and evaluation tools were based on the most recent advances in psychiatric education. The medical student and resident psychiatric education sections in this document include what can be considered optimal standard descriptions of curricular content and implementation. Although the educational and clinical competencies discussed in this document are common to all regions of the world, there was recognition that modifications would be needed based on local realities. These include, but are not limited to, the availability of resources such as teachers, patient populations in various teaching settings, patient demographics, facilities, educational equipment and materials, technological support, financial support, and the designated time available to complete the prescribed course of education and training. Whether programs are offered in public, private, community based, religious, or other types of institutions will also dictate modifications. Political and legal regulations and standards are also likely to be influential in the curriculum decisions made at the local and national level.

Rather than prescribing a specific model for use in locations with a wide range of expectations and resources, this document was produced with the appreciation that, even in areas with few resources, there are differing points of view regarding content and structure of education. Some believe that, where desirable resources are few, psychiatrists must be trained more extensively than is generally considered optimal, as these few professionals may play a greater role in developing national policies or advocating within governmental agencies for psychiatric education and services. A role in the development of public health policies and programs is a specific example, requiring additional education for the health professional. A second approach favors reliance on existing state of the art educational guidelines from other regions to implement even in low resource areas. A third perspective suggests that the optimal approach to both medical student and residency education, where resources are limited, is to focus on a select set of "must know" skills and knowledge. Circumscribing education to the diagnosis and treatment of common disorders exclusively is an example of this last approach. Rather than prescribing these or other approaches, such as taking state of the art guidelines and modifying them based on specific national requirements, the task force recognized that these decisions are best made at the national and local level. Last, it was envisioned that the guidelines might become a vital resource in lobbying governments and institutions to improve educational programs and ultimately health care. Because of the rapid pace of change not only in psychiatry's knowledge base but also in the development of regional (e.g., the European Union of Medical Specialists (UEMS 2009) or national revisions in training requirements (e.g., the Milestones Project in the United States) (ACGME 2015), the WPA is reviewing existing guidelines for needed revisions.

Development, Implementation, and Evaluation of a Psychiatric Curriculum

Developing a psychiatric curriculum requires a determination of its key content elements, the sequencing of learning experiences, and making decisions about the time devoted to each content element. Once a program has been created, it must be implemented and continually evaluated and reassessed through careful consideration.

At the level of medical student education, the process begins with clarifying what a nonpsychiatrist physician needs to know about recognizing and treating psychiatric problems and when to obtain a psychiatric consultation or make a referral. Of course, such determinations will be extensively influenced by the national availability of psychiatric treatment resources. In most low and middle income countries, such availability is severely limited, requiring specific decisions about what the body of knowledge and skills should be for nonpsychiatrists, especially primary care physicians. At the level of residency training, constructing a psychiatric curriculum begins with clearly outlining the clinical roles of the practitioners in the specific country of the program. This issue in itself presents challenges, as psychiatrists across the globe are faced with varied responsibilities, influenced in part by cultural considerations, medical practice standards, number of students/trainees, length of specialty training, and availability of resources (personnel, clinical facilities, and financial and technological support).

Just as psychiatric curricula have become more structured and refined, various organizations have specified the core competencies required from a physician and the various specialists. Thus, in the United States, the Accreditation Council on General Medical Education (ACGME) has outlined six core competencies: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice. This is in addition to extensive specialty specific competencies (ACGME 2007). Focusing on specialists, the European Union of Medical Specialists (UEMS 2009) outlines the psychiatrist's main roles as expert/clinical decision-maker, communicator, collaborator, manager, health advocate, scholar, and professional (UEMS 2009). The required competencies, according to these organizations, are based on an educational framework, within which practical decisions are made, that allows a consistent approach to the formulation and monitoring of the curriculum's performance.

The kind, depth, and scope of knowledge contained within a psychiatric curriculum is a subject of continued debate and extensive study as the profession is rapidly evolving. The advantages and limitations of this process and its outcome were delineated by the deliberations of the UEMS Psychiatric Section, an entity comprised by a wide diversity of nations, perspectives, and ultimately, cultures. The Section initially refrained from creating a specific listing of topics to be covered in the residency curriculum, aside from their initial competency framework, citing that such elements "are determined by national conditions" (UEMS 2009).

Medical schools in some countries do not require more than a rudimentary experience in psychiatry, and training requirements for residents are exceptionally varied, making the international acceptance of even generally approved components of psychiatric education a complicated task. Consistent with this perspective, we recognize that the training terrain and the form and content of the program will vary, based on where the psychiatric training is taking place. Thus, the initial phase of curriculum development requires looking at what, if any, governing body provides oversight to psychiatric training for medical student and/or resident education in that nation or region. Then, a careful study of the knowledge content requirements will provide the foundation for discussions about the topics to be covered and development of appropriate didactic experiences and clinical placements.

The particular knowledge and skill sets needed for competent practice have been debated in numerous venues in many countries, but all agree that trainees must be exposed not only to an adequate breadth of information to enable work in a variety of practice settings at the completion of training, but also that an appropriate depth of such knowledge will be needed at different stages of training. Yet there is no consensus regarding the desired knowledge and skills base for physicians who are not clinical specialists, thus leading to a wide range of medical student requirements in psychiatry. This is of particular concern for primary care clinicians in regions of the world where there are few psychiatrists, since their needs for psychiatric knowledge and skills are necessarily wider than areas where mental health services are more abundant.

A commonality across the globe is the recognition that resident trainees must be able to obtain a history from a patient and appropriately diagnose mental illness. In addition, trainees must have an understanding of disease processes at the root of mental illness, including what is known about etiology and pathogenesis, cultural factors, clinical course, and appropriate treatment interventions. The latter must be also understood and performed from biological, psychological, and socio-cultural vantage points. The governing body of a given country or region often outlines specific expectations in regard to this content, yet guidelines for content of psychiatric curriculum do not exist in every country.

The depth of curricular time devoted to specific topics also will vary based on the local conditions in a particular region of world where training is taking place. For example, a locale with a high prevalence of amphetamine abuse, or natural disasters, may spend more time focusing on these problems and their clinical implications, compared to regions where they are not prevalent.

Once the content of the curriculum is determined, the next step is deciding what teaching formats to use. Didactic teaching through classroom-based lectures is a major traditional method for imparting knowledge. With advances in technology, however, reliance on formal on-site lectures may become less critical as lectures are placed on-line for trainees to view at their own pace. This practice occurs already in a number of medical schools in various areas of the world. Similarly, tele-teaching, which permits instruction between two or more sites, often reduces the difficulties imposed by a lack of teachers or instructors in any given setting. In addition, these shifts may allow for time to implement more interactive means of teaching such as problem-based and team-based learning groups.

The phase-appropriate aspects of psychiatric education must be a consideration in the planning, implementation, and evaluation of both medical student and resident programs. For example, eliciting an appropriate clinical history is a more fundamental skill than learning how to administer complex medication therapy. Thus, when approaching the timing and amount of material being covered, it makes sense to logically map basic skills first and then layer the knowledge, covering more complex and specialized information as a trainee makes consistent progress. The recent implementation of the Milestones Project in the United States by their ACGME (2015) is one of the most current and comprehensive approaches to address acquiring competencies from a phase-specific learning development approach.

Once the undergraduate or postgraduate training requirements have been ascertained, teaching resources must be considered, including the number of available faculty and their scope of subspecialty expertise. Fewer faculty may hinder the provision of multiple simultaneous lectures across beginning and advanced training, while a large faculty often permits smaller group teaching. Where available, programs may choose to televise lectures via the web, while using live teaching for more interactive endeavors. Unfortunately, there are regions of the world where medical libraries are rare and accessing computerized literature searches may be challenging, if not impossible.

Although discrete information from lectures and reading provide basic knowledge, there are abstract levels of understanding and conceptual integration that must also be fostered. Ultimately, trainees are typically educated by the simultaneous and/or subsequent use of various teaching modalities. Struggling trainees at any level may require a more concrete and directive approach, while those with greater levels of learning capabilities or intellectual sophistication may benefit from more self-directed means.

Faculty supervision of the residents' and medical students' clinical work is central to all medical education and is historically the experience in which integration of knowledge, clinical skills, and attitudes occurs. However, the amount of and opportunities for the use of this modality will vary widely based on available resources. Relying on extensive supervision by senior faculty is a major challenge in areas of the world with a paucity of psychiatrists and/or other mental health professionals.

Group clinical conferences offer yet another teaching approach and provide better efficiency where faculty resources are suboptimal. Morbidity and mortality conferences, where cases with undesired outcomes are reviewed, journal clubs, and larger grand rounds all offer nonlecture-based educational opportunities. Group conferences also allow the exchange of information in a more active process and promote a higher level of integration of knowledge.

As an example of laying out a curriculum, the Royal College of Psychiatry's Curriculum for residents in the UK has recommended a modular approach to establishing a core curriculum (Royal College of Psychiatrists 2017).

The core module covers basic essentials in clinical psychiatry such as history taking, diagnosis, and treatment. With successful completion of this model, trainees study modules in specialty areas including adult, forensic, geriatric, child and adolescent psychiatry (including learning disabilities), and psychotherapy. Finally, trainees study modules on addiction, rehabilitation, and consultation-liaison psychiatry. Within the UK's medical system, this process takes place over the course of

6 years. This is in contrast to other localities in the world where training may be as brief as 12 months. Thus, this modular approach may not be feasible or appropriate in every system, and certainly, if used, must be modified to suit the local context. The advantage of this framework, though, is that content and sequence can be determined for any curricular component at either the medical student or resident level, no matter what the desired content.

Once a curriculum course has been mapped, it must be implemented. Available faculty resources and national requirements often dictate the leadership and administrative requirements for training program oversight. National standards, for example, often mandate a specific individual to be the coordinator, a highly desirable practice regardless of requirements.

The program director for either students or residents oversees the development and monitoring of the curriculum's implementation. Sufficient faculty to provide onsite teaching as well as assisting in other educational modalities is necessary since both skills in education are needed for implementation of comprehensive teaching, mentoring, supervision, and professional guidance. When adequate faculty resources are not available, the program director's job becomes even more critical, as developing the needed faculty effort is essential for success in any clinical training program. One solution to paucity of faculty resources at either the medical student or resident level is the evolving use of either online teaching resources or live distance faculty teaching via teleconference approaches. While national requirements, technological, cultural, and language variations may be constraints on using this approach, pilot projects are being developed in a number of areas to better understand how the technology can be best used (Alfonso et al. 2018).

Maintaining a strong curriculum requires frequent and consistent reviews. There are continual advances within both undergraduate medical education and postgraduate psychiatric education, and the content and structure of the curriculum needs to reflect this evolution with regularly scheduled updates. Each of these changes requires the curriculum to be modified accordingly. Sustained quality also relies on identifying deficiencies and monitoring progress in plans and attempts to remediate them.

Effective evaluation of trainee performance requires thoughtful and ongoing feedback. Within both undergraduate and graduate training programs, this process relies on agreed upon outcome measures. Trainees should regularly evaluate didactic and clinical experiences. This feedback provides important information from those who are in training, either medical students or residents, to those evaluating the quality of their education.

Objective measures paired with faculty evaluations of trainees' performance should be used to accurately assess the effectiveness of the curriculum (Andrews and Lomax 1999). If trends in trainees' shortcomings and lack of skills become evident, one or several elements of the curriculum may need strengthening, curriculum content may require adjustment, or the characteristics of clinical rotations might be reevaluated. Quality training involves a cyclic approach to curricular design, evaluation, and change. Some national requirements include specific guidelines regarding the cycles in which programs must undergo such reviews (Yudkowsky et al. 2002).

As already discussed, the duration of undergraduate medical education and psychiatric residency training varies around the world. Psychiatric residency training programs may range from one to six years. The shorter the training program, the more difficult it is to cover the entire field adequately, and decisions must be made regarding the breadth and depth with which material is covered. It is unreasonable to expect that a trainee will become clinically competent in a single year or two, but this time period may be all that is available. While the resources available may limit the amount of time to be used in training, it also must be acknowledged that this hinders the ability to easily train psychiatrists with equal skills or knowledge across all regions. There may be differences in competency levels of psychiatrists trained in various parts of the world, based simply on these factors. There is no ready solution for this problem, which becomes even more complex if we assume, as we must, that updating education programs is, ultimately, an unending endeavor.

Medical Student Training

When the WPA templates for medical student education were approved in 2011, the pressing need for treating mental disorders in both developed and developing countries was clear. Those guidelines, therefore, were developed with a view that ideally all physicians, especially primary care physicians, should know how to detect and manage these disorders from a bio-psycho-social perspective and when to refer them to a specialist. There was general consensus agreement that, *where possible*, all medical students should be trained in the areas of knowledge, skills, and attitudes regarding the diagnosis and treatment of psychiatric disorders noted in the following.

At the time of the WPA action, and still at present, however, there exists a robust debate about whether such expectations are reasonable and realistic in low- and middle-income countries. Because adequate faculty teaching capacity is quite limited for teaching psychiatry to medical students in such countries, and because there is not only a paucity of psychiatric specialists but also of primary care physicians, some argue that the expectations for medical students should be substantially limited from the recommendations below. Professor Parameshvara Deva in Malaysia is one of the leading proponents of a highly streamlined curriculum for medical students in low- and middle-income countries, and he has published his recommendations (Deva 1980, 2008).

Steps of the learning process for a medical student include the acquisition of knowledge, the dexterity in the use of specific skills, and the adoption of professionally appropriate attitudes as outlined below:

Knowledge

There is consensus in that, regardless of country, geographic region, or volume of resources, every medical student will have to demonstrate, by the conclusion of his/her educational process, the ability to: (1) organize clinical data from psychiatric

interview and mental status examination allowing him/her to hypothesize reasonable psychiatric diagnoses and psychosocial circumstances or stressors; (2) develop thorough psychiatric differential diagnoses based upon information from and about the patient; (3) recognize the clinical characteristics of the following mental disorders: (a) major depression, (b) bipolar disorder, (c) dysthymia, (d) panic disorder, (e) generalized anxiety disorder, (f) Posttraumatic Stress Disorder (PTSD), (g) obsessive-compulsive disorder, (h) schizophrenia, (i) schizoaffective disorder, (j) personality disorders, (k) substance use disorders, (l) cognitive disorder, (m) somatic symptom disorders, and (n) attention-deficit/hyperactivity disorder (ADHD); (4) understand the parameters of ethical clinical practice.

Similarly, in the areas of laboratory and other types of testing (e.g., psychological tests), the student will have to be able to: (1) determine which tests are indicated based upon the patient's psychiatric presentations, (2) discuss the rationale for ordering the tests with the patient and/or family, and (3) recognize when tests provide abnormal or pathological results, including results related to medication compliance.

In order to generate an appropriate psychiatric case formulation and present plausible and comprehensive hypotheses about the etiopathogenesis, course and outcome of the patient's psychiatric condition, the student must know about: (1) biological factors, (2) psychological factors, (3) sociocultural factors, (4) spiritual factors, and (5) Patients' psychological strengths and weaknesses or barriers for adequate management.

The medical student should demonstrate the ability to: (1) recognize potential risks and psychiatric emergencies among general medical patients, including (a) suicidal thinking, (b) homicidal thinking, (c) signs of mental decompensation, (d) impulsivity and violence-proneness, (e) poor judgment or cognitive deficits, and (f) serious side effects to medications (1) neuroleptic malignant syndrome, (2) neurotoxic or cardiotoxic responses, and (3) overdosage; (2) demonstrate knowledge about medical and medico-legal interventions: (a) psychiatric referrals, (b) involuntary commitment, and (c) judgments of medical incompetence.

Skills (Interpersonal and Communication)

The medical student should demonstrate the ability to conduct a psychiatric interview, including (1) establish rapport with patients by properly introducing him/herself and defining the role the interview will play in the patients' care; (2) be empathic with patients, showing genuine concern for patients' moods, dilemmas, viewpoints, and conflicts through tone of voice, speaking style, facial expressions and gestures; (3) facilitate interviews with helpful blends of open and closed questions, supportive remarks, use of silence, and therapeutically oriented interventions; (4) use language neutral to gender, age, race, sexual orientation, culture, and religion; and (5) conclude interviews with proper timing and respect.

The student will demonstrate the ability to elicit data for a complete psychiatric history, including (1) chief complaints in the patients' own words; (2) details for a thorough history of present psychiatric illness: (a) onset of symptoms, (b) duration of

symptoms, (c) course of exacerbations and decreases of symptoms, (d) help-seeking patterns, (e) actions patients have taken to cope with symptoms, (f) impacts of symptoms on patients' lives, (g) patients' thoughts about causes for and meanings of symptoms, (h) patients' expectations for prognosis; (3) details for past general medical history and psychiatric history; (4) details for family and social history; (5) details for developmental history; and (6) details for substance use history.

The student will recognize indications for treatments of patients with mental disorders, including (1) psychotherapies: a. individual psychodynamic, cognitive, behavioral, and supportive b. marital and/or family c. group; (2) medications; (3) other somatic therapies; and (4) necessity for social, economic, or legal interventions.

The student should demonstrate the ability to provide coherent, thoughtful presentations of psychiatric patients in both oral and written forms, including (1) Patients' psychiatric histories; (2) mental status examinations data; (3) physical examination data; (4) data from laboratory and other tests; (5) differential and specific diagnoses; (6) psychiatric formulations (including cultural); and (7) treatment plans.

Attitudes

The medical student will demonstrate professionalism through the ability to: (1) be punctual and attend required events; (2) complete patient notes in a timely fashion with legible writing; (3) maintain professional boundaries (physical, sexual, financial, and emotional) with patients and practice within an appropriate ethical framework; (4) be truthful about medical data; (5) be courteous to patients, patients' families, staff, colleagues, and other health professionals; (6) maintain confidentiality regarding patient care; (7) demonstrate respect, empathy, responsiveness, and concern regardless of the patient's problems, personal characteristics, or cultural background; (8) demonstrate sensitivity to medical student-patient similarities and differences in gender, ethnic background, sexual orientation, socioeconomic status, educational level, political views, and personality traits; (9) demonstrate integrity, responsibility, and accountability in the care of assigned patients; (10) demonstrate scholarship by contributing to a positive learning environment, collaborating with colleagues, and performing self-assessment and self-directed learning; and (11) assess one's strengths, weaknesses, and be willing to seek and accept supervision and constructive feedback (Brodkey et al. 1997; Brodkey et al. 2005; Harper 2017).

Resident Education

As noted in sections above, there can be no single system proposed for utilization across the globe. National and regional training requirements, resources, the system of care, and cultural considerations all play a role in designing the resident training

program. Further, the nature of the mental health component of the national array of medical education and practice plays one of the most important roles in program elaboration.

As described in a number of places in this chapter, there are generally substantial differences for program in low- and middle-income countries compared to those in high-income countries. One significant difference in the model of educational goals is what has been described as a public health model. This approach to structure and content of the residency program assumes that when there is a very small number of psychiatrists for the population size, the role of the psychiatrist will be more likely to serve in roles which will involve setting overall mental health policies and/or playing a more significant role in the planning and implementation of mental health services than in providing direct clinical service. The public health competency model described briefly below is based on this assumption.

Although resident competencies will be more extensive and graded on a more sophisticated level of expectations, all the competencies elucidated for medical students in the section above are relevant to training and educating the psychiatry specialist. As is true in all of medicine, the depth and breadth of the postgraduate experience is greater, and additional skills and knowledge are required in both clinical and administrative domains. Specialist training in psychiatry, for example, should also include depending on location, but is not limited to, sufficient didactic and clinical experiences to develop competency in:

1. The major types of psychotherapy
2. Somatic therapies (electroconvulsive therapy, biofeedback, phototherapy)
3. Understand the principles of and conduct clinical practice in an ethical manner respective of human rights
4. Psychiatric administration (leadership of interdisciplinary teams, quality assurance, and performance improvement)
5. Providing psychiatric care to patients who are receiving treatment from non-psychiatric physicians and nonmedical therapists and coordinating such treatment
6. Teaching psychiatry to medical students, residents, and others in health profession
7. Training in neurology to develop expertise in the diagnosis of those neurological disorders and conditions often encountered in psychiatric practice that must be considered in the differential diagnosis of psychiatric disorders.
8. Understanding the designing and interpretation of psychiatric research studies
9. Developing expertise in the critical assessment of new therapies and scientific theories
10. Participating in national professional and scientific societies especially through presentations at regional and national scientific meetings

To demonstrate specific aspects of the competency-based approach, three among many models that designate resident competencies will be described briefly. These include the UEMS, the United States ACGME, and an international public health

approach. Educators and administrators are of course required to select topics, ideas, and approaches that are compatible with and practical for their own programs, countries, and regions.

European Union of Medical Specialties (UEMS) approach

The UEMS (2009) has proposed a general competency model wherein the psychiatric specialist must perform within seven diverse overarching competencies, adjusted to, but also independent of, working environment, including sociopolitical and cultural context. The role of the psychiatrist in this model could focus on one or more or a diverse range of work foci which includes caring for individual patients and their families or within a public mental health framework for the society at large. The UEMS Charter on Training of Medical Specialists in the European Union recently updated training requirements for the specialty of Psychiatry (UEMS 2017). In such context, the competencies of a fully trained resident can be described to include:

1. As a clinical expert, a psychiatry resident should be able to:
   (a) Elicit a comprehensive psychiatric, sociocultural, and medical history; (b) conduct a psychopathological investigation; (c) establish a diagnosis; (d) document properly the clinical findings and actions taken; (e) formulate and implement a treatment plan in collaboration with the patient, his/her family and other health professionals; (f) utilize the appropriate therapeutic skills; and (g) apply relevant medical technologies
2. As a health advocate, a psychiatry resident should be able to:
   (a) Appreciate the determinants of mental health in a given society and (b) promote mental health and prevent mental disorders in individual patients and society
3. As an academician, a psychiatry resident should be able to:
   (a) Formulate a self-addressed life long program of continuing medical education; (b) read scientific literature and interpret new findings; (c) investigate the determinants of mental health and disorders; (d) integrate and apply new knowledge and technologies in his/her daily work; (e) conduct research; (f) perform quality assurance and contribute to quality development; and (g) document epidemiological changes in psychopathology
4. As a professional collaborator, a psychiatry resident should be able to:
   (a) Establish treatment plans through working with patients and caretakers and (b) work effectively with other healthcare professionals including those in primary care
5. As an administrator/leader, ha psychiatry resident should be able to:
   (a) Develop cost effective treatment plans and mental health services and (b) utilize resources effectively
6. As a communicator, a psychiatry resident should be able to:
   (a) Establish a therapeutic alliance with patients and relatives; (b) educate the patient, families and other health and social services professionals; and (c) educate the public about mental health to combat stigma

7. As a professional, ha psychiatry resident should be able to:
   (a) Abide by ethical principles of the profession; (b) respect patient rights and broader human rights; (c) support patient autonomy and dignity; and (d) respect the patient's culture, beliefs, and values.

In this model, psychiatrists must identify and deal with the prevention, diagnosis, and management of urgent psychiatric conditions. Residents must develop skills in triage, often within multidisciplinary settings. Common conditions seen in emergency psychiatry include, but are not limited to, severe agitation and panic, some conversion reactions, acute psychotic episodes, poisoning and substance related intoxication or withdrawal, depression with severe suicidal ideation/suicide attempt, homicidality, some eating disorders, rape and other types of assault, child maltreatment, and disaster management. Based on a well-formulated treatment plan, psychiatry residents must be able to provide the least restrictive environment for intermediate care. Effective treatment, no matter the length, often requires sophisticated collaboration with primary care clinicians and social services/staff with clear goals of recovery and rehabilitation while being mindful of resources.

The United States Accreditation Council for Graduate Medical Education (ACGME) approach

The Accreditation Council for Graduate Medical Education (ACGME) in the USA has established for all medical specialties six general competencies expected of a new practitioner. Psychiatry programs must define the specific knowledge, skills, behaviors, and attitudes required and provide educational experiences as needed in order for their residents to demonstrate the following general competencies (ACGME 2007):

1. *Patient care* that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Each resident must receive supervised experiences in the evaluation of treatment of patients of all ages and gender from across the life cycle and from a variety of ethnic, racial, sociocultural, and economic backgrounds. These experiences must occur in hospital and outpatient rotations and include in addition to general adult psychiatry, assignments in child and adolescent, geriatric, addiction, consultation/liaison, forensic, emergency, and community psychiatry.
2. *Medical knowledge* about established and evolving biomedical, clinical, and cognate sciences, as well as their application of this knowledge to patient care. The didactic curriculum, for example, must include, but is not limited, to the following components: (a) the major theoretical approach to understanding the doctor-patient relationship; (b) the fundamental principles of epidemiology, etiologies, diagnoses, treatment, and prevention of all major mental disorders, including the factors that affect the prevention, incidence, prevalence, and long-term course and treatment; (c) comprehensive discussions of the diagnosis and treatment of neurologic disorders commonly encountered in psychiatric practice,

such as dementia, neoplasms, headaches, traumatic brain injury, infectious diseases, movement disorders, multiple sclerosis, seizure disorders, stroke, and intractable pain; and (d) instruction in research methods in the clinical, biological, and behavioral sciences, including techniques to appraise the scientific and professional literature and to apply evidence based findings to patient care as well as opportunities to participate in research.

3. *Practice-based learning and improvement* that involves the investigation and evaluation of care for their patients, the appraisal and assimilation of scientific evidence, and improvements in patient care. This competency focuses on lifelong learning to improve knowledge, skills, and practice performance.
4. *Interpersonal and communication skills* that result in the effective exchange of information and collaboration with patients, their families, and other health professionals.
5. *Professionalism,* as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to patients of diverse backgrounds.
6. *Systems-based practice*, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Specific knowledge, skills, and attitudes should include but are not limited to: (a) practicing cost effective health care and resource allocation that does not compromise quality of care; (b) advocating for quality patient care and assisting patients in dealing with system complexities, including disparity in mental health care; (c) knowing how to advocate for the promotion of mental health and the prevention of disease; and (d) acknowledging the importance of medical errors and examining systems to prevent them.

Since the approval of the WPA templates (Tasman et al. 2011), the ACGME has implemented a new program in collaboration with the American Board of Psychiatry and Neurology (ABPN) which represents the next phase in competency-based education and training. This approach, called the Milestones project (ACGME 2015), places the learning and assessment of clinical and knowledge competency in a phase-specific developmental approach. This new approach marks an important jump to a more specific structure within which specific teaching approaches and competency acquisition can be targeted. This approach is in concordance with the pedagogical efforts and work of Tasman and US colleagues in the span of the last four decades (Tasman and Rieder 1987).

The Milestones approach is too complex to review in detail, but it provides specific anchors to address 5 levels of competency across the period of training. These anchors are not designed to specifically address the year of training during which the competency will be acquired, but generally follow the progression across the years of training in what is a four year program in the United States. Level 1 denotes the most basic level of competency and level 5 marks a level of competency sufficient to teach it to others. It is not assumed that residents will generally reach level 5 skills or knowledge by graduation from training, but may acquire that level of competence in certain areas. (ACGME 2015). To illustrate the approach, three examples will be given.

The milestone for general interview skills under the psychiatric evaluation competency is arrayed as follows by level:

Level 1 Obtains general and psychiatric history and completes a mental status examination
Level 2 Acquires efficient, accurate, and relevant history customized to the patient's complaints
Level 3 Consistently obtains complete, accurate, and relevant history
Level 4 Routinely identifies subtle and unusual findings

The milestone for using psychopharmacologic agents in treatment under the somatic therapies competency is as follows by level:

Level 1 Lists commonly used psychotropic agents and their indications to target specific symptoms (e.g., depression, psychosis)
Level 2 Appropriately prescribes commonly used psychopharmacologic agents
Level 3 Manages pharmacokinetic and pharmacodynamics drug interactions when using multiple medications concurrently
Level 4 Titrates dosage an manages side effects of multiple medications

The milestone for empathy and process under the psychotherapy competency is arrayed as follows by level:

Level 1 Accurately identifies patient emotions, particularly sadness, anger, and fear
Level 2 Identifies and reflects the core feeling and key issue for the patient during a session
Level 3 Identifies and reflects the core feeling, key issue, and what the issue means to the patient
Level 4 Links feelings, behavior, recurrent central themes/schemas, and their meaning to the patient as they shift within and across sessions.

As can be seen from these examples, the levels shift at small but clear levels of sophistication, which can be generally easily seen during supervision or observation of clinical care by the resident. While the US ACGME Milestones project is quite complex and detailed, the general approach and structure can be modified for the specific context of a residency program in any country. Further, it provides an excellent framework for evaluation that can also be modified for use with medical students.

A Public Health Approach

This model assumes that in regions where very few psychiatrists exist, there must be broader resident training experiences in preparation for roles in developing, implementing, and evaluating all aspects of mental health care and policy locally, regionally, and nationally. This model, therefore, also addresses training about the

impact of civil and political unrest and natural disasters, to name but two areas not included specifically in the earlier approaches. Further, this model emphasizes that mental disorders are no less prevalent in low-income countries, as well as the increasing importance of mental health problems as epidemiological transitions from communicable to noncommunicable diseases take place. There is greater emphasis also on the link between mental health and personal and national poverty as reflected in educational, social welfare, and criminal justice issues.

In the public health approach, there is clear acknowledgment of the salience of mental health to the achievement of the majority of the objectives of the United Nations Millennium Development Goals by 2015 that include: (a) eradicate extreme poverty and hunger; (b) achieve universal primary education; (c) promote gender equality and empower women; (d) reduce child mortality; (e) improve maternal health; (f) combat HIV/AIDS, malaria, and other diseases; (g) ensure environmental sustainability; and (h) develop a global partnership for development.

Competencies in this model require that residents (1) have a clear conceptual understanding of the epidemiological information on prevalence, risk factors, and consequences of mental illness; (2) understand the contribution of mental disorders to global burden of disease; (3) understand the public health framework of mental health promotion, prevention, treatment, rehabilitation, and prevention of mortality; (4) appreciate the various components of social policy, health policy, mental health policy, and mental health service delivery, including the role of primary care; (5) appreciate human rights issues; (6) can diagnose and manage the common psychiatric disorders; (7) understand the principles of suicide prevention; (8) understand the definition and impact of disasters and their management; and (9) comprehend the importance of lifelong learning through familiarity with the characteristics of evidence-based psychiatry.

Integrated care is of essence to the public health approach. Although aspects of integrated care are usually taught in psychiatry residency in the ACGME approach within the constraints of consultation and liaison psychiatry rotations, in low- and middle-income countries more time should be dedicated to demonstrate the relevance of collaborative care. It would be sensible for psychiatry residents in countries with low- and middle-income economies to spend a large part of their clinical duties providing supervised out-patient mental health services on site in primary care clinics, medical-surgical units, or community health centers (Alfonso et al. 2017)

Assessment and Evaluation of Medical Students and Residents

Whether at the medical student or resident level, the curriculum and training experiences must be developed and continually evaluated and modified to ensure the resident adequately learns both the knowledge base and the required clinical skills needed to become clinically competent. Just as for other components of the chapter, the reader is reminded that any evaluation system may require extensive faculty time and other resources. Thus, appropriate modifications will be required based on the location of the training programs including expectations in the

institution or national standards. As should be apparent from the discussion above, the Milestones model provides a solid structure for how to design a resident assessment system. There will be a brief discussion of a model of competency-based evaluation which flows from the competency-based education model.

Competency-based evaluation is a much more structured approach to assessing clinical competence than has been historically utilized. Using an assessment system to measure professional clinical performance is very similar to making a complex or challenging diagnosis. When program directors and faculty are asked to assess whether a medical student or resident is competent to be promoted or to practice independently, an accurate determination requires multiple observations and methods of assessment just as in making a diagnosis of a complex or challenging patient.

By developing assessment systems to measure a student or resident's competency, we can improve the education of physicians and improve patient care. Accurate assessment of performance provides information not only about whether a medical student or resident is able to be promoted or practice independently, but also helps to identify gaps in educational programming. The following section on assessment draws heavily on the ACGME/ABPN Toolbox of Assessment Methods from the ACGME Outcomes Project (ACGME 2000) as well as from the Milestones project cited above (ACGME 2015).

There are several basic questions that any system of evaluation must address:

Did the student/resident achieve the objectives for the educational experience? The objectives of a rotation or other educational experience provide guidelines and a framework for what the resident is expected to know or be able to do by the end of that experience. Thus, assessment results provide evidence to support whether or not the trainee has acquired the needed skills or knowledge.

What knowledge, skills, or attitudes the students/residents need to acquire or improve? Assessment results identify the knowledge, skills, or attitudes that the resident needs to still acquire or improve. By providing constructive and ongoing feedback, the faculty can help guide the resident in implementing changes that will lead to performance improvement.

How might the medical student program or residency program use aggregate performance data to improve education? For example, in reviewing all of the evaluations done at the end of a particular clinical experience such as completing an inpatient psychiatric rotation, the faculty might determine that the trainees as a group are rated low in their understanding of basic psychiatric disease principles. This insight will help the training program make the needed modifications.

How can assessment results provide formative and summative feedback to the trainees? This helps students/residents in making expected progress in achieving the knowledge, skills, and attitudes outlined by the learning objectives.

Formative evaluation refers to an assessment whose primary purpose is to provide feedback during an experience in order to improve knowledge or skills. Summative assessments review performance at the end of an experience and are

typically used to make a statement about whether a resident has mastered specific competencies, identify skills needing attention, and identify opportunities for program improvement.

In thinking about developing an assessment system, educators want to be certain that it is comprehensive and assesses what is needed. The reason for developing a system of assessments rather than relying on a single approach is that complex clinical skills and the delivery of medical care are not likely to be accurately measured by a single assessment tool or a single evaluator.

A competency-based learning and assessment program focuses on specific clinical competencies, which we expect medical students or residents to gain during the course of their training. One could construct long lists of such clinical competencies, but at the start the system should be manageable, and this is important in every part of the world, not only in low- and middle-income countries. Competency-based systems are reliant on multiple different teaching and supervision components, with assessments carried out in a systematic way over a period of time. There is no question that developing such a system requires significant resources, and this makes the development of such systems much more challenging in resource poor regions, especially when there are relatively few faculty available to be involved in the training program. Nonetheless, a competency-based program provides the best model that can be used to accurately assess resident's clinical performance.

Over the past several years, a variety of tools have been developed which can provide reasonable assessments of the knowledge base. The reader is again referred to the ACGME website at www.acgme.org where information about competency-based evaluation systems can be found. There is general agreement, however, that such assessments do not yet accurately predict independent clinical performance. Thus, there is an urgent need for further research to develop systems of assessment that provide reliable and valid information about a resident's clinical performance abilities.

The Importance of Educational Research

Medical education research was developed in the 1950s with the intent of making the education of physicians evidence-based (Hodges 2008). Education research in psychiatry should include areas of curriculum development, professional and leadership development, clinical supervision and evaluation processes (Weiss Roberts et al. 2003; Hatala and Guyatt 2002). In this chapter section, we will selectively summarize academic work in some but not all of these important areas.

Impact of Early Exposure to Psychiatry in Medical School

Although much emphasis has been placed in understanding the variables that correlate with increased recruitment of medical students into psychiatry, the percentages medical students choosing psychiatry seem to remain stable over

time across continents. Although a low recruitment rate is often perceived to correlate with negative attitudes, other factors may be impactful and significantly correlated. These include reports of students choosing psychiatry because of social background, liberal political views (Eagle and Marcos 1980), interest in the humanities, having specific personality factors, academic aptitude, and history of family psychiatric illness (Rajagopal et al. 2004). Positive experiences during clinical rotations, however, always seem to correlate with improved attitudes towards psychiatry (Budd et al. 2011) and may determine to some extent career choice (Farooq et al. 2013).

Incidental findings in many studies that focus on recruitment, however, show that negative professional stigma is effectively diminished when students have positive and early exposure to psychiatry during their undergraduate medical education. In one recent study in the UK, early clinical experiences of psychiatry increased awareness and understanding of the field and reduced the potential for misunderstanding and misconceptions of psychiatry (Brown et al. 2015). More positive experiences in medical school that include early exposure to enthusiastic and talented psychiatrists-teachers may help reduce stigma and lead to more positive views of psychiatry.

Determining the Sequence of Residents' Training Experiences

Traditionally, as far back at least as the early 1900s, psychiatric residents, just as those in nearly all other specialties, have begun their training with an extensive amount of time taking care of hospitalized patients. This was done historically for very pragmatic reasons. There were few organized systems of ambulatory care and the need to treat severe illnesses within a hospital setting was much more important due to the state of knowledge in those days. Thus, all residency programs were heavily focused on hospital-based practice. The second half of the twentieth century began a period of dramatic changes in both health care systems and postgraduate medical education. Certainly, the modern psychiatric training programs of today in nearly every country in the world barely resemble those which existed in the first half of the twentieth century, due to changes both in systems of care and in the knowledge about illness and available treatments.

Within psychiatry, there have been ongoing debates over the proper sequence of clinical experiences. In the United States, there was considerable debate among academic leaders about whether or not the optimal approach to psychiatric education involved beginning with the most severely ill patients in the most intensive care treatment settings. One of the reasons for this debate lay with the view that gaining a developmental perspective on psychopathology was deemed to be a crucial issue in the determination of proper care decisions. In a small number of programs in the United States, residency clinical sequences were put into place to emphasize a developmental perspective on psychopathology. Such programs often began not with emergency or adult hospital care, but with child psychiatry experiences, often in an ambulatory setting.

Research in this area is important since the sequence of training experiences may have an impact of residents' performance in the areas of diagnostic skills, comprehension of the range of prominent inpatient psychopathology, comprehensions of the range of appropriate therapeutic interventions, and the development of professional psychiatric identity.

An early study (Tasman 1991) addressed educational gains and gaps in relation to the sequence of clinical rotations in a psychiatry residency program. Specifically, having an ambulatory year with strong child psychiatry emphasis prior to an inpatient year treating acutely ill hospitalized patients led to small, but definite *educational gaps* for residents later in training. Residents who work in acute care first, before moving on to ambulatory care rotations, seem to fare better in terms of *educational gains* (Tasman 1991).

Measuring the Impact of Adequate Clinical Supervision

An important aspect of pedagogical research is to study the impact of clinical supervision in residents looking at both educational outcomes and improved patient care. Accessing qualified supervisors, preferably on-site, has been shown to improve patient care and education-related outcome measures, across all medical specialties for physicians in training (Farnan et al. 2012). When supervision is accessible on site, measurable improvements in clinical outcomes occur. These findings resulted in the systematic implementation of regulations in inpatient and emergency clinical settings mandating enhanced supervisory oversight in the USA and other high-income countries. In low- and middle-income countries with a paucity of attending supervisors, qualified supervisors need not be licensed or board-certified senior clinicians, as senior resident and junior resident supervisory dyads may also result in improved clinical care. Additionally, off-site tele-supervision is receiving increased attention in the psychiatry education research arena.

Video-Supervision to Bridge Educational Gaps in Underserved Countries

International academic partnering using videoconferencing has been widely used to bridge training gaps of psychiatric residents who reside in low- and middle-income regions of the world. Examples include collaboration between the University of Colorado School of Medicine and the University of Health Sciences Cambodia (Savin et al. 2013) in the form of monthly case conferences, and two and four year training programs offering psychotherapy training through the China American Psychoanalytic Alliance (CAPA). CAPA formally established training for mental health professionals in China including psychiatrists (Fishkin et al. 2011). Training currently spans over 25 Chinese cities, with a faculty of over 150 volunteer faculty members from high-income countries teaching using videoconference technologies. Hundreds of psychiatrists have graduated from the programs since 2008.

The WPA Psychoanalysis in Psychiatry, Psychotherapy, and Education Sections piloted a program over five years in Southeast Asia (Alfonso et al. 2018). This program included a one semester advanced psychodynamic psychotherapy-training course that was specifically tailored for psychiatric residents and early career psychiatrists. The collaboration between the USA, Thailand, Malaysia, and Indonesia combined on-site with videoconferencing and computer-assisted learning. Although virtual classrooms have significant pitfalls, resident satisfaction usually outweighs the vicissitudes of fluctuations in Internet connectivity (Alfonso et al. 2017; Cameron et al. 2014).

A systematic review examined the perceptions of physicians about clinical supervision and educational support using videoconferencing technologies. This meta-analysis examined 1288 studies and found overall satisfaction and acceptance rates in a majority of settings, with reports of improvement in knowledge and practice outcomes (Cameron et al. 2014)

Opportunities for Research in Education

While there has been a growing body of literature focused on psychiatric education, good educational outcomes research is in its infancy and significant growth in this area of scholarly endeavor would be extremely important to ensure that residents have training experiences which maximize the likelihood that they will have the knowledge and skills to provide competent care.

The journal *Academic Psychiatry* in the United States is one of the few globally available sources in psychiatry, which encourages through its stated publication mission the carrying out of educational research. Further, conducting educational research is much more difficult because of a wide variety of methodological problems. In addition, there is little funding available to support such research even in the most highly developed and resource intensive countries. Thus, there is a necessary and ever increasing emphasis on continued revision of local and national standards that training programs optimize their curricula and training to ensure the greatest likelihood of graduating clinically competent clinicians. At the same time, few resources are available and methodologies need to be developed to foster more education research.

Conclusion

The authors propose that educational programs should be designed or revised taking into account the cultural context at large of the clinical populations served and host country, using a biopsychosocial approach as a framework to provide care and educate medical students and residents. Although there can be no single universal educational system proposed for utilization across the globe, existing curricular paradigms may be used as points of reference for educational purposes. National and regional training requirements, resources, the system of care, and cultural

considerations all play a role in designing medical student and resident training programs. Innovative programs already in existence and described in this chapter can be replicated or modified to better fit the needs of students and residents in low- and middle-income countries with high work volume and few resources. Efforts should be placed in the thorough assessment and evaluation of pedagogical methods not to compromise the effectiveness of educational programs and to better achieve adequate educational competencies. The importance of educational research cannot be emphasized enough, as it is a fertile ground to make education practices evidence-based in psychiatry.

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The Actual Status of Undergraduate Training

2

Rathi Mahendran

Contents

Abstract

Psychiatry education has evolved over the years in tandem with advances in the care of the mentally ill, population mental health needs, historical developments in specialty practice, and advances in scientific knowledge and treatment discoveries. The need for special skills in psychiatry such as empathy, patience, and

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understanding are recognized. Evidence in best practices in medical education and new learning theories, and better understanding of students' learning needs, have transformed psychiatry education. This chapter traces psychiatry education over the years, highlights innovative practices that have been introduced, and also identifies areas for improvement.

Keywords
Undergraduate psychiatry education · Mental health teaching

Introduction

Undergraduate psychiatry training has evolved over the years. Various sociocultural, religious, and environmental factors have shaped it as have prevailing perceptions of mental illnesses, the state of health services and the recognition and understanding of mental illnesses as a priority in population health. World bodies such as the World Health Organization, in their drive to promote mental health and care for the mentally ill, have played a significant part in the recognition of psychiatry as a specialty and its importance in undergraduate medical education. At national levels in many countries, the availability of financial and healthcare resources allocated to population health as well as the existence of mental health policies and legislation have also indirectly shaped the need for including mental illnesses and health in medical education.

History

A little over two centuries ago in 1808, Johann Christian Reil of Halle, Germany, introduced the term "psychiatry" and argued for its recognition as a medical specialty and as an integral part of medicine (Marneros 2008). For centuries before this, the mentally ill were viewed as possessed by spirits or demons or as having incurred the wrath of God. These views were fairly consistent across cultures and religions in many parts of the world. In the seventeenth and eighteenth centuries, mental health care shifted from the community to asylums (Laffey 2003). While this is often viewed as a setback in countries where asylums were badly managed and care limited, it led to the increasing recognition that doctors needed to be taught about mental disorders and the care of the mentally ill.

In the UK in the nineteenth century, there were two distinct groups who cared for the mentally ill: the doctors who worked in the lunatic asylums and neurologists with varying psychiatric experience who saw patients in private practice (Rollin 2003). However, progressive individuals, such as Dr Daniel Tuke and Dr. Henry Rayner, who lectured on mental diseases at St Thomas's Hospital, London, not only started outpatient departments for psychiatric care in Yorkshire and London, respectively but also advocated similar departments at other public hospitals. At Leeds Medical

School from the 1890s, arrangements were made for students to have tutorials on mental illnesses, in the asylums. Henry Maudsley persuaded the University of London to include mental illnesses in the curriculum for the final medical examination, and in 1885, the General Medical Council included mental diseases as a separate item in the medical school curriculum and insisted that it should be tested.

Griesinger became the world's first professor of psychiatry in Berlin in 1865, and psychiatry departments were set up in German university medical schools. Students were required to study the subject and pass an examination, while in many other parts of the world, an apprenticeship model was still in use. In 1871, the Association of Medical Superintendents of the American Institute for the Insane proclaimed:

"That in view of the frequency of mental disorders among all classes and descriptions of people, and in recognition of the fact that the first care of nearly all these cases necessarily devolves upon physicians engaged in general practice . . .. it is the unanimous opinion of this Association that in every school conferring medical degrees, there should be delivered by competent professors a complete course of lectures on insanity . . ." (Ebaugh 1944).

Despite this, in the USA, the treatment of mental illnesses and psychiatry as a specialty remained embedded in neurology in the medical school curricula, till as late as the early 1900s (Visotsky 2005). In other American and Canadian medical schools, the care of the mentally ill included "complementary and alternative medicine" approaches from naturopaths, homeopaths, chiropractors, and osteopaths. All this, however, changed with the Flexner Report (Flexner 1910), one of the most important evaluations of medical education in the twentieth century. Titled "Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching", and published in 1910, it was based on Flexner's evaluations of 156 graduate and 12 postgraduate medical schools. He studied entrance requirements; size and training of the faculty; financial support of the institution; adequacy, quality, and training in the laboratories; and the relationship between the medical school and its associated hospitals. It is estimated that between 7% and 22% of schools closed or merged as a result of the Report.

Flexner had received a science-based academic education at Johns Hopkins University (USA) which focused on intensive laboratory work and clinical bedside teaching and observations. This scientific paradigm of medical education and research would lead him to define modern medical teaching. In addition, the first two to three decades of the twentieth century were periods of extensive research in the biological sciences and medicine. This had a significant impact on academic psychiatry and helped drive the changes brought about by Flexner's report.

Similar changes were occurring in Britain. The first professor of psychiatry in Britain, Dr. Shaw-Bolton, Medical Superintendent of Wakefield Asylum, was appointed in 1911. There were, however, no university teaching departments till 1923 when the Maudsley Hospital (London University) was built. Many of the well-known personalities in the care and research of the mentally ill at that time lived in Germany and France: Alzheimer, Kraeplin, Nissl, Creutzfeldt, Binswanger, Binet, Charcot, and Janet. But despite this, differences in psychiatry teaching existed across Europe.

In the northern European countries of Germany, Switzerland, the Netherlands, and the Scandinavian countries, psychiatry was taught as a special subject and students were examined in the subject for graduation (Lin 1961). Among the southern European countries of France, Italy, Spain, and Portugal, however, psychiatry did not have a prominent place in medical schools at the turn of the century. This slowly changed as chairs of psychiatry were established and teaching hours for mental illnesses were increased. South American medical schools followed the European traditions, and they too slowly expanded the hours for psychiatry teaching. In the USSR, psychiatry teaching was dominated by the "organic approach" and "Pavlovian concepts" (Wortis 1950).

In China, till as late as the 1940s, there was little differentiation between mental and somatic illness and disease was attributed to "wind," "air," and "heat" (Crammer 1996). However, the communist rule from 1949 led to a rapid introduction of western medicine. In India and Africa which were colonial countries and part of the Commonwealth, early mental health services were delivered by physicians from Britain till these countries went on to develop teaching and training capabilities in their universities and mental health services for their populations.

Psychiatry thus gradually gained independence as a medical specialty and with this came a global movement to develop the teaching of psychiatry. By 1960, a WHO Expert Committee in Mental Health met in Geneva to discuss undergraduate teaching of psychiatry and mental health promotion (Sartorius 1993). Subsequently, the World Psychiatry Association (WPA) and the World Federation of Medical Education (WFME) joined efforts to develop detailed guidelines for a "Core Curriculum in Psychiatry for Medical Students" (World Psychiatry Association [WPA] 1998).

As part of the global recognition of mental illnesses and the realization that the delivery of good mental health care was an important component of population health care, many countries developed mental health policies and mental health legislation which required the support of well-trained mental healthcare professionals (Semrau et al. 2011).

Why Include Mental Health and Illness in Undergraduate Education?

It is now widely accepted that the teaching of mental illness and health should be part of the undergraduate medical curriculum largely due to the provision of healthcare services to meet population health needs and considerations for the quality of life of individuals. The growing prevalence of mental illnesses was recognized in the middle of the last century. The World Health Organization in 2001 reported that about 450 million people worldwide suffer from some form of mental disorder or brain condition (Psychiatric Times 2002). A more recent systematic review and meta-analysis of common mental disorders from 1980 to 2013 confirmed the high global prevalence of these conditions (Steel et al. 2014). Data from 174 surveys across 63 countries showed that

approximately 1 in 5 respondents (17.6%) met criteria for a common mental disorder during the 12 months preceding assessment and lifetime prevalence was 29.2%. A gender effect was apparent with women at higher risk of mood (7.3%) and anxiety (8.7%) disorders in the last 12 months and a higher risk in men, for substance use disorders (2%).

The high disability associated with mental disorders is evident from data that mental disorders accounted for the largest proportion of disability-adjusted life years (DALYs) (56.7%) among mental, neurological, and substance use disorders (10.4% of global DALYs) (Whiteford et al. 2015). Compounding the suffering and disease burden are significant treatment gaps in mental health care across regions. The median treatment gap for psychotic disorders like schizophrenia was found to be 32.2%. For depression, dysthymia, panic disorder, generalized anxiety disorder, and obsessive compulsive disorder, it was >50% each. The widest treatment gaps of 78.1% were for alcohol abuse and dependence (Kohn et al. 2004).

Global suicide rates have increased 60% over the past 45 years. Over a million people commit suicide each year, on average one suicide every 40 seconds somewhere in the world. The global suicide rate is 16 per 100,000 population and 1.8% of worldwide deaths are suicides (Caruso n.d.).

These findings highlight the importance of mental illnesses in population health and reflect the need for adequate health services and training of doctors and other health professionals. By the 1950s, it was recognized and acknowledged that psychiatrists alone could not undertake psychiatric prevention and community mental health care. The role of other physicians particularly general practitioners was recognized, in addition to "nurses, educators, judges, clergymen, journalists and many others" (Krapf 1951).

In the 2001 World Health Report, management and treatment of mental illnesses in primary care was listed as a first recommendation and recognized as fundamental in providing the greatest accessibility to the largest number of people. Given that psychiatry education at the undergraduate level is probably the only exposure to the specialty for doctors, it is the most appropriate time to introduce the teaching of mental health and illnesses at the undergraduate level. Psychiatry training for undergraduates has been described as "vital" as it prepares students to "deal with various difficult and complex situations during medical practice" and also contributes to positive developments in communication skills, empathy, humanistic values, and professional relationships with patients (Kallivayalil 2012). Although these have been described as "generic doctoring skills", they are fundamental skills in medicine which students must develop if they are to provide holistic patient care (Dale et al. 2007).

Medical schools today recognize psychiatry as a basic medical discipline and importantly, that it should be integrated with preclinical subjects and other clinical disciplines. What is also expected but unfortunately not explicitly stated is that the training in psychiatry has to be sufficiently impactful to address the additional issues of relevance in mental health care, that of stigma and the professional image of psychiatry.

What Should Direct the Mental Health and Illness Content in Undergraduate Education?

The fundamental aim is to prepare medical students for their future roles as doctors and their learning should be relevant to the kind of clinical cases and decisions they will need to make when they start clinical practice as doctors. These students will in the near future, care for patients in the community as family physicians or as specialists in general hospitals and specialist centers. Patients with primary psychiatric issues more often than not will seek help from family physicians and even other specialists rather than seek help from a psychiatrist. All doctors need to recognize mental well-being and illnesses whether they exist at a subsyndromal level or as a disorder. They need to appreciate and understand the role of stressors and other social cultural factors in their patients' lives and how these can precipitate and/or perpetuate difficulties in coping. In addition, the role of psychiatric illnesses in affecting compliance and complicating medical treatment are important.

Hence, the focus on awareness of mental illnesses and the ability to recognize symptoms in patients' complaints are crucial. Maguire et al. (1974) found that a half of psychiatric morbidity is not recognized by treating teams in medical and surgical wards. At the primary care level, family physicians are also failing to recognize psychiatric disorders in patients with physical illnesses (Goldberg 1990). Students need to be able to recognize and manage common conditions such as delirium, mood disorders such as depression and anxiety, sleep complaints, suicidal behaviors, psychiatric sequelae of medical conditions, and psychiatric manifestations of medical disorders. In addition basic skills in interviewing, counseling, managing chronic illnesses and breaking bad news, and stress management are basic requirements not only for psychiatry but to practise in any discipline of medicine. Integrating mental health and illness content across the undergraduate curriculum may be one way to address these needs.

The primary objective in enabling the medical student to practice psychiatry at the primary care level upon graduation is especially important in countries where there is no further training in psychiatry after graduation. Few may seek training in postgraduate diploma courses if they are available, undertake continuing medical education programs for self-learning or decide to embark on training as a specialist in psychiatry.

The General Medical Council of UK, rather than develop a national curriculum for medical schools in the UK, produced instead "Tomorrow's Doctors," a framework within which medical schools could develop their medical curriculum (General Medical Council [GMC] 2009). While addressing not only students' learning but also responsibilities of the medical school and its governance and clinician educators, the document is comprehensive but provides freedom for innovation.

The document emphasizes "a shift from a heavily content-laden taught curriculum to teaching students key facts and other skills, which are transferable. . ." (Dogra et al. 2011). It is important that the curriculum should parallel advances in psychiatry and "state of the art" practice to prepare students for their future work and train them in lifelong learning and also strike a balance to define essential from esoteric

psychiatric information. But what is increasingly recognized is the need to teach and focus attention on the neurobiologic basis of mental illnesses. This addresses stigma associated with psychiatry and drives the acceptance of psychiatry as a scientific discipline.

Attention to Student Learning

Several theoretical models of student learning have been developed over the years such as stimulus-response (S-R) theory and learning, constructivist theory, adult learning theory, and theory of reflective practice (Schon 1987). These concepts have provided new understanding of how students learn and incorporating these theories can promote more effective teaching and facilitate learning.

There are fundamentally two ways in which students learn: surface approach or deep approach (Marton and Saljo 1976). Students resort to the former approach when they are faced with large quantities of information taught in passive and largely didactic learning environments. The latter strategy, however, is adopted when students are able to interact with teachers and learning resources; learners attempt to learn by questioning and challenging and then by application and problem-solving. The deep approach is widely regarded as important in higher education particularly medical education as it supports the development of thinking and reasoning skills in clinical work. Often, teaching methods and assessments determine which approach students use to process and handle information (Ramsden 1982).

Yet learning is also an individual exercise; although the teacher may teach, there is great variability in how students store and use that knowledge. Generally, students build upon what is already known, using existing schemas and then add new ideas and knowledge by "ideational scaffolding" for schema building. The responsibility of the teacher is to facilitate this and allow the student the opportunity to question and clarify issues for schema refining. Hence the quality of the learning skills of the student is also important for successful learning. One way to achieve this is to help students develop metacognition or higher order thinking which fosters depth and breadth in student learning (Cutting and Saks 2012). Metacognitive skills enable students to plan; learn appropriate strategies to solve problems; self-assess; and evaluate their performance, progress, and learning strategies (Gonullu and Artar 2014).

Medical students themselves recognize, and here there is agreement with psychiatrists, that they require basic psychiatric skills rather than specialized psychiatric knowledge (Chatham-Showalter et al. 1993). Oakley and Oyebode (2008) found that students in a psychiatry posting felt that skills relevant to all doctors were more important than more specialist psychiatric skills. They felt their teaching could be made more relevant to their future careers through the use of scenarios of commonly encountered clinical problems. In addition, they felt an opportunity for learning in different settings with greater integration of

psychiatry in the medical curriculum would be useful. However, the authors conclude that there still needs to be a balance between what students believe they need versus the fundamentals and principles of the specialty that they need to know and be taught.

When Should Psychiatry Be Introduced in Undergraduate Teaching?

Around the globe, the moment in training when knowledge about basic neurosciences is offered is highly variable.

An approach in many medical schools is to introduce the behavioral and neurosciences in the "preclinical" years, before clinical rotations. Basic neuroanatomical principles and psycho-pharmacological principles related to psychiatry are introduced in the preclinical years. Some courses such as those at Oxford and King's College London have medical psychology components to help students understand psychological models of disease (Dale et al. 2007). Other schools have included sociology and provide the opportunity to incorporate psychiatric disorders and to explore the scientific basis of psychiatric practice early on in medical training (Prasad et al. 2016). Earlier exposure to psychiatry in undergraduate education enables earlier identification and encouragement of students interested in psychiatry to subsequently pursue specialization (Manassis et al. 2006). There is even a call to identify those with interest in psychiatry even before they enter the psychiatry rotation or even enter medical school (Weintraub et al. 1999).

However, other universities introduce the basic sciences relevant to psychiatry during the psychiatry clinical rotation. These subjects then compete for curriculum time in the psychiatry rotation, with acquisition of mental illness knowledge and competencies in clinical psychiatry skills. This can be a challenge depending on the length of the clinical rotation. There appears to be no clear consensus or recommendation on this matter. Wide practice variations exist among medical schools, on the amount of time allocated to related preclinical topics and the integration of these with clinical teaching.

If medicine is taught in an undergraduate degree, then when should the clinical psychiatry training be introduced? Again, there is no general agreement on this. University teachers of psychiatry in Poland reached a consensus that psychiatry should be taught at the beginning years of clinical teaching (Bomba n.d.). Others have integrated the psychiatry teaching program with other disciplines for various reasons that range from a lack of sufficient psychiatry teachers and increasing student numbers to the need to integrate learning for students and teach them to deliver holistic care at the primary care level.

A recent project used emails to insert teaching of key psychiatric concepts at other core clerkships rather than just psychiatry, using a method referred to as spaced learning (Blazek et al. 2016). Snippets of psychiatry information were repeated over time intervals and students who actively engaged with the emails (Intervention group

N = 71 and Control group N = 61) achieved significantly higher scores on the knowledge test. Participants valued the timing, delivery format, and application of psychiatric principles outside the psychiatric setting, leading the investigators to conclude that this could be an efficient means to integrate psychiatry teaching across medical disciplines.

A scoping group commissioned by the Royal College of Psychiatrists suggested greater involvement of psychiatrists in all aspects of medical school life. At the Third Faculty of Medicine, Charles University of Prague, psychiatrists not only teach the neurobehavioral sciences but also in a diverse range of subjects such as "Needs of the patient" and "Introduction to Clinical Practice." The greater participation and involvement in the medical school curriculum beyond just psychiatry teaching is viewed as having additional benefits in reducing stigma of psychiatrists and psychiatry.

Similarly, at a US University (Florida International University Herbert Wertheim College of Medicine), psychiatry teaching faculty are involved in courses such as "How to be a Doctor" which teaches bedside manner, empathy and delivering bad news. The school has attributed the early and consistent exposure to psychiatry as having a tremendous impact on attracting more medical students to the specialty. This was 10% of their 2015 graduating class almost equal to graduating seniors from top medical schools in the USA (Moran 2015).

A training program in psychiatry at the All India Institute of Medical Sciences in New Delhi has provided clinical training in psychiatry over fifth to eighth semesters of their MBBS course in both the Departments of Psychiatry and Community Medicine since 1964 (Sood and Sharan 2012). Their aim is "to link mental health issues to national initiatives like the National Mental Health Programme" and to address the issue of limited manpower resource in mental health care. At the University of Western Australia, a rapid increase in student numbers led to a collaboration with an urban hospital to integrate community general practice-based psychiatry with a hospital-based clinical attachment to improve educational capacity at the hospital (Vickery 2008).

Two schools in the UK (Brighton and Sussex Medical School) have incorporated mental-health teaching with geriatrics in an "Elderly and Mental Health" module; half of the 8 weeks of posting is for mental-health teaching (Dale et al. 2007). This course offers the opportunity for multiprofessional learning and multidisciplinary teamwork experience.

In graduate degree programs, for example, like that at the Department of Psychiatry, Harvard Medical School, preclinical psychiatry courses including didactic teaching such as psychopathology, epidemiology, and neurobiology and skills training such as Mental State Examination are introduced in the first or second years. The clinical rotation of 4 weeks occurs in the third or fourth years.

A positive move in many medical schools is the offer of Electives Modules with the psychiatry department. This provides additional curriculum time for clinical work in specialized areas that students are keen to expand their knowledge and skills in, and research opportunities in mental illnesses and health for interested students.

Delivering the Core Mental Health and Illness Curriculum

For the majority of doctors, the only exposure to mental illnesses is the clinical psychiatry rotation in medical school. The knowledge, interest, and attitudes formed in that short period will either change existing attitudes for the better or worsen attitudes and entrench stigmatizing behaviors. Hence it becomes crucial to ensure that the psychiatry curriculum is relevant and useful for future practice and addresses students' views and attitudes towards the discipline.

In line with the World Health Organization (WHO) dictum, "there is no health without mental health", psychiatry has become well established as an important component in undergraduate medical education. Psychiatry teachers in many parts of the world have attempted to develop a core curriculum for psychiatry to improve the quality of undergraduate psychiatry teaching. While most universities have broadly similar curriculum, differences in the content, teaching, and assessment exist (Sawyer et al. 2008). Probably the most important of these attempts at developing a core curriculum was in 1994 when the World Psychiatric Association (WPA) and the World Federation of Medical Education (WFME) surveyed medical schools about existing curricula and made recommendations (Walton et al. 1999).

The WHO and WFME (1995) report summarized findings from 113 psychiatry departments from 40 countries revealing that while almost half (47.8%) had a national curriculum for undergraduate psychiatry teaching, 54% were dissatisfied with what they were teaching. The mean duration of theoretical teaching was 46.4 ± 24 hours of which 34.9% were lectures and 24.8% lectures and discussions. The length of psychiatry postings varied from 1 to 32 weeks (mean 6.2 ± 4 weeks). Assessment of learning was by written examination (68.8%), student participation (62.3%), use of checklist (20.2%), oral examination (20.2%), multiple choice questions (0.9%), and evaluation by objectives (0.9%). The main outcomes were a need to have other specialties recognize the importance of psychiatric teaching, to stress the importance of community mental health, and improve teaching of behavioral sciences and psychotherapy. Lastly, the importance for an internationally coordinated undergraduate education for psychiatry was emphasized.

Although this survey has not been replicated, another survey of undergraduate psychiatry teaching in UK and Ireland in 2005 found the curriculum content, teaching, and assessments were still highly variable (Karim et al. 2009).

Gelder (1998) simplified the requirements as follows: students need "to understand the nature of psychiatric disorder, to detect it, to manage simple problems and to know when to arrange specialist help." Common yet important conditions at the primary care level as well as psychiatric manifestations and sequelae of physical conditions are crucial, as is the understanding of the contributions of development, personality, familial and genetic risks, and demographic factors such as age, gender, education, and sociocultural factors in mental illness.

Equally important are clinical skills in interviewing to gather relevant history for the diagnosis and care planning, assessment skills in Mental State Examination and functioning and in providing treatment such as psycho-education, simple counseling, and motivational interviewing.

In focusing on providing knowledge about mental illnesses, good mental health is often overlooked or deemed as "understood or expected knowledge", leading to knowledge gaps in this area. Good mental health should be emphasized and taught for recognition of its importance not only for patients but also their caregivers and for the physician's own well-being.

Attention to attitudes to mental health and mental illnesses is also important. These affect personal and professional behaviors that can impact whether attention is paid to patients' mental health issues and whether appropriate help is sought to meet their needs. Studies have found that even psychiatrists and mental health nurses may hold prejudices similar to primary care teams about schizophrenia patients (Niedermier et al. 2006). The problem is just as worrying with students entering medical school, as some hold the view that psychiatry is "distinctly and consistently less attractive than other specialties" (Feifel et al. 1999).

Additionally, psychiatrists do not work in isolation but now function as part of multidisciplinary teams. Hence teamwork and an understanding of the roles of different members of the multidisciplinary team in providing mental health care are important. Students should also be introduced to the multiple settings which form part of psychiatric care. Community mental health care now ranges from day centers and rehabilitation services to home visits for assessments and care provision by community health teams. Hospital care includes ambulatory clinics and inpatient settings which are available in psychiatry units in general hospitals and tertiary psychiatry hospitals. Exposing students to the availability of psychiatric services and how these can support the mentally ill will help them in a broad understanding of needs and options for the mentally ill.

Equally important is the teaching of child and adolescent psychiatry at the undergraduate level. It is frequently relegated to specialty training despite the fact that primary care providers also deliver some psychiatric care for children and adolescents and recognition and knowledge of child psychiatry problems would be important for them. A Task Force called the Child and Adolescent Psychiatry in Medical Education (CAPME) has been set up by the Association for Directors of Medical Student Education in Psychiatry (ASMSEP) and child and adolescent psychiatry educators and medical student educators in psychiatry (Fox et al. 2012). The project has emphasized that child and adolescent education must be an essential part of the medical school curriculum. Basic skills such as interviewing an adolescent are some of the core competencies that can be achieved in basic medical education.

How best then to address all these requirements in clinical postings or rotations that are frequently short and last just a few weeks? One way might be to structure the curriculum with a balance of approaches in the delivery. This could range from provision of didactic knowledge with clinical sessions to learn interviewing and assessment skills and opportunities to practice independently with close supervision.

Didactics can be centralized with large group lectures and small group teaching. Better yet, newer teaching models, such as team-based learning, have been shown to reduce the number of didactic sessions and instead maximize the time for discussions for better learning and encouraging a questioning approach. This helps

inculcate longer term learning in the students to prepare them for the career in medicine and lifelong learning that it entails.

Studies have also shown the effectiveness of problem-based learning (PBL) in psychiatry. McParland (2004) and Kaufman and Mann (1998) found that learning using PBL methods significantly improved scores in psychiatry examinations. Revisiting the earlier discussion about deep and surface learning approaches, PBL encourages the student to not just absorb new information but to understand and apply the knowledge, make sense of it, and construct meaning for learning to take place. Hence it is ideal for learning clinical reasoning which is crucial for medical practice (Schatte et al. 2015). In a modification of this, Messineo and Allegra (2014) proposed a case-based educational model in which real clinical cases, drawn from patients' clinical data stored in hospital electronic medical records, are presented in an interactive format to develop and improve students diagnostic clinical reasoning skills. Teachers guide students on the online learning materials in dealing with a progressing problem situation; students sequentially answer open and multiple-choice questions about three diagnostic process phases for each case. The aim is to reproduce clinical situations that students are likely to encounter when they start work. It provides the student with the opportunity to practice clinical competence and skills in a protected environment.

An opportunity to work alongside psychiatrists and other members of the mental health team is possible through arrangements to embed medical students in clinical teams to deliver care on the wards.

The curriculum is recognized as comprising three distinctive components: (1) what is planned and intended for student learning, (2) what is taught and delivered, and (3) what the students actually experience (Prideaux 2003).

Young clinician educators are now turning to new technologies to improve knowledge accessibility for students. These range from online portals, web-based applications, and smartphone technologies. Students have shown a preference for e-learning rather than classroom lectures. However, learning has to be supported and directed, and there is a need to ensure information is learnt, understood, and internalized through opportunities for discussions, clarifications, and assessments.

Ensuring Acquisition of Clinical Competencies and Skills and the Use of Standardized Patients

Skills learnt during a psychiatry rotation are important for all physicians and not just for those intending to pursue psychiatry. Learning to form a therapeutic relationship, providing empathy, the ability to break bad news are important skills and useful in any branch of medicine. It is therefore important to ensure that these skills are properly taught and competencies achieved.

Standardized patients are increasingly used in psychiatry teaching and assessments. These are healthy individuals trained to portray a person with an illness. This concept was first introduced by a neurologist and clinician-educator, Howard Barrows, at the University of Southern California in the late 1950s. He realized that

medical students were not directly observed and corrected on errors in direct patient evaluation encounters, and many performed poorly in various clinical skills, because they did not know they were doing things incorrectly (Barrows 1993). Additionally, he was dissatisfied with how students were evaluated at the end of their clinical rotations at his medical school, and this led him to look for more reliable ways of evaluating students. He concluded that by having a patient with the same signs and symptoms for every student, the evaluation would be accurate and equitable for students to be judged comparably (Barrows and Abrahamson 1964).

The actual term standardized patient, however, was coined by Geoffrey Norman of McMaster University to reflect the most significant aspect which is reproducing the same challenge to each student (Wallace 1997). While the terms are often used interchangeably in the literature, Cleland et al. (2009) highlight the subtle differences in the terminology and their connotations. Barrow's definition of the simulated patient emphasizes the simulation of reality, whereas Norman's approach to the standardized patient focuses on standardization or consistency of the experience.

However, the use of SP (We use SP for both standardized patient and simulated patient in the rest of the text.) methodology has grown exponentially largely because of difficulties associated with using "real patients" or "live patients." There is difficulty in finding suitable patients when required, and it is tiring for patients to repeat their history and be subjected to repeated examinations. Their signs and symptoms may fluctuate, and they may not provide students or examinees with a consistent experience, which would then introduce an element of biasness in the examination. Real patients provide advantages in terms of "patient-centered learning" (Bokken et al. 2008). Medical students have reported that such interactions made them more confident, motivated, satisfied, and assisted them in developing a professional identity. They also developed a high level of metacognition ("knowing about your knowing") (Bell et al. 2009). It has thus been suggested that clinical experience with real patients as opposed to SPs might promote the formation of tacit knowledge and promote professional development (Bleakley et al. 2008). Interaction and the chance to receive feedback from real patients is an invaluable experience for medical students even though the feedback may not always be reliable or consistent (Ikkos 2003).

The earliest work on using SPs to teach psychopathology is the research by Krahn et al. (2002). Second year students from the Mayo Medical School (N = 45) participated in a study comparing the use of standardized and real patients to teach psychopathology. Students and faculty were blinded to whom they were seeing. The training session consisted of initially observing their clinical teacher/psychiatrist interview two patients. The students then conducted two interviews while being observed by the group and their teacher. This was followed by discussions of psychopathology and diagnosis with verbal and written feedback by the teacher about interviewing technique. Krahn et al. (2002) only asked a single question of the student: "which provides a superior educational experience?"

While students rated the course favorably, they reported that real patients provided a "superior educational experience" and generally preferred real patients, as they perceived them to have actual psychiatric issues. Several students stated that

they became "less emotionally engaged" when they realized they were interviewing a SP and reported feeling "more inattentive"; 91% reported "difficulty feeling empathy" (Krahn et al. 2002). All this despite the advantages of using SPs that included clear symptomatology, cooperation, response to questions, and emphasis on psychiatric symptoms. These findings differ from the earlier work of Sanson-Fisher and Poole (1980) in which students could not distinguish SPs from real patients.

Krahn's study was also important as it gathered feedback from faculty who were providing the teaching; all seven "strongly preferred real patients" and questioned the realism of the psychiatric experience for the medical students. Faculty members were always able to differentiate the SPs from real patients with students identifying SPs "most of the time."

The authors highlighted the students' inability to engender empathy as a "serious shortcoming in psychiatry" particularly as empathy is crucial in engaging patients in assessment, treatment, and follow-up. The corollary is whether the inability to engage with the SP also affects the student's development of interpersonal and communication skills.

Another important finding in this study was that students noted differences in how SPs portrayed different diagnostic groups with some conditions such as obsessive compulsive disorder, eating disorders, and borderline personality disorders providing effective educational experiences. This led the authors to conclude that real psychiatric patients could offer a more realistic clinical experience (Krahn et al. 2002).

A paper by Hall et al. (2004) however supports the use of SPs to teach psychopathology. In a study at the Uniformed Services University of the Health Sciences Medical School, involving 112 third-year medical students, 5 SP case scenarios of paranoid schizophrenia, mania, postpartum depression, alcohol abuse, and early dementia were developed. Students had the opportunity to conduct 20-min interviews with each of the SP cases, and the sessions were videotaped. The SPs were also involved in providing feedback, and the videotapes were reviewed with the faculty.

In subjective feedbacks, students reported they found the sessions valuable and provided the opportunity "to become more comfortable with interviewing, receiving feedback from SPs." They also considered the SPs' presentations as the highlights of the course. However, the study failed to determine students' actual feelings towards SPs. Significantly, many students did not have the opportunity to see real patients with these diagnoses; only 42% of students actually saw a real patient with a bipolar disorder; 25% saw a real patient with schizophrenia and only 15% examined a real patient with dementia. This is highly relevant information as the lack of opportunity to interact and interview real patients could have led to false positive findings and views of SPs. Although the authors concluded their data supports the use of SPs to augment psychopathology teaching, there are limitations that were not addressed.

Bennett et al. (2006) highlighted the usefulness of adding a Psychiatry Clinical Standardized Patient Examination (PCX) with a SP during the third-year psychiatry clerkship. This improved their students (N = 469) performance on the psychiatry component of the Clinical Competency Examination (CCX) that they used to prepare their students for the National Board of Examiners Step 2 Clinical Skills

Exam (Step 2CSA). They concluded that the use of SPs could help students improve their interviewing and interpersonal skills. Again, this study did not include real patients for comparison.

In a study assessing students' interpersonal skills, Sanson-Fisher and Poole (1980) used psychiatry outpatients as simulators to measure empathy via audio recordings. They found no difference in students' performance with real or simulated patients. Students were also unable to distinguish between those who simulated a patient role and those who presented a real history, reflecting that this did not interfere with the clinical experience (Sanson-Fisher and Poole 1980). Generally, students welcomed the greater opportunities to practice interviewing skills and receiving feedback.

Few studies have focused on the effectiveness of SPs in portraying complex emotional and cognitive behaviors. In the area of teaching psychopathology, Krahn et al.'s work (2002) found less emotional engagement and empathy for SPs. This is a significant issue in teaching psychiatry where learning to engage with a patient and forming a therapeutic relationship and alliance are crucial to patients' treatment adherence and compliance and the effectiveness of the psychiatrists' clinical role.

Brenner (2009) too has highlighted limitations in the use of SPs in psychiatric education particularly in relation to the issue of empathy. While he acknowledged the usefulness of SPs in exposing students to different psychiatric disorders he felt the interaction could not definitively evoke the emotions that an encounter with a real patient could. Highlighting that these were the very emotions used in psychiatry to understand and recognize patients' symptoms, feelings, and thoughts, he cautioned the use of SPs in teaching and assessing complex interpersonal skills and feared the SP encounter could become "shallow role-play" (Brenner 2009). Yet in studies using SPs to teach psychotherapeutic interviewing skills, there has been more positive feedback (Lewis 2002; Mohl 2002).

The Mental State Examination is a key skill that students must learn during their psychiatry posting; it forms the cornerstone of the psychiatric interview and assessment of the patient. It goes beyond basic interviewing and communication skills and requires guidance and practice in eliciting symptoms or psychopathology after basic psychiatric history is taken from a patient who is mentally unwell.

Empathy and rapport are important features that need to be developed during the Mental State Examination. SPs are probably very effective when discrete skills need to be taught, but the Mental State Examination is a much more complex and challenging task. Observations of behaviors and emotions expressed during the interview need to be noted. Various symptoms such as thought processes, mood, perceptual disturbances, insight into the illness and the cognitive state need to be systematically elicited and examined through careful questioning.

A simulated session can admittedly provide a safe and supportive environment for the medical student to achieve this core skill. However, whether this experience for the student can be reproduced by a SP trained to play the role is an issue and has far-reaching impact on whether the skills are acquired adequately for future practice. Psychiatric disorders are difficult to simulate and require rigorous

training. Broquet (2002) highlights the complexity of case histories in psychiatry that SPs must learn and rehearse. Roles can be emotionally demanding, for example, that of a depressed suicidal patient and psychiatric scenarios, such as those with multiple comorbidities, may not be understood or readily reproducible by a well person (Broquet 2002).

Yudkowsky et al. (2006) also highlight the "suspension of disbelief that is an important aspect of the interaction with an SP and suggests this basic requirement is not in keeping with the training in psychiatry. Hanna and Fins (2006) further raise a very real possibility that medical students become adept in simulation situations such that they continue to "act" good relationships with patients but fail to establish meaningful or real connections with them.

There is only one study, by Birndorf and Kaye (2002), that determined the use of SPs in Mental State Examination. In this study, second-year medical students were shown how to do a Mental State Examination in a patient with schizophrenia. Unfortunately, the study involved a large group teaching session for Mental State Examination and students were not directly involved in SP interaction. Despite this, the majority of the students (89.5%) reported that the session helped them to better understand the material.

The Use of Standardized Patients in Psychiatry Assessments

The first publication on SP use in psychiatry was by Famuyiwa et al. (1991) who described the use of SPs in OSCEs for assessments in psychiatry. A study by Loschen (1993) involving SPs in OSCEs to assess clinical skills of 15 second and fourth year psychiatry residents reported a positive overall experience. These early studies focused on feedback from residents on aspects of the examination rather than the performance of the SPs.

By the late 1990s, the literature supported the acceptability, reliability, and validity of Objective Structured Clinical Examination assessment using SPs in psychiatry (Hodges et al. 1998). The American Board of Psychiatrists and Neurology (ABPN) conducted studies which established that standardized patients could simulate psychiatric disorders for board examinations. The first study involved SPs trained to simulate a patient with schizophrenia and a patient with major depression. They determined that SPs could be used in assessments of interpersonal skills and history taking skills of psychiatry residents. Their second study examined SPs portrayal of psychiatric patients and whether the SP could evoke a realistic emotional response during the exam. The finding was again positive, and these studies were crucial in leading the ABPN to embark on the extensive use of SPs in psychiatry certification examinations (Yudkowsky 2002).

The use of SPs in psychiatry examinations addresses many of the difficulties in the logistics of exam preparations such as getting real psychiatric patients who need to be stable enough to participate in the exam and still be symptomatic to be of relevance in the examination. Issues related to consent and confidentiality are minimized. The examination becomes equitable and generalizable and importantly, the psychometric properties (reliability and validity) have been established.

The Role of Examinations in Undergraduate Psychiatry Education

Students' learning is also driven by assessments and examinations. Hence the use of examinations both formative and summative can help to ensure acquisition of knowledge and skills. Formative assessments guide students to improve over a period of time; summative assessments determine if those skills and knowledge have been achieved at the end of the teaching rotation and the assignment of a pass/fail mark. Assessment methods need to be objective and reliable.

The formats of examinations vary widely and have evolved over the years. In the nineteenth century when learning was by apprenticeships', personal supervision and assessment was undertaken by the teacher. With the increasing knowledge base, written examinations and oral examinations were used to test knowledge acquisition. By the mid-twentieth century, multiple-choice questions were used and by the late twentieth century, the Observed Standardized Clinical Examination (OSCE) was introduced to assess physical examination, mental state examination, and communication skills (Hodges 2006).

There are three major areas in medical education and also in psychiatry that need to be considered in examinations. Firstly, knowledge, skills, and attitudes; secondly, content; and finally, the assessment tool. A curriculum blueprint helps guide the assessment process and ensures that all aspects of the course and learning objectives are assessed and achieved (Hays 2008). Assessment methods should only be selected when the areas to be tested or deemed important for clinical practice have been identified. The assessment is then matched to the knowledge or task to be assessed. For example, for assessment of competency in assessing suicide risk, an OSCE station would be appropriate rather than a written question or oral test.

For the knowledge component, written papers with long essay type questions have been largely replaced by short-answer or multistemmed questions and multiple-choice questions. Each of these has its benefits. To assess clinical skills, formats have included the Observed Standardized Clinical Examination (OSCE), a multistation examination of simulated clinical tasks. These short timed examinations with students moving from one station to the next allow the inclusion of stations that can test various skills in front of a trained examiner/observer. Skills tested can include history taking, mental state examination, skills in assessing cognition, explaining diagnosis and treatment, counseling among others. The OSCE has thus replaced long and short cases in psychiatry examinations which limited the range of skills that can be assessed in a short examination time frame. OSCEs have also shown reasonable reliability and validity in psychometric measurements and appear particularly useful in proving safe practice (Marwaha 2011).

However, the question remains whether a one-off assessment is sufficient for psychiatric skills. This is an issue applicable in other specialties as well. Should some competencies be tested at multiple times throughout the medical school? Knowledge and skills may decay if not reinforced or if they are highly condition specific like the mental state and suicide risk assessments in psychiatry.

One common tool highlighted in the WPA template for undergraduate and graduate psychiatric education is the use of 360° evaluations. Periodic observations by faculty, peers, and multidisciplinary team members involved with the patient provide a more holistic assessment not only of knowledge and skills but also attitudes and professionalism of the student. While close supervision and direct observations of student performance is likely to provide a good indicator of competencies, it can be time consuming and not entirely feasible for large class sizes.

Medical schools with more extensive resources have harnessed technology to assess competencies. At the Indiana University School of Medicine, multidimensional electronic infrastructures allow medical students to maintain an electronic portfolio of all their projects including presentations, video interviews, and written work. These are then evaluated with feedback and the information stored as a competency transcript. In the UK, electronic records of patients cared for by students are also used to assess students' work.

Addressing Attitudes to Psychiatry

Ignorance, prejudice, and discrimination towards those with mental illnesses exist in many societies. Unfortunately, unfavorable attitudes can also exist amongst medical students. Many studies have focused on attitudes of medical students and the effect of a rotation in psychiatry on these, with some studies revealing positive attitudinal changes. Tharyan et al. (2001) and Kuhnigk et al. (2007) found that the educational and personal experience through direct patient contact and the opportunity to observe psychiatrists interacting with their patients contributed to positive attitudes in addition to enhancing students' clinical skills. In a study in Singapore, attitudinal improvements were noted specifically in "recognizing the merits of psychiatry as scientific medicine" and the effectiveness of psychiatric treatment (Mahendran et al. 2014).

Another study comparing medical students' attitudes following a psychiatry clerkship across five countries found that they are not dissimilar. This was despite existing differences in socioeconomic development, mental health resources, and demographic and cultural heterogeneity (Mahendran et al. 2015a). Medical students from Singapore, Spain, and the USA scored higher reflecting more positive attitudes, on the modified Attitudes to Psychiatry Scale (mAPS) than those from India and Ghana. This modified scale has four subscales: (I) Merits of psychiatry as scientific medicine, (II) Effectiveness of treatment, (III) Stigma of psychiatry, and (IV) Inspiration from medical school (Shankar et al. 2011). While Singapore scored the highest on mAPS IV which is the inspiration from medical school, India scored the lowest on mAPS I (merits of psychiatry as scientific medicine). Consistently high scores in the stigma subscale were observed across all countries.

A recent systematic review of 26 studies from 19 countries found that overall attitudes to psychiatry were positive, with 9 studies reporting an increase in the decision to pursue psychiatry as a career, post-clerkship (Lyons 2014). However, research to date

has focused of changes without attention and identification of exact mechanisms to achieve these changes (Balon 2008). This may be the limiting factor in attempting to bring about the change.

Addressing Stigma

As noted, much of the work has focused on attitudes rather than stigma. Thornicroft et al. (2007) have described stigma as a tripartite model with the components of attitudes, knowledge, and behaviors. There is a need to address stigma which unfortunately is much more deeply rooted and pervasive with greater impact on patients with mental illnesses and consequence for the management and care. "Education has been cited as integral to reducing stigma towards the mentally ill" (Pinfold et al. 2005).

Research has shown that students hold negative stigmatized attitudes towards mental illnesses and psychiatry as a career. This stigma may extend to people who care for the mentally ill including teachers of psychiatry. While some findings have revealed that a clinical rotation in psychiatry can foster a positive change in attitudes through encouragement from consultants and fellow students (McParland et al. 2004), it is also recognized that the usual psychiatry curriculum does not specifically address nor is it designed to reduce stigmatizing attitudes (Abbey et al. 2011). One study revealed that while the "educational environment" in the medical school, recognized as comprising the physical environment, the emotional climate and the intellectual climate (Mohanna et al. 2007), contributed to a positive attitudinal change, the stigma associated with psychiatry seemed to worsen post-rotation (Mahendran et al. 2015b).

Not only should misinformation be addressed but medical students' perspectives on mental illnesses and stereotypes focused upon. Papish et al. (2013) have suggested that students' perceptions could be modulated by focusing on their experiences in caring for mentally ill patients. While Pinfold et al. (2005) have suggested that educational strategies that facilitate patient contact would effectively facilitate this, active attention to these areas are required if any headway is to be made at the undergraduate level.

Apart from the clinical environment and clinical experiences during the rotation, the hidden environment or informal curriculum also has a role in transmitting values and professionalism and influences not only teacher–student relationships but also student–patient relationships.

A global attempt to combat stigmatization was undertaken by the World Psychiatric Association in 2009. A Task Force was set up to examine evidence of stigmatization of psychiatry and psychiatrists and to make recommendations for national psychiatric societies and psychiatrists to take to reduce or prevent stigmatization (Sartorius et al. 2010). Among the many recommendations was also the need to revise training curricula for health professionals, establishing links with other professional associations and patient and caregiver groups. The Task Force also emphasized the role psychiatrists could play and stressed the need to develop respectful

relationships with patients, observe ethical rules in psychiatry practice, and maintain professional competence. This document deserves the attention of psychiatry teachers for application in interactions with their students.

Can We Train, Teach, and Nurture Inspirational Teachers?

The ultimate goal in teaching medical students is to produce the doctors of tomorrow with outcomes for the doctor as a scholar and a scientist, as a practitioner and as a professional (GMC 2009). Students learn best when they get to observe psychiatrists' interactions with patients and when psychiatrists take a keen interest in imparting skills and mentoring students.

Doctors who participate in teaching medical students have various responsibilities. The first is to ensure their clinical competency and that their knowledge and skills are up to date. In addition, they should be competent teachers who diligently commit time and effort to the teaching program and supervision of students assigned to them. This includes the ability to objectively and skillfully provide feedback to students on their performance and honesty in appraising their performance in assessments. It is suggested that feedback to students in psychiatry requires greater care and attention as "a critique of the subjective artistry of the psychiatric interview may be felt more personally than the critique of an objective skill" (McIlwrick et al. 2006).

While research indicates that the curriculum and its assessment are key in determining the quality of student learning (Wilson 1981), the quality of teaching is equally important. It requires teachers to understand and address learner's learning styles and needs and in medicine, flexibility, energy, drive, and commitment in balancing teaching with clinical care (Vaughn and Baker 2001). In one study in Kuwait, medical students cited teachers who were "enthusiastic interactive" had "a clear audible voice" and the use of "visual teaching materials" as helpful strategies for their learning (Fido and Al-Kazemi 2000). As with all teachers, clinician educators have their own preferred teaching styles, which Bibace et al. (1981), have described as assertive, suggestive, collaborative, and facilitative.

Teachers play an important role in influencing career choices of medical students and it is no different in psychiatry. In fact, the quality of teaching and training experience during the clinical rotation are known to be strongly influential deciding factors in whether a student decides to subsequently specialize in psychiatry (Hoschl and van Niekerk 2011). As the number of psychiatrists in formal teaching jobs is low and frequently insufficient to meet all the clinical supervision and teaching, and as student numbers increase, psychiatrists with mainly clinician duties have to take on additional teaching responsibilities. Although these psychiatrists may be content experts, few have formal training in teaching methods. Many are unaware of teaching theories and principles or modes of assessment and often teach based on their past experience. They lack skills in delivering lectures, teaching in small groups, and in giving/receiving feedback

(Masson 2011). This can lead to inconsistency in the delivery of the curriculum and sometimes indifference to the additional role as teacher, to the detriment of the students' learning experience.

While there are many roles that a "good medical teacher" can have, (Harden and Crosby 2000), being a good role-model is probably one of the most important in the making of a good doctor. It provides the student someone they can identify with has qualities they can emulate and are in a position they can aspire to (Paice et al. 2002). But psychiatrists must also teach effectively. It is often assumed that good clinicians and good researchers would also be good teachers, but this does not necessarily hold true (Vassilas et al. 2003). The American Psychiatric Association (2002) has outlined several teaching principles in a practical guide to teaching for psychiatric residents:

1. Actively involve students
2. Challenge students to reason with clinical information and explain their choices
3. Capture attention and have fun
4. Connect the case to broader concepts
5. Teach by modeling patient interactions
6. Meet individual learners' needs
7. Support learners autonomy and show respect
8. Be practical, relevant, selective, and realistic
9. Provide feedback and evaluation

The APA has also recommended a five-step approach to clinical teaching (Neher et al. 1992):

1. Get a commitment from the student
2. Probe for supporting evidence
3. Encourage discussion
4. Reinforce what was right
5. Correct a mistake or teach a general rule

Eng (2011) suggests that "psychiatrists have an obligation to develop, improve and maintain their teaching skills to ensure high-quality teaching." For a truly rounded program, commitment, skills in different teaching methods, enthusiasm, and regular evaluation of performance are equally important (Langsley et al. 1977). Equally important are teachers who are enthusiastic about teaching, passionate about their field and approachable, and who have the skills to integrate psychiatry into overall medical care of the patient. Students value the interaction with their teachers.

As teachers are expected to interact more with students, one particular area that has been little studied is providing feedback to students in undergraduate psychiatric education (McIlwrick et al. 2006).

Masson (2011) lists a stepped approach to improving teaching skills which includes: (1) knowledge of the undergraduate psychiatry course, (2) psychiatry teaching guides, (3) "Teach the Teacher" courses, and (4) postgraduate degrees in medical education.

University departments as a whole should have a strong commitment to teaching and a welcoming inclusive attitude. Not only is leadership within the department and charisma important but the academic prestige of the psychiatric department within the medical school are important in attracting students to psychiatry. Studies on the hidden curriculum emphasize the importance of teaching staff. Staff who are role models and who can provide students with personal encouragement and support form a fundamental component of the informal curriculum (Gaufberg et al. 2010). Attention to recruitment of quality staff and effective teachers is required.

Furthermore, those allotted teaching tasks must have time set aside for these roles and also be recognized for their efforts. A proper system of monitoring teaching hours and teaching performance, and financial remuneration are needed. Recognition for those who teach well and for those who need help to develop teaching skills, there should be opportunities to acquire the teaching skills. Recognition for medical education research is also necessary for vibrancy of the teaching culture, delivery of quality teaching, and innovative approaches. Importantly, even if the teaching program is well accepted by medical students, there still should be regular systematic evaluations with the entire teaching faculty for rapid responses to students' needs in keeping up with psychiatric research and progress.

Accrediting and Maintaining Medical Education Standards

Every medical school is responsible for promoting high standards of medical education. It is part of their duty to protect, promote, and maintain the health and safety of the public (General Medical Council 2009). In some countries, guidelines determine the content of medical school curricula. In the UK, the GMC and the Quality Assurance Agency (QAA) visit medical schools to monitor standards of medical education (Dogra et al. 2011). The criteria monitored includes six aspects: (1) curriculum design, content, and organization; (2) teaching, learning, and assessment; (3) student progression and achievement; (4) student support and guidance; (5) learning resources; and (6) quality management and enhancement (Quality Assurance Agency [QAA] 1997).

In the USA and Canada, the Liaison Committee on Medical Education (LCME) which is sponsored by the American Medical Association is the accrediting authority for awarding the medical degree by the medical school (Liaison Committee on Medical Education [LCME] 2007).

At the institutional teaching department level, ongoing reviews of the curriculum and evaluations of student feedback are important measures. Not only do they help maintain good standards but also ensure the curriculum parallels developments in psychiatry and continues to meet the needs of the community and country. Students' viewpoints are often underutilized. But taken in the right spirit, they can help shape teaching practices and the introduction of innovative practices.

The Future of Mental Health and Illness Teaching

There are challenges in deciding in a core curriculum and this may not be the way forward for medical schools across the world as countries and populations differ in their needs and resources. What might be the best approach is for medical schools to consider what would constitute a "strategic curriculum" for students in their institutions and where they will practice while being cognizant of overall requirements for knowledge of psychiatry as a basic medical discipline. In addition, attention to adequate curriculum time to mental health and illnesses and that those psychiatrists called upon to teach, receive the training to effectively impart knowledge and skills to medical students.

Psychiatry knowledge and specialization has also expanded vastly in child and adolescent psychiatry and geriatric psychiatry to just name some areas. It is only recently that attention has been paid to include child and adolescent psychiatry teaching for undergraduates. Learning from this, how much of geriatric psychiatry should be taught at the undergraduate level? Could these be delivered in collaborative teaching programs with geriatric medicine?

Finally, studies have shown that while the psychiatry curriculum focuses on people with mental illnesses, there is insufficient attention to their families. There has been a call for medical education curriculum guidelines to incorporate information about families and their needs, for example, stigma, caregiver burden, and crisis support (Riebschleger et al. 2008).

The question remains whether lay people in the public or even a patient can be trained to portray an illness and act in a standardized way and whether SPs should be used instead of real patients in major psychiatry exams (Yudkowsky 2002) and psychiatry teaching at the undergraduate level.

A recent 10-year (1996–2005) review of the literature on the use of SPs found that little has been researched about the value of using them (May et al. 2009). In that paper too, May et al. (2009) raise concerns about methodological issues in much of the research involving SPs (Birndorf and Kaye 2002).

In studies related to psychiatry education, there is no evidence that the focus was on the impact of the contact with the SP on the students' learning to do the Mental State Examination and elicit psychopathology. This is particularly important with regard to empathy and rapport. The studies that are available are mostly subjective reports or feedback from students and did not adequately focus on the psychiatric interview process and patient engagement, rapport, and empathy.

The use of SPs supports the evaluation of achievement at the second, third, and fourth levels of Miller's Competence Pyramid (Knows How – explaining to others, Shows How – lets others see it, and Does – real practice) (Miller 1990). However, there is little objective evidence of the role SPs have in helping medical students develop engagement, empathy, and rapport in psychiatry; studies have also not determined whether SPs can evoke emotions that an encounter with a real patient could. Neither is there definitive evidence that SPs can clearly portray complex emotional and cognitive behaviors.

Conclusion

Many innovative ways of enhancing psychiatry teaching have appeared in recent years. Few have been extensively evaluated or even studied longitudinally. While it is necessary to adapt to changing learner needs and community care demands, evaluation is still crucial and greater attention is needed to determine what is actually effective.

Do we want to standardize the curriculum for psychiatry or should it be allowed to progress the way it has – with innovative plans and attempts to improve the teaching and learning of mental illnesses? If the students' learning is not affected, then this may not be such an important issue after all.

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The Actual Status of Postgraduate Training

3

Edvard Hauff

Contents

Abstract

In this chapter, the current status of postgraduate training in psychiatry will be discussed in a global context. International professional organizations promote standards for psychiatric postgraduate training, including World Psychiatric Association (WPA) and European Psychiatric Association (EPA). The European Union of Medical Specialists (UEMS) has a section of psychiatry, which has provided guidelines for postgraduate training in psychiatry to harmonize the

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training in Europe. Globally psychiatry and mental health has not been prioritized in many countries, and this has particular implications for the training of psychiatrists in low- and middle-income countries, and postgraduate training programs are often not available in low-income countries. Some countries have collaborated with high-income countries to develop in-country training programs (e.g., Ethiopia and Cambodia). Competency-Based Training frameworks have increasingly been introduced into postgraduate medical training worldwide, and a number of novel procedures have been introduced to assess the residents' competence. A full postgraduate education in psychiatry should provide an integrated approach including psychotherapy training as well as training in pharmacotherapy, neuroscience, and other relevant disciplines. Considering the increasing international migration, residents also need to develop competencies in providing high quality and effective care to immigrants. Users of mental health services increasingly expect to participate in the postgraduate training of psychiatrists, and there is a need to provide training for the users as educators. The efforts to improve postgraduate training in psychiatry worldwide should be guided by stepped up research focusing on the content of the training, the teaching methods, and the assessment of the residents.

Keywords
Postgraduate medical education · Psychiatric residency training program · Competency-based education · Psychiatry · Mental health services · Low-income countries · Users of mental health services as educators · e-Health

Introduction

Residency programs are an essential component in the professional development of a medical student into a medical specialist, and it is a demanding intellectual and emotional process for the resident. Not surprisingly there are no uniform training requirements or certification processes internationally, and the programs are usually organized by universities or public or private hospitals. Postgraduate training in psychiatry is currently facing several major challenges in the training requirements in psychiatry and implementation of them. The challenges for psychiatry are often greater than in many other specialties with more resources. Globally psychiatry and mental health has not been prioritized in many countries, and this has particular implications for low- and middle-income countries. Budgetary restrictions may lead to less emphasis on education and shorter duration of the training. However, in psychiatric training the residents also need to develop a professional maturity necessitating a sufficiently long training period. The field of psychiatry is at the same time undergoing rapid professional development and demands, related to new treatment methods and recent research findings, increasing demand from the patients and their families, politicians and media, as well as increasingly complex societies. There are also controversies in our field, e.g.,

related to models of understanding and treatment priorities. At the same time there are broad efforts to make the training more competency-based as well as more focused on assessing the knowledge, skills, and attitudes of the residents. Considering these demands and complexities, how can postgraduate training in psychiatry meet these challenges in order to educate mature and competent psychiatrists?

In this chapter, the current status of postgraduate training in psychiatry will be discussed in relation to these challenges.

Efforts to Establish Common Standards

International professional organizations have made considerable efforts to promote standards for psychiatric education on different levels, including postgraduate training. World Psychiatric Association (WPA) is actively involved in psychiatric education. This organization has published a comprehensive template for undergraduate and graduate psychiatric education (www.wpanet.org). Obviously it is a demanding task to develop a template that may be useful globally. The task force takes care to acknowledge to tremendous diversity in psychiatric education across the globe. They emphasize the importance of constructing recommendations that can be modified nationally and locally to suit different socio-cultural contexts. Their recommendations include content, design, structure, methods, and evaluation tools. Such a template may be particularly valuable in countries and regions that are in the process of establishing new programs, where there may have not been any residency training in psychiatry available previously.

In Europe there is a broad variety of postgraduate training programs in psychiatry (Lotz-Rambaldi et al. 2008). The European Union Free Movement Directive gives medical specialists the right to work in all the countries in the EU as well as in Switzerland and the other countries in the European Economic Area (EEA), i.e., Iceland, Liechtenstein, and Norway. In 1994 the European Union of Medical Specialists (UEMS) adopted its Charter on Post Graduate Training aiming at providing recommendations at the European level for good medical training. One of the chapters (Chap. 6) is specific for each specialty.

Chapter 6 "Requirements for the Speciality of Psychiatry" (UEMS 2013) describes

- Requirements for the residents themselves, including knowledge, skills, and professionalism
- Requirements for the organization of the training
- Requirements for the trainers
- Requirements for training institutions

The charter stipulates that the training should be of at least 5 years duration. So far these requirements function as guidelines for specialist training in psychiatry, and so

far there are no common educational standards or certification in psychiatry. However, UEMS is working towards common European standards for training and certification. This is seen as a necessity in the future and will benefit the psychiatric profession as well as patient safety. A major challenge is to address all the variations in health care systems, understanding of psychiatry and resources in order to reach a basic consensus about the values and the content of the training (Brittlebank et al. 2016). Considering the great variation in the training requirements in the European countries, UEMS in 2009 also produced curriculum guidelines, the European Framework for Competencies in Psychiatry (EFCP) (UEMS 2009). These guidelines were produced in consultation with national associations of psychiatrists, the European Union of Psychiatric Trainees (EFPT), and other stakeholders. They are based on a large number of reports on training and supervision. These reports have been produced by the section over the years and are competency based. A central document is The Profile of a Psychiatrist, which in many ways was influenced by the CANMEDs description of physician roles (Frank 2005).

In addition to the regular members of the UEMS, a number of countries are represented at the meetings as observers, e.g., Turkey, and Russia, and Morocco, are other countries that are collaborating with the UEMS Section of Psychiatry. By extending its professional network, UEMS also may contribute to the quality development of residency training outside the member countries. The European residents are increasingly active in developing the quality of their own training in the different countries through the EFPT. The collaboration between UEMS and EFPT is close. This active participation and input to the training requirements indicate a professional commitment by the residents that may lead to further improvements in the training of psychiatrists in Europe in the future.

The European Psychiatric Association (EPA) is also focusing on postgraduate psychiatric training in Europe (Mayer et al. 2014). EPA underlines the need to develop a European certification system. One of the advantages of such a uniform certification would be to make it easier for employers to assess the educational level of applicants from other EEA countries.

In the Psychiatric Training Atlas, The World Health Organization (WHO) identified an overwhelming lack of psychiatrists globally. At that time only 54.5% of low-income countries had psychiatric residency programs, while 77.1% of high-income countries had such programs (WHO 2005). In the Global Action Plan 2013–2020 WHO underlines the need for human resource development, but does not have any specific focus on the training of psychiatrists. Instead, the aim is to develop the knowledge and skills of "general and specialized health workers" in order to deliver evidence-based, culturally appropriate, and human-rights-oriented mental health and social care services (WHO 2013).

In the United States, the Accreditation Council for Graduate Medical Education (ACGME) accredits US medical residency and fellowship programs and the institutions that sponsor them. Similar to the European recommendations, the curriculum must contain competency-based goals and objectives for each assignment at each educational level. The accredited programs must be of 48 months duration, which is also the minimum duration in the European Union. The ACGME has established

specific and detailed program and curriculum requirements for graduate medical education in psychiatry (http://www.acgme.org/Specialties/Overview/pfcatid/21). The point of departure in these guidelines is the concept of graded and progressive responsibility. As residents gain experience and demonstrate personal growth in their ability to care for patients, they assume roles that permit them to exercise those skills with greater autonomy.

Global Challenges: Developing Postgraduate Training in Psychiatry in Low-Income Countries (LIC)

The overwhelming and almost uniform scarcity of mental health services, research, and education in low-income countries is a great challenge for the psychiatric profession. To put it into perspective, the median number of psychiatrists is 172 times higher in high-income countries than in low-income countries. And during the period 2005–2011, the median change in the number of psychiatrists in low-income countries fell, while it increased in high-income countries (Kakuma et al. 2011). What are the roles for psychiatrists in low-income countries? What should be the focus and content of the training? How may the residency training be organized in the best and most efficient way?

There is obviously a need to provide postgraduate training in psychiatry for graduates in low-income countries. Historically this was mostly done by providing scholarship to medical doctors in these countries to receive their training in academic institutions in Europe and North America. Over the last couple of decades, this approach has changed, and the need to establish training programs in low-income countries is emphasized internationally. A major argument in favor of this approach is that psychiatrists should be trained in contexts in which that they are going to work in the future. Another argument in favor of training in the residents' country of origin is to prevent so-called brain drain when the psychiatrist remains in the country where he/she was trained instead of returning home. This issue obviously depends on the push and pull factors of migration, however. Even if the training takes place in a low-income country, internal migration may be a challenge. The training programs are normally based in cities, and the psychiatrists often prefer to stay on there. There is usually a much greater lack of psychiatrists in rural or provincial settings. Efforts to recruit residents from remote provinces may counteract this problem but not necessarily solve it. Other limiting factors in the recruitment of residents are lack of funding and lack of trainers. The recruitment of residents may also be limited related to stigma and negative attitudes towards psychiatry and mental illness in the population (Ndetei et al. 2008). Furthermore, training programs in the residents' countries do not guarantee that the training will be culturally sensitive and address socio-cultural aspects of the mental health care system comprehensively and explicitly, so these issues must be addressed in the curriculum development. A psychiatrist in a low-income country is likely to need other and sometimes additional knowledge and skills than colleagues in Europe and North America, depending on the service needs in the country. Clinical methods used in other countries must undergo

socio-cultural validation. In order to validate and develop relevant and sensitive treatment approaches, the psychiatrists also will need to develop basic research skills. A likely major task is teaching and supervising colleagues and other mental health personnel, which means that skills in teaching and supervision methods may be essential, including e-learning and tele-psychiatry. Skills in different rehabilitation strategies may be even more important in low-income countries than in the richer countries, including psychoeducational programs to help the population to cope with mental distress and detect severe mental illness. The resident must learn how to address needs for task sharing, delegating task to other health personnel and teach them the relevant skills (Fulton et al. 2011). Postgraduate training programs in psychiatry have often mainly been hospital based, and this does not provide the best opportunities for developing clinical and management skills for a community-oriented mental health care. Psychiatrists also have to take up leadership positions, and training in skills in management and leadership is highly relevant for most residents in low-income countries. Special courses have been developed to meet this need, e.g., the 4-week course at the University of Melbourne (Beinecke et al. 2010).

Major reasons for the scarcity of postgraduate training programs in psychiatry in low-income countries are lack of funding and low priority for mental health care in the countries (WHO 2005). However, this critical situation is also a challenge to the international community including psychiatrists and academic institutions and hospitals in high-income countries. A closer collaboration between colleagues and institutions in low- and high-income countries to develop training programs in low-income countries has increasingly been proposed (e.g., Fricchione et al. 2012). Such twinning or bidirectional programs are likely to benefit the training programs in both partner institutions. This type of collaboration is also needed in child- and adolescent psychiatry, and Hamoda and Belfer (2010) have, for example, recommended regional centers of excellence to improve the collaboration between child- and adolescent psychiatrists in the region. Exchange of faculty and students will also benefit partners in the "north" by providing understanding of global mental health as well as experiences in cultural diversity and transcultural psychiatry and public health issues related to psychiatry. There are several examples of such collaboration programs, and two of them will be described in more detail here.

In 1993 the University of Health Sciences and the Ministry of Health Cambodia started to collaborate with the University of Oslo in Norway to establish a national postgraduate training program in psychiatry (Hauff 1996). The International Organization of Migration (IOM) was managing the program. Cambodia was at that time still recovering from the Khmer Rouge regime (1975–1979) and had no educational programs in psychiatry, nor any mental health services. The program expanded over the years and also addresses the scarcity of mental health services throughout the country by gradually establishing such services in most provinces. This was made possible by funding from the Norwegian Government for a period of 13 years. The University of Oslo initially directed the program. In the next phase IOM was responsible, and the Cambodian partners have directed the program since 2002. At present the training is run as an ordinary postgraduate training program by the University of Health Sciences without external funding, and more than 60

psychiatrists have been educated, and all of them except one still work in the country. In addition there have been courses for psychiatric nurses and general practitioners. Psychiatry has been introduced as a teaching subject in the medical school, and medical and psychology students have clinical teaching in the affiliated hospital. Initially Norwegian psychiatrists were present continuously as supervisors and teachers and gained valuable experience in transcultural psychiatry. There were also regular 2-weeks teaching blocks with resource persons from the other South East Asian countries as well as Norwegians. The collaboration still continues between Cambodia and Norwegian psychiatry. This effort shows that it is possible with external funding to establish a postgraduate training program in psychiatry in an early phase of reconstructing a health care system after war, civil war, and mass killings and destruction. A remarkable aspect of this effort is that the first batch of residents – and thus the present leaders of Cambodian psychiatry – all were survivors of the Khmer Rouge concentration camps.

Some of the present challenges are further curriculum development, competency-based training, and quality assurance of the clinical services.

Another example is Ethiopia. In 2003 the University of Addis Ababa invited the University of Toronto to collaborate on the first Ethiopian psychiatric residency program to be run entirely in Ethiopia, the TAAPP (Alem et al. 2010). Together, psychiatrists from Addis Ababa University and the University of Toronto have trained 30 Ethiopian psychiatrists in-country to bring the total number of psychiatrists in the country from 11 to 41 specialists. Similarly to the program in Cambodia, the TAAPP has expanded its scope and activity, although from another starting point. The graduates of TAAPP now run five departments of psychiatry outside the capital of Addis Ababa. Furthermore, the Department of Psychiatry at Addis Ababa University has established a PhD program as well as a Master program in mental health. The University of Toronto also benefits greatly from this collaboration, operating three 1-month teaching trips a year to Addis Ababa. Each outgoing teaching group consists of two faculty members and one resident in psychiatry. This program in psychiatry has also been the model for a broader educational collaboration, the Toronto Addis Ababa Academic Collaboration (TAAAC). This collaboration involves six faculties at the University of Toronto.

There is obviously a need for similar collaboration programs also in other low-income countries without in-country psychiatric residency programs. One example is Laos where there have been an expressed need and efforts to establish a program, but so far without results.

Teaching and Learning Methods

Training residents to become competent psychiatrists is a complex task, and the methods of training and assessment of competence are continuously developing. Competence can be defined as the ability to do something successfully. It has been pointed out that the movement in favor of competency-based training was apparently largely driven by a politically perceived need to make the national

workforces more competitive (Leung 2002). Competency-based training frameworks have increasingly been introduced into postgraduate medical training world-wide (Carraccio et al. 2016). United Kingdom, Canada, Australia, and New Zealand are examples of countries that have introduced competency based residency training in psychiatry (Saperson 2013; Jurd et al. 2015). The basic approach consists of a functional analysis of the occupational roles, translation of these roles (competencies) into outcomes, and assessment of the trainees' progress on the basis of demonstrated performance. One of the criticisms of this approach is that it ignores the connections between individual tasks and the meaning underlying each task (Leung 2002). In spite of the controversies (Hawkins et al. 2015), it has emerged as a core strategy to educate and assess psychiatric residents. There are a number of relevant frameworks from different countries, e. g., CanMEDS (Frank 2005) and the Accreditation Council for Graduate Medical Education competencies (Batalden et al. 2002). This approach is still deeply rooted in workplace-learning (Dornan 2012). A well-trained psychiatrist should have skills and knowledge in all relevant fields of mental health care. However, training time spent in different departments is not the main criteria for accreditation any longer, but the residents' achievements and demonstrated competencies. The formulation of learning objectives and learning activities, i.e., the methods used to reach the objectives, is central in this approach. It implies an active participation of the resident in their own learning and assessment.

Accreditation Council for Graduate Medical Education (ACGME) in the United States now encourages residency programs to base their assessment of the residents on the "Entrusted Professional Activities" (EPA) which are units of professional practice (tasks) that can be entrusted to a sufficiently competent learner. They are work-descriptors based on observable activities. Competencies on the other hand are person-descriptors. For most EPAs, multiple competencies are required (Ten Cate 2013). The assessment of competence is conducted in a number of ways, and clinical observation of the resident during the job is a main component. Other methods are knowledge tests, simulations, logbooks, video observation, mini clinical evaluation exercises (MiniCEX) procedures, multisource feedback procedures, and many more (ten Cate and Scheele 2007).

The quality and responsibilities of the clinical supervisor is of paramount importance. A systematic review of the effect of clinical supervision on patient and residency education outcome (Farnan et al. 2012) indicated that the supervision resulted in improved patient- or education-related outcomes. As in most areas of postgraduate training programs, high quality educational research is scarce, and the published studies were limited by small sample sizes, nonrandomized designs, and a lack of objective measures of clinical supervision. Thus, there is a need to develop validated measures of clinical supervision. Other areas where research is needed are cross-cultural supervision, training of supervisors, direct observation of trainees, evaluation of the effect of supervision on treatment outcomes, and issues of medico-legal responsibility (MacDonald and Ellis 2012).

Didactic class-room teaching is still being used world-wide, although more and more in a modified interactive way. In their template, WPA promotes on-line

lectures and tele-teaching as well as problem-based and team-based learning groups. Increasingly e-learning (online-learning, Internet-based learning) has become popular and is being used in medical education, including residency training in psychiatry. This includes both distance learning and computer-based instruction (Ruiz et al. 2006; Hilty et al. 2015). The distance learning programs are particularly suitable where training is decentralized including remote areas. A meta-analysis of Internet-based learning in the health professions indicated that Internet-based instructions had a large effect compared to no interventions and appeared to have an effectiveness similar to traditional methods (Cook et al. 2008).

In Norway obligatory residential courses have been a main component of the national training of psychiatric residents for decades. These courses are now 4×5 days and have become an arena for peer-group reflections on their professional development, the role, and identity as a psychiatrist and discussing recent developments in psychiatry and societal expectations and community needs. Norway has a decentralized residency training in psychiatry, and the participants are residents from different training institutions from all over the country (Hauff E, Personal communication).

Concurrently with the efforts to improve the methods and content of the residency training in psychiatry, there are also increased needs for psychiatric services, often without an accompanying increase in funding. The likely demands for a higher number of consultations and more effective job performance may easily come in conflict with the extent and quality of the training. Competency-based training requires time and resources, and this has fiscal implications for the institutions and programs responsible for the training. The training institutions have to give the residents time for customized study, preparing training portfolios, participate in different types of assessment and examinations, etc. Thus, it is important to have a continuous quality control of educational programs (Louie et al. 2004).

Evaluation of the Residents

The establishment of competency-based training objectives leads to an increasing emphasis on a systematic assessment of the resident's accomplishment of these objectives. Such assessment may include both formative and summative evaluation. The formative evaluation should provide, e.g., assessment of competence in patient care, medical knowledge, and communication skills. A comprehensive evaluation using multiple evaluators is often recommended, the so-called 360 degrees evaluation (Whitehouse et al. 2007). This may involve patients, peers, faculty, other professional staff, and the resident himself/herself. The summative evaluation should verify that the resident has demonstrated sufficient competence to enter practice without direct supervision. In several countries, there are written examinations (e.g., in the United Kingdom), but this is not a uniform requirement globally.

Cultural Diversity Among Residents

In most countries and especially in immigration countries, psychiatric residents increasingly have a variety of socio-cultural and ethnic backgrounds. This situation has important implications for the training. Residents who master two or more cultural codes often have an advantage by being more aware of their own worldview, having useful language competency, having international networks and experience with the living conditions of minority populations, etc. But if the resident has not grown up in the country in which she/he is being trained, she/he may meet additional challenges during the training, being less familiar with the cultural codes in that specific context. It may, for example, take time to develop a deeper understanding of the language than merely being able to communicate in daily living. Minority residents with such a background are likely to benefit if they themselves, their supervisors, and directors of residency training address these issues explicitly and in a nondiscriminatory way.

Improving the Content of the Training

The main international approach to the content of the training is that it must include practical clinical work and relevant theory, covering biological, psychological, and social treatment modalities. The content of the residency training varies considerable between countries. In some countries, especially countries with less teaching and academic resources, the content of the training may be mostly focused on the core subjects as diagnostics, psychopathology, and main treatment modalities like psycho-pharmacotherapy and basic psychotherapeutic interventions. However, the recommendations of international professional bodies like UEMS and WPA include a large variety of topics in order to meet the developments in psychiatric research, social and cultural changes, as well as societal demands and expectations.

There are many examples in the psychiatric literature of topics that are seen as important, but under-focused in the residency training. One example is neurosciences and neuropsychiatry, which has gained increasing importance in psychiatric residency training related to the rapid expansion of clinically relevant neuroscience knowledge. When revising curricula for residency training, it is a challenge to include sufficient learning objectives in this field so that the future psychiatrists gain neuroscience literacy (Benjamin 2013; Chung and Insel 2014).

Training in neurology for psychiatric residents is not mandatory in all countries. A survey among directors of residency training program in the United States indicated that the majority of the programs offered instruction in neurology to the residents, but that there was a need to improve the curriculum (Reardon and Walaszek 2012). Furthermore, training in psychosomatics, liaison psychiatry, as well as in general medicine is emphasized to improve further integration of psychiatry in medicine (Annamalai et al. 2015). In order to achieve competency in addressing co-morbidity issues and liaison psychiatry, Heinrich et al. (2014)

recommend that the residents participate in a rotation training, which includes psychiatric consultation-liaison services.

Psychotherapy is a core discipline in psychiatry, but training in psychotherapy for psychiatric residents varies a lot in relation to the types of therapy, teaching methods, and extent of the training. In some countries, psychotherapy training may be less emphasized due to time constraints due to competition from other topics and increased administrative tasks. A survey of 13 European countries (Fiorillo et al. 2011) found that training in psychotherapy was mandatory in all of the countries except Belgium and France. But in most of the countries the residents had to pay additional fees to receive this training. Most of them also had to pay for personal psychotherapy, which was mandatory in nine of the countries (Fiorillo et al. 2011). Psychiatric residents themselves in the United States and in Europe consider that psychotherapy should be an integral part of their professional identity (Brittlebank et al. 2016). Gabbard and Kay (2001) on the other hand asked the question: "Whatever happened to the Biopsychosocial Psychiatrist?" and found that there was an artificial separation of the psychosocial and biological domains in psychiatry as well as in the training. A full and relevant postgraduate education in psychiatry should be able to provide an integrated approach including psychotherapy training as well as training in pharmacotherapy, neuroscience, and other relevant disciplines. The residents should receive qualified and regular supervision of therapy with patients with different disorders and educational courses about the main types of psychotherapy (Clemens et al. 2014). It has been difficult to establish good studies of the effect of supervision, including psychotherapy supervision, on the outcome of the treatment of the patients. However, this is currently a field of considerable international research efforts, using a competency-based framework (Watkins 2014).

Serving Minority Populations, Refugees, and Other Immigrants

Considering the increased international migration, both voluntary and forced, institutions and professional bodies have described the competencies that psychiatrists must have to enable them to provide high quality and effective care to immigrants. The UEMS Section of Psychiatry in 2016 adopted guidelines for knowledge, skills, and professionalism for required training in this field. The residents should, for example, have knowledge of the legal framework including international conventions as well as national legislation on refugees, asylum seekers, and awareness of related human rights issues. They should also acquire knowledge about *t*he psychological and psychiatric consequences of loss, trauma, abuse, especially human rights violations as torture, wars, incarceration, and politically, ethnically, and racially based persecution. They should also be able to perform and document a psychiatric assessment with attention to cultural diversity (UEMS 2016). Another example of recent developments in this field is the American Psychiatric Association's inclusion of the Cultural Formulation Interview (CFI) in the DSM-5 manual (American Psychiatric Association 2013).

What Could be the Role of Users and Carers in Postgraduate Training of Psychiatrists?

During the last decades, the user movements have become stronger and their points of view are increasingly adhered to, especially in high-income countries. Patients have always had a central role in this education, but previously this was mostly in the form of passive participants. Currently users want to participate as more active educators. Users are now involved in curriculum development, as session presenters, tutors, and project supervisors (Khoo et al. 2004). However, such user involvement in postgraduate education is still uncommon, and projects involving users as active resource persons in postgraduate mental health education so far exist mostly in postgraduate training of nurses (Happell et al. 2014). There is a need to provide training for the users as educators, to evaluate their teaching in line with other mental health educators, and to conduct research to identify the most effective and satisfying ways to collaborate with users as teachers (Livingston and Cooper 2004).

Training Pathways and Subspecialty Training

There is a variety of training pathways for the residents in different programs. Some programs are highly structured with a fixed rotational scheme, while others traditionally have been less structured and left more choices to the residents. There seems to be a development in the direction of more structured pathways, in line with the competency-based frameworks described above.

Although training in General Psychiatry is the core of the training, many programs include exposure to different fields of psychiatry like Child and Adolescent Psychiatry, Old Age Psychiatry, Forensic Psychiatry, Medical Psychotherapy, Psychiatry of Learning or Intellectiual Disability, Substance Misuse Psychiatry and Rehabilitation Psychiatry. In some countries, these fields are organized and accredited as separate specialties (e.g., Child and Adolescent Psychiatry), and in many countries some of these fields are recognized as subspecialties. The American Board of Psychiatry and Neurology (ABPN) has, for example, recognized 14 different subspecialties (https://www.abpn.com).

Conclusion

Psychiatry is a major medical specialty facing diverse challenges in different parts of the world, related to professional and scientific development and to the provision of mental health care in a wide variety of cultures and social contexts. The residency training programs must address these issues, enabling the future psychiatrists to serve the diverse populations where they are practicing. Postgraduate education in psychiatry should be developed in collaboration between patients and their families, health and academic authorities, professional bodies, training

directors, and supervisors. These efforts should be guided by stepped up research focusing on the content of the training, the teaching methods, and the assessment of the residents.

Cross-References

- ▶ Global Perspectives on Psychiatric Education
- ▶ Teaching Neurobiology in Psychiatry
- ▶ Training in Psychotherapy
- ▶ Training in Telepsychiatry

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ACGME: Accreditation Council for Graduate Medical Education. http://www.acgme.org/Specialties/Overview/pfcatid/21

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Mental Health Nursing Education: Past, Present, and Future

4

Sally Chan

Contents

Abstract

With the changing paradigms about mental health, mental illness, and mental health services in this new millennium, mental health nursing practice also evolves with time. Mental health nursing education needs to keep abreast with the growing and changing demands of professional practice and to prepare the

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graduates for leading the future practice development. This chapter highlights some contemporary issues related to preparing mental health nurses for today's professional practice. The competency-based approach is essential to build a curriculum to prepare nursing students for contemporary professional practice. Two modes of the preregistration mental health nursing education system from the United Kingdom and Australia are compared and their educational rationales and implications to service and practice development are explored. The recovery model of care requires reframing educational approaches from the biomedical focus to one that focuses on building and maintaining service users' strength. The component of evidence-based practice has long been established in mental health nursing education programs, but there remains continuing debate over what evidence is relevant and applicable to mental health nursing. A reflection on how this is integrated in the education process and the learning outcomes would help to reinforce its importance to improve practice. In the traditional healthcare system, the approach of multidiscipline healthcare team with medical dominance still maintained. Today much more emphasis is placed on an interdisciplinary collaboration with active participation of the service users. Mental health nursing education needs to progress within such context and keep up with what is needed today, and certainly tomorrow.

Keywords
Mental health nursing education · Competency-based education · Evidence-based practice · Recovery model · Interprofessional education

Introduction

Mental health nurses are an integral part of the mental health care team. They play a significant role of promoting mental health and caring for service users in both institutional and community care. It is well recognized that effectiveness of the mental healthcare system depends much on both the quantity and quality of mental health nursing service. In Mental Health Atlas 2014, the World Health Organization (WHO) (2015) reported that the median of nurses working in mental health globally has shifted upward by 37%. This positive change in the number of nurses working in mental health is greatest in low-income countries and least in high-income countries. Despite such positive shift, there is a global shortage of appropriately qualified nurses to work effectively in mental health services (World Health Organization 2015). For example, in Australia, it is identified that mental health nursing will be the area of the greatest shortage among healthcare professionals, with a projected shortfall of approximately 17,000 nurses in the year 2030 (Ryan 2015). Education is one of the mental health workforce development strategies to address the issue (Ryan 2015). Such shortage creates an opportunity to review and reflect on current and future mental health nursing education, and how education can promote students' interest in mental health nursing, and increase the number of new recruits to mental health practice.

The new millennium sees the changing paradigms and views about mental health, mental illness, mental health services, as well as mental health nursing. In many countries, institutional care has been largely replaced by comprehensive, integrated, and community-based mental health services. The recovery approach is replacing the biomedical approach to mental health care. The recovery-based care requires reframing treatment and service provision from the healthcare professionals' perspective to service users' autonomy and emphasis on the individual's personal strengths. Mental health nurses are expected to work in partnership with individuals who use the mental health services, their families, carers, and their communities (Department of Health 2014a). There is a growing demand for evidence-based nursing practice to provide mental health care which has a sound research base and is continuously refined and improved. Also, an integrated interdisciplinary team approach becomes essential to optimize the use of resources and attain best possible outcomes of mental health care.

This chapter discusses some contemporary issues related to preparing mental health nurses for meeting the rapid developing demand of today's professional practice, as well as the needs of service users and the healthcare system. The discussion includes the competency-based approach in curriculum development, pedagogical methodology with emphases on students' active learning, problem-based learning, reflection, digital learning evidence-based practice, and interprofessional education. The recovery model of mental health promotion and maintenance would also be discussed as a recommended theoretical framework for building mental health nursing education programs. The discussion also attempts to highlight issues on the different modes of preregistration education for preparing beginning practitioners.

Competency-Based Mental Health Nursing Education

The Australian College of Mental Health Nursing (ACMHN) published the Standards of Practice for Australian Mental Health Nurses in 2010. These standards (ACMHN 2010) expect the mental health nurse to:

1. acknowledge diversity in culture, values, and belief systems and ensure his/her practice is nondiscriminatory, and promote dignity and self-determination
2. establish collaborative partnerships that facilitate and support people with mental health issues to participate in all aspects of their care
3. develop a therapeutic relationship that is respectful of the individual's choices, experiences, and circumstances. This involves building on the user's strengths, holding hope, and enhancing resilience to promote recovery
4. collaboratively plan and provide ethically based care consistent with the mental, physical, spiritual, emotional, social, and cultural needs of the individual
5. value the contributions of other agencies and stakeholders in the collaborative provision of holistic, evidence-based care and in ensuring comprehensive service provision for people with mental health issues

6. actively pursue opportunities to reduce stigma and promote social inclusion and community participation for all people with mental health issues
7. demonstrate evidence-based practice and actively promote practice innovation through lifelong education, research, professional development, clinical supervision, and reflective practice
8. incorporate and reflect common law requirements, relevant statutes, and the nursing profession's code of conduct and ethics
9. integrate international, national, local, and state policies and guidelines with professional standards and competencies
10. hold specialist qualifications and demonstrate advanced specialist knowledge, skills, and practice, integrating all the standards competently and modeling leadership in the practice setting

The key elements of the ACMHN standards have been used to guide the development of mental health nursing curriculums in Australia. The standards also facilitate an adoption of the competency-based approach by education institutes in organizing their mental health nursing programs. Teaching, learning, and assessment strategies are designed and implemented according to the three areas in the educational taxonomy – attitude, knowledge, and skills.

The ACMHN standards describe that the mental health nurse should accept diversities of individual service users without discrimination, and remove social stigma. A learner in the nursing program could not develop such attitude by just knowing the negative effects of discrimination and social stigma. They need to reflect on own values and feelings toward mental health and the challenges encountered by the service users (Stockhausen 2005).

To reflect, the learner needs to go deeply into the life of the service users and learn through the challenges experienced by them. Reflection exercises during the clinical placement would help the learner develop a sense of the situation where the service users are facing. Direct engagement with the service users will exposure the learner to the emotive element of caring, and hopefully feeling of empathy could be developed (Stockhausen 2005).

Reflection would be more effective when it is guided by the clinical mentor who works with the student to review and discuss the student's reflective journals (Chien 2012). Attitude development takes time and cannot be assessed by scores or grades. When the clinical mentor reviews student's reflective journals together with the student, issues with the students' values and views toward mental health and promoting the service user's well-being could be identified and guidance could be continuously offered.

Build Knowledge Base by Problem-Based Learning

Learning is a life-long process. Continuing professional development is a common requirement by professional regulation bodies globally as well as healthcare employers. In preregistration nursing programs, students should be guided to develop both an inquiring mind and skills to search for answer to problems.

Problem-based learning (PBL) is a commonly employed strategy to drive students to work in groups to learn the knowledge about a problem. Each PBL group member is responsible for finding the answer to a designated problem, and then sharing and discussing in the group. In this process, learners would develop multiple skills, including skills of identifying the knowledge gap, searching and scrutinizing the information collected, and collating the information for sharing and discussing in the group. This is a process to develop inquisitive and autonomous learning. It is also a way to collaborate with others to learn effectively (Cooper and Carver 2012).

In mental health nursing education, the PBL questions are usually constructed around the competencies expected by the regulatory body of the nursing profession, which could include specialized knowledge in mental health, local and international issues and policies on mental health care, standards and guidelines of practice, legal requirements and professional codes, and contributions of the healthcare system and other stakeholders. Learning outcomes could be assessed in formal examinations as well as by rating performances in the PBL process (Roh et al. 2013).

PBL has been used for many decades by various professional programs and is not confined to classroom learning. PBL could be facilitated by academics in the school, and supervisors during clinical placements. Many innovative strategies have been developed to enhance learning by PBL, for example, integrating PBL with simulation learning activities. This is found to be effective in promoting students' interest and motivation in solving problems (Roh et al. 2013).

Develop Clinical Competency Through Practice

In their daily work, mental health nurses employ communication skills to engage the service users and their families. For a student with no experience of interacting with an individual with mental health issues, practical guidance is needed. The guidance may include the very basic skills like what to say and how to start a conversation to attain therapeutic outcomes. Students often experience anxiety when they fail to start an engagement or are rejected by the service user. It is useful to learn from demonstration of communication and listening skills by experienced clinicians both in simulation environment and clinical settings. Sharing experiences among students is often helpful to broaden the scope and increase the depth of understanding of a specific topic as well as to build effective skills (Bronwyn 2014).

For example, Bronwyn (2014) had effectively used student-generated podcast to facilitate student sharing in learning therapeutic communication skills. Students were asked to produce and upload audio files of 3–5-min communication activities as podcast. Through self-reflection, sharing views on others work, and writing reflective essays, students effectively mastered the communication skills with facilitation by the teacher. Students were motivated by such peer learning experience.

Mental health nurses use many therapeutic intervention skills in practice, like cognitive behavioral therapy. All such specific skills, like learning the basic communication skills, need to be learned first in a safe and simulated learning environment. Repeated rehearsals with facilitation by academic and clinical mentor are the key to clinical skill mastery.

Integrate Digital Technology in Healthcare and Nursing Education

Today's rapid advances in digital technology have great impacts on healthcare, including those addressing mental health issues. Digital technology offer opportunities for service users to access therapeutic and supportive services conveniently. There has been fast development in e-mental health services. For example, innovative mobile apps using smartphone have been developed for supporting caregivers and service users (Zhang et al. 2016, 2017).

The use of digital technology often involves interdisciplinary efforts. Mental health nurses could be an active member in the production and implementation team of e-mental health services. They could be directly involved in the development of apps or other e-mental health programs, and supporting the service users in the use of these programs. Given its easy access and effectiveness, especially for those service users living in remote areas, e-mental health services are now an essential part of regular services (Zhang et al. 2016, 2017). It is thus essential that mental health nursing programs equip the graduates with skills in digital technology.

Apart from applications in healthcare, digital technology can be a powerful enabler of learning which goes beyond knowledge transfer. Technology enables students to learn at anytime, anyplace, anywhere, and any pace which is convenient to them. Digital technology such as e-learning, serious games, virtual reality, and augmented reality have increasing been used in healthcare professional education. It can be applied in a broad spectrum of education practices including classroom learning, blended learning, and virtual learning. Evidence supported that digital technology can enhance flexible learning, interactive learning, real-time feedback, networking, and overall student performance (Kowitlawakul et al. 2017; Johnston et al. 2013).

Enhance Evidence-Based Practice

During the Crimean War in the 1850s, Florence Nightingale applied evidence in food and environmental hygiene, and patient outcome to enhance patient care. Members of the nursing profession proudly regarded this as the first documented attempt of evidence-based practice (EBP) in nursing (Chan 2013). EBP in health care is generally referred to integrating the best research with clinical expertise and patient values to achieve optimal health outcomes. Research evidence support that EBP could lead to safer care, better care outcomes, and lower health care costs (Winters and Echeverri 2012). EBP has become a core competency of all healthcare clinicians. Nurses are expected to access and appraise evidence before integrating it into clinical practice.

There has been progressive development in the past decades on EBP in mental health nursing. Innovative research has been conducted in many areas with evidence translated into clinical practice. Some examples include intervention at psychological emergency (Callaghan and Waldock 2012), psychoeducation (Chan et al. 2009;

Chien et al. 2012), management of behavioral and psychological symptoms of dementia (Kales et al. 2015), service users peer support (Landers and Zhou 2011), and promotion of mental health in perinatal care (Shorey et al. 2015).

Despite the progress, challenges remain in applying EBP to nursing practice. Evidence suggested that nurses generally have positive attitude toward implementing EBP. Lack of skills in literature search, evidence synthesis, and the lack of organizational resources for research utilization have been frequently reported by nurses as the biggest barriers that impeded EBP (Chan 2013). For example, a descriptive survey of 1015 nurses in USA showed that nurses were willing to implement EBP, but most nurses suggested a need for educational opportunities and access to knowledgeable mentors, resources, and tools needed to use EBP. Another big barrier was an organizational culture that did not support EBP implementation. Staff nurses encountered resistance from nurse managers (Melnyk et al. 2012). Some nurse managers were critical for providing the support needed for implementing EBP and for providing role models. Such resistance and barriers could be related to the lack of education (Wallis 2012).

Further, there are many knowledge gaps in mental health nursing practice. Zauszniewski et al. (2007) pointed out that some practice remained grounded in tradition, and trial-and-error approach. Areas such as effects of seclusion, employment of chemical restraint, and titration of depot tranquillizer still need further studies to have conclusive evidence. Many "traditional practice" could have been developed by nurse leaders with their practical wisdom. These practices are sometimes being formalized as clinical guidelines. Practices backed up by authority are seldom being challenged by practicing nurses.

The Institute of Medicine (2010) Interdisciplinary Health Professions Education Summit noted that EBP had not been incorporated into the basic fabric of the education of healthcare providers (Winters and Echeverri 2012). The outcome was that healthcare students may not be fully prepared for EBP practice.

Continuing efforts are required to integrate best available evidence in mental health nursing practice. There is a need to build EBP culture in practice. Education could be one of the ways to build such culture. EBP competencies can be developed at different levels of mental health nursing education.

The American Association of Colleges of Nursing identified "scholarship for evidence-based practice" as an essential of preregistration bachelor degree nursing education. Preregistration education could prepare students with competencies in searching, reading, evaluating, and applying evidence to nursing practice (Winters and Echeverri 2012). Students should gain knowledge and skills in various research designs, including quantitative, qualitative, and mixed method, so that they can use the best deigns to answer different research questions. At the undergraduate level, EBP concepts can be integrated into both theoretical and clinical courses, instead of a standalone subject.

It is essential that academics and clinical mentors act as role models of these skills. Role modeling can help students developing positive attitudes toward evidence-based practice which is an essential first step to EBP. Academics can teach by incorporating best evidence and practice into their teaching. A clinical learning

environment which encourages changes and students receiving support from mentors on how to apply evidence to improve care can play an important role in promoting EBP culture among students. Students can engage in evidence-based projects, which require them to observe practice, collect and synthesize research evidence, and implement recommendations to improve practice and evaluation of outcome. It can help students to build competency in integrating EBP in nursing practice (Chan 2013).

At the postgraduate levels, masters programs are commonly used to prepare advanced nursing practitioners who will be clinical leaders to implement care practice change to improve outcomes. It is essential that such programs prepare graduates with proficiency in conducting research and use evidence effectively. The graduates should be able to translate best available evidence to improve practice (Winters and Echeverri 2012). Doctoral programs should prepare graduates to take the leadership role in using advanced analytic method to appraise, synthesize evidence, dissemination of evidence, make practice recommendations, and translate evidence to improve practice (Chan 2013).

In the clinical setting, organized educational support should be given to the nurse managers and leaders to promote the use of EBP. Specifically designed professional development programs can be offered to develop their competency for completing EBP projects and building organizational capacity for implementing EBP. The program contents could include finding and synthesizing evidence, learning effective strategies for implementation and evaluation, and discussing techniques for building an EBP program. The healthcare institute should ensure there are incentives for these clinical leaders to learn and implement EBP. They should be made responsible for supporting and guiding EBP in their areas and be the role model for nursing students (Cullen et al. 2011).

Implement Interprofessional Education

Within the healthcare team for mental health care, mental health nurses are often recognized as the professional who have the closest engagement with the service user. It is not only due to the nurses' nonstop support for the service user, especially the round-the-clock care in the in-hospital setting, but also the intense therapeutic relationship with the service users. In community and home settings, mental health nurses often act as service users' case manager who coordinates the use of professional, social, and community resources for promoting well-being of the user. It is therefore significant for the nurse to be effectively working with all members of the healthcare team.

There are many factors influencing a person's mental health. An individual's mental function is recognized as associated with a wide range of nonhealth and social issues, which goes beyond the healthcare perspective. Mental healthcare is moving toward integrated care systems where collaborative practice between different disciplines has become increasing vital. Thus, mental health nurses need to work with a complex interdisciplinary team that include not just medicine and allied health

professionals, but also other disciplines such as like education, legal, spiritual support, employment, financial, and housing services (Stanton and Tooth 2013).

It is now well accepted that a formally organized component in the undergraduate curriculum that enable students from different disciplines to learn together would effectively facilitate the students to develop the competency needed to work in an interdisciplinary team. Thus, there is increasing emphasis on interprofessional education (IPE) in healthcare education.

After almost 50 years of enquiry, WHO (2010) acknowledges that IPE enables effective interprofessional collaborative practice, and most importantly, improved patients' health outcomes. WHO describes that IPE occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration. IPE aims to help students from different disciplines understand the roles and responsibilities of each other, develop skills in team communication, team work, conflict resolution, and reflect and learn from each other's experiences. The ultimate goal is to make the future health worker collaborative practice-ready (Jacobs et al. 2013).

Healthcare students' attitude and understanding of their own and other healthcare disciplines may affect their willingness to collaborate. A study on first year dentistry, medical, nursing, pharmacy students in their attitude toward IPE found that medical and nursing students had the most positive attitudes toward IPE followed by pharmacy, and lastly dentistry students. Public perceptions may explain this result. The public is more likely to associate pharmacists as working behind the counter of a pharmacy, while dentists are more commonly associated with working in an independent dental clinic. Those entering pharmacy or dentistry studies may hold such misconceptions and do not see a strong need to collaborate with other healthcare professionals (Ahmad et al. 2013).

To help changing such misperceptions, IPE should occur early in healthcare education. IPE could highlight the respective professional roles and introduce ways how best various disciplines work together to achieve effective and efficient operation of the healthcare system. For example, in an introductory IPE session, the link between the roles of various health professionals with the roles of players of a football team could effectively help students realize the importance of teamwork and collaboration (Stephens et al. 2007). In mental health nursing education, IPE needs to expand beyond health boundaries. Mental health nursing students need to be given opportunities to interact with students inside and outside health disciplines to develop competency working in an integrated mental health care system.

First year mental health nursing students could involve with students from other disciplines, such as medical and social work students in interdisciplinary projects that are relevant to their needs. Students can gain insight into roles of different healthcare disciplines before stereotypes set in. For senior students, their professional identity may be more established. They could work together to develop care plans and solve clinical problems (Sanson-Fisher et al. 2005).

Different models of conducting IPEs have been employed with different outcomes. Common practices involve students from multiple health disciplines attending lectures together, such as in anatomy and physiology classes. Though the

students may have the opportunity to interact in the lectures, it might not facilitate team work and understand each other's discipline role (Sanson-Fisher et al. 2005). It could be regarded as interprofessional teaching, but not IPE per se.

Students from multiples disciplines attending tutorials on clinical cases can facilitate interactions and collaboration. Students from these disciplines are involved in identifying patient's problem and developing care plans. Such activities can help to enhance communication skills and understand team roles. Experiential learning in simulation learning environment could also create opportunities for students from different disciplines to interact, communicate, and manage clinical scenarios in a safe environment. IPE could have some limitations. While the IPE group tutorials usually focus on team work and collaboration, some of the discipline-specific learning needs, for example, learning clinical pathology by medical students or devising rehabilitation plan by nursing students, may not been met in these IPE activities. There may also be logistic problems such as timetabling (Jacobs et al. 2013; Sanson-Fisher et al. 2005).

IPE can also be effectively implemented in the clinical settings. In clinical placement, students in the interdisciplinary team all have direct and individual responsibilities toward care of real patients. They could learn from each other under supervision of an interdisciplinary clinical teaching team. Members of the student can work together as a team to conduct patient assessment, care planning, care implementation, and evaluation. They participate in interdisciplinary case conference to reach care management decisions.

Such approach can help students understand the roles and functions of other team members, participate in a collaborative environment, communicate with team members, resolve conflicts, and reach a team decision in the real life clinical setting. However, like IPE classroom learning, IPE in the clinical setting could have similar challenges of timetabling and limitations to discipline-specific learning (Sanson-Fisher et al. 2005). Most health professional accreditation requirements currently do not highlight IPE learning and it may cause additional difficulties for organizing IPE activities.

Despite the evidence demonstrating the positive impacts of IPE, its use is still not widespread. Literature suggests that barriers to IPE implementation could be related to operational difficulties aligning curricula of different professional programs and logistics of bringing different groups of students and teachers together. Programs for training health care professionals are highly demanding in terms of width and depth of knowledge and challenging training of clinical competencies. Adding new elements in the already demanding programs would require thorough consideration and careful planning (Jacobs et al. 2013). Attitudinal barriers such as negative stereotypes and prejudices among health academics may also discourage team members to have frank discussion and collaboration. Workload is an issue for academic staff (Sanson-Fisher et al. 2005). IPE may be perceived as an additional burden to the already packed curriculum and demanding academic requirements.

To overcome barriers, a framework for IPE needs to be set up and agreed by different disciplines in education institutions. Shared leadership, such as co-chairing of IPE committee may avoid being dominated by any one discipline. Each discipline

needs to continuously review its curriculum to free up time and resources for IPE components. Developing course contents that are appropriate for IPE is an essential step. A formal group, like an IPE steering committee, can be set up to determine IPE educational outcomes in terms of interprofessional competency, identify materials common to health disciplines, and explore workable strategies to implement IPE (Jacobs et al. 2013; Sanson-Fisher et al. 2005).

Apart from formal curriculum, student-led extracurricular activities, such as public mental health screenings or overseas community trips involving multidisciplinary students, could be incorporated as part of the IPE initiatives (Ahmad et al. 2013). Students are in a good position to initiate IPE activities. The IPE activities suggested by the students could provide valuable information for the academics to plan appropriate activities that will appeal to the students. Taking into account of students' suggestions to improve IPE activities will also provide students with a sense of ownership of the IPE experience, and this will hopefully elicit greater participation from students (Ahmad et al. 2013).

There need to be adequate time, development, and training provided to faculty to develop IPE concept and learn how to deliver IPE. Recognition of staff member's participation and achievements is important for the success of IPE. Staff members who spend time developing IPE with colleagues from other disciplines can be recognized for their efforts in their annual staff appraisal. As IPE involves collaboration among different schools within the university and healthcare agencies, commitment by senior management in education institutions, practice, and work settings is essential (Jacobs et al. 2013).

It is important to obtain ongoing feedback from students and teachers and longitudinal studies on IPE outcomes to improve IPE implementation. At present, majority of the evidences related to IPE are related to student satisfaction and attitude change. Apart from whether the IPE activities have positive impact on the attitudes of the healthcare students who are involved in them, there is a need for ongoing evaluation to assess the longer-term benefits of IPE (Jacobs et al. 2013), particularly whether students can transfer learning in the IPE to clinical practice settings with improved patient outcomes.

Incorporating "Recovery Model" in Mental Health Nursing Education Curriculum

With advances of technology, there has been progressive development in the biological explanations of many mental disorders, neuropathology, diagnostics and symptomatology, and psychopharmacology. The medical model had been dominating the mental health care practice for the past few decades. In contemporary mental health care, attention has been redirect to the individual, the service user as a person, and not the illness. The individual's recovery from the disabilities associated with the illness becomes the center of attention. It is a major shift in the beliefs about mental health care – from medical model to recovery model.

The "recovery model" focuses on empowerment, collaboration, resilience, and hope (Stanton and Tooth 2013). For many individuals having mental health problems, recovery is about staying in control of their life despite the existing mental health problem. The emphasis is on the long-term health and well-being of the individual, but not absence of the mental health problem (Department of Health 2014b; SANE Australia 2014). The recovery-centered approach has been adopted in Australia, the UK, the United States of America (USA), and many other countries as the key component in a fair and progressive system of mental health care. Governmental policy and plans of allocating resource for mental health service are moving toward such a direction. Mental health nurses are to be well prepared for such trend of practice.

To keep abreast with the current development, there is a need to update mental health nursing education curriculum with a new set of learning objective and expected outcomes of the graduates. Students need to be facilitated to develop a strength-based focus in nursing care. The aim of mental health nursing is to promote a person's aspirations, talents, and uniqueness. Nursing interventions are focusing on supporting recovery and building the resilience of the individuals with mental health problems while helping these individuals manage their symptoms (Department of Health 2014b).

The mental health nurse would need the knowledge about fundamentals of mental health problems including the pathology of mental disorders and treatment modalities, and more importantly, an understanding of how the individuals are affected by the mental disorder and the treatment process. Mental health nursing education is to prepare graduates who have the competency to recognize specific needs of the individual with mental health issues, to develop a therapeutic relationship that is respectful of the individual's choices, experiences, and circumstances, and to establish partnership with the service users to develop plans to overcome challenges in their life. This involves students knowing how to build on service users' strengths, hold hope, and enhance resilience to promote recovery (Stanton and Tooth 2013; Gilburt et al. 2013).

In many countries, both developed and developing, the majority of individuals with mental health issues are cared for in the community at their home. Many service users are living with their families or significant others who are their major carer. Families are often a significant part of the mental health care system. Family members play an important and ever-expanding role in the promoting well-being of the service user.

Mental health nurses are often in the best position to assist family carers at critical times. Thus, mental health nursing education needs to prepare graduates who have the knowledge and competency to work with these carers, understand carers' burden, coping, and resilience. They need skills to develop innovative programs for empowering the carers to manage their caregiving challenges. Students should be equipped with skills to involve the carers effectively so that they become active and contributing members of the healthcare team. This is an essential part of the recovery model. It is critical that mental health nursing students know how to identify available resources for the carers and facilitates access to the resources needed to provide care to service users, for example, involve in planning the care program, and working actively with the service users to achieve their life aims.

With the move toward the recovery model of care, mental health nurses would need a specific set of competencies. The mental health nursing program would need to be designed to prepare graduates who will value the active participation of the service user as well as contributions by the significant others. The graduates need to appreciate service users' individual choice and caregivers' specific circumstances. To enable person-centred care, mental health nurses need to have essential skills in collaborating with service users, caregivers, and other healthcare team members (Chan 2011).

Transitioning to a recovery approach in mental health nursing education would require substantive changes in the curriculum content, delivery, as well as fostering a new culture of service user participation throughout the nursing program. The contents in the preregistration curriculum need to include the concepts of recovery and elements of recovery model, assessment and care planning from service users' perspectives, and social inclusion/vocational activities from a social work perspective. There is also a need to include carers' perspective on recovery; involve carers in care provision; and spirituality and reflection on fundamental issues around personal values and beliefs, strength-based approaches, and the role of hope (Gilburt et al. 2013). With the recovery model, it does not mean symptomatology, pathology, and medical and other treatment modalities would be ignored, but these subjects would not be the sole focus (Stanton and Tooth 2013).

In the preregistration mental health nursing program, students can have a brief experience in the acute care settings, and more substantial experience on community, primary healthcare, and home settings where the majority of the service users are being cared for. Students need to have first-hand experience of interacting with the service users in their own living environment to understand their lived experiences, and learn from them. Evidence suggested that health discipline students generally perceived service users' involvement in education as positive and interesting (Byrne et al. 2013).

For example, a recovery camp where students gained understanding about the lived experience of a person with mental illness facilitated the development of in-depth knowledge of recovery (Patternson et al. 2016). Such involvement could be effective in influencing more positive attitudes, an understanding of a collaborative environment, as well as enhancing a more holistic approach to practice (Happell et al., 2015a, b). In some universities, trials have been conducted to involve service users in mental health nursing education, with substantive academic positions established for them. There were positive impacts but there were funding issue and negative attitudes of other faculty members. To overcome these barriers, the commitment of schools of nursing is essential. On-going research and evaluation are needed on the longer term outcomes, like graduates employment in mental health services (Byrne et al. 2013; Happell 2014; Happell et al. 2015a, b).

Modes of Mental Health Nursing Education at Preregistration Level

Internationally, there are, in general, two modes of preregistration education and training for nurses working in mental health settings – direct entry to the specialist study of mental health nursing, or starting with a generic study of comprehensive

nursing program of which mental health nursing would either be an integral part or an optional specialist component. These two modes of education are stipulated by the regulatory bodies in individual countries. Mental health nursing is generally regarded as a specialist qualification in most developed countries. The preparation of mental health nurses and practice are regulated accordingly. There are different ways of organizing the way to prepare mental health nurses and how their practices are regulated. In the following discussion, the different systems of preregistration mental health nursing education in the United Kingdom for (UK) and Australia are used to illustrate the two modes of education preparation.

Mental Health Nursing Education in the UK

In the UK, the Nursing and Midwifery Council (NMC 2018) maintain registers for two main categories of professionals – nurses and midwives. In the nurse register, there are different levels of registration, each with many sub types. At Level One (the beginning level to practice), there are four main sub types of Registered Nurse (RN), namely RNA (Adult Nurse), RNMH (Mental Health Nurse), RNLD (Learning Disabilities Nurse), and RNC (Children's Nurse).

Both the RNLD and RNC qualifications could also be obtained by the RNA or RNMH completing an advanced program in Learning Disabilities or Child care, respectively, that is, at a postregistration level. RNAs are to practice in "physical" care facilities and RNMH in "mental health" care. This is very similar to the old ways of classifying RNs as "Registered General Nurse – RGN" and "Registered Mental Nurse – RMN."

Given the different foci of education requirements in the basic RNA and RNMH programs, career choices for the graduates from these programs are different. In general, RNAs practice in all clinical areas except those highly specialized mental health facilities, whereas RNMH practice in mental health facilities. Both can practice in community and home settings.

In the UK nurse education system, nursing student can complete a direct-entry specialist program and become an RNMH. With this single registration, one can only practice in the mental health care field. By further study and training, the RNMH could advance into specialties such as child and adolescent psychiatric nursing, psychogeriatric nursing, or substance-abuse nursing. If the RNMHs wish to shift to practice in "physical" care area like the medical, surgical, or emergency care, they must complete a "postbasic" training to gain the RNA qualification. The UK mental health nursing education system is designed to "channel" the RNMHs to become members of the mental health workforce right from the very beginning of training.

In the UK, there has been discussion on changing the present pre-entry in the specialization program to a comprehensive program to prepare a generic nurse (McKeown and White 2015). It was argued that with the aging population and related chronic health problems, the present pre-entry specialization might not be able to prepare nurses to provide comprehensive care to patients with increasing complex needs.

Holistic Person-Centered Care

In the past, the biomedical model which focused on mental illness significantly limited healthcare professionals' perspective of health. There was insufficient awareness of the link between the mental and physical health. Nursing profession globally has now recognized that nursing practice should adopt a health-oriented model. Health is perceived from a holistic view with emphasis on interconnectedness of various aspects of health including the biological, psychological, social, cultural, and spiritual parts. All these individual characteristics determine the health status and how the individual reacts to health issues.

To support individuals to manage their health problems, nurses need to address the issue holistically and in collaboration with the service user – a holistic person-centered approach. Nursing education programs need to provide students with knowledge and skill foundation which is built around the concept of holistic health and person-centered care. Nursing students need to know that the mind cannot be separated from the body, as well as all other aspects of life, e.g., culture, beliefs, etc.

Independent Role and Responsibilities of Today's Mental Health Nurse

Nurses have traditionally been taken as physician's assistants. The dependent role of nurses has been reinforced by the specialization of nursing practice which basically follows the medical model. For example, the traditional psychiatric nurses had been expected to assist the psychiatrist to keep the "patients" and others safe through custody care, enforcing psychiatric medications and other treatments.

Today's mental health nurses are expected to embrace the holistic and person-centered ideology. They are taking up advanced practice role, such as providing psychotherapeutic intervention; and/or extended practice, such as prescribing medication. They collaborate with members of the interdisciplinary healthcare team and the "service-users" or "consumers."

The new roles and responsibilities of the mental health nurse require a comprehensive set of professional nursing competencies. Such specialist competencies would best be built on a broad-base foundation of nursing competencies. A comprehensive baccalaureate program plus the initial experience as a beginning nurse would adequately prepare the nurse to move into any specialties, like mental health nursing.

Mental Health Nursing Education in Australia

Australia has moved away from the multiple discipline nursing registers since 1990s. The Nursing and Midwifery Board of Australia (NMBA), the national regulatory body, closed off the separate register for mental health nurses in 2010 (Hemingway et al. 2016). A single registration of nurses is now maintained by the NMBA.

All nursing programs within the country provide comprehensive nondiscipline-specific training. Graduates are prepared to practice in various settings, such as medical, surgical, mental health, and age care, as beginning nurses. Beginning registered nurses working in the mental health care setting have gone through the same education as other beginning nurses in a medical or surgical setting. Individual nurses could move on to advanced practice in any nursing specialties after further study.

The nationally accredited comprehensive program to prepare a registered nurse is a 3-year full-time bachelor's degree of nursing. Comprehensive education enables nursing graduates having generic skills to work in diverse settings and to address all clinical possibilities. Such approach is based on the belief of holistic health. The individual's health status is an outcome of interaction of all the various systems, including biological, psychological, social, cultural, spiritual, and economical elements. The comprehensive program equips students with the holistic view of health, and the knowledge and skills to meet health needs of service users (Hemingway et al. 2016).

Advanced studies in mental health nursing are offered by many tertiary institutes at postgraduate certificate/diploma/master level which can be 1 or 2 years of study specialized in mental health. Such specialized study is not a compulsory requirement for nurses to work in the mental health setting. The Australian College of Mental Health Nurses, a national professional group of mental health nurses, developed a credentialing program in 2004 as a professional self-regulation for mental health nurses (Hemingway et al. 2016). However, it is not a legal requirement for RNs to have such credentialing before they can practice in mental health settings.

Considerations and Evolvement in the Mode of Mental Health Nursing Education

On the contrary, in the mental health sector in Australia, there are recent concerns about the professional competencies of the graduate nurses from the comprehensive program. There are queries if the "comprehensive" nurse has been adequately prepared to take care of mental health service users. There are suggestions to consider an undergraduate direct entry mental health program similar to that of the UK. One of the major issues underlying such suggestions is that there have been severe shortages of nurses in the mental health setting. There is substantial evidence showing that, after the move to comprehensive nursing education, there has been increasing difficulty recruiting and retaining nurses in mental health settings. It appears that the majority of graduates from the comprehensive nursing program do not take mental health nursing as a career choice. Some nurses joining the mental health service do not stay long. When compared with the UK situation, Australia has a more recognized shortage of mental health nurses (Happell and McAllister 2015).

Studies related to the shortage of mental health nurses in Australia have been conducted. Happell and McAllister (2015) suggest that there has been underrepresentation of mental health contents in the undergraduate curricula since the

introduction of comprehensive nursing education. Some nursing graduates express that they are not adequately prepared for the knowledge, skills, and professional competency for mental health practice, though practicing at the beginning level. Thus, working in mental health settings would not be their choice. When comparing the "direct entry mental health nursing" program with the comprehensive program, it is apparent that the learners from the comprehensive programs have much less exposure to both the theory and clinical input than the single discipline program. There is limited coverage of mental health nursing in the very packed comprehensive curriculum (Happell and McAllister 2015).

Given the persistent social stigma toward mental illness, it requires sound personal determination for a newly graduate nurse to choose mental health as a career choice. It is suggested that career immersion in mental health, including clinical exposure and career mentoring, is of utmost importance. Lengthy clinical placement in mental health settings is not possible in the comprehensive nursing program. Usually a 3-year curriculum can afford a 2-week mental health placement. Such a brief encounter could hardly allow the student to demystify mental health, reduce stigma related to mental illness, and reduce uncertainty about the role of the mental health nurses. Consequently, it may not be able to develop students' interest and desire to work in mental health (Hemingway et al. 2016).

The comprehensive nursing program and registration system do allow more career choices for the graduates than the direct entry single discipline program. If the new graduates find the encounter in mental health settings not favorable, it is easy for them to move to other areas to pursue the nursing career. Furthermore, mental health is one of many disciplines that could be limited in terms of geographical location and few career choices in a particular region. There is high tendency for new graduates moving away from mental health practice.

Factors Influencing Nurses' Career Choice

The changing economic and financial context also influences the nursing job market and has a direct impact on nursing graduates' career choice. The mode of mental health nursing education, either comprehensive or "direct entry into mental health discipline," may not be the sole determining factor causing shortage of mental health nursing workforce. Instead of looking at the mode of nursing education program, it is more important to examine how effective the comprehensive nursing program is to help the graduate build a holistic concept of health, and develop the competency to meet individual needs of the service user, and not the narrow focus of a certain health problem.

To help promoting students' interest in mental health nursing and increasing new recruits to mental health practice, there are suggestions to review the present bachelor degree nursing curriculum in Australia. Strategies to improve the comprehensive curriculum could include increasing the mental health content, implementing a reinforced module of transition-to-practice in mental health nursing for those students selecting the option of mental health practice. Another suggestion

is to introduce a major stream in mental health nursing in the current comprehensive program (Hemingway et al. 2016; Happell and McAllister 2015). Such strategies could improve the comprehensive curriculum while retaining its strengths of a holistic approach in nursing practice. There is a need to conduct systematic evaluations to determine the effectiveness of these strategies (Hemingway et al. 2016, Happell and McAllister 2015).

The decision on whether mental health nursing should be part of a comprehensive program or standalone direct entry single discipline program is not merely a professional decision. There are economic considerations. Many governments and healthcare systems may consider it easier in nurses' deployment if nurses are graduated from comprehensive programs. The Australian experience could provide very helpful hints and insight for the UK and the global community on the future direction of mental health nursing education.

Outcomes of the Mental Health Education in Nursing Graduates

The mental health nursing graduates are expected to be competent, safe, and committed mental health nurses who can meet the contemporary and changing demands of global mental health services. Pedagogically, emphases are put on developing the required competencies through active, experiential, and reflective learning experiences. Students are encouraged to take active parts in the teaching and learning process to develop independent and life-long learning skills. Different education institutes may have different foci in their curricula design. It would be most effective if they work closely with the local community and healthcare system to develop appropriate curriculum and provide appropriate clinical experiences to students. The ultimate goal is to produce graduates who can serve the needs of the local community.

Conclusion

This chapter highlighted some important issues in contemporary mental health nursing education. Most discussions and examples provided were within the context of developed countries. With fundamental changes in the concept of health and service users' participation in care, as well as the modes of mental health service, the new generation of mental health nurses would need a new set of competency for meeting contemporary needs.

The national mental health policy, organization and delivery of service, relationships among professional disciplines, would all have an impact on the development of mental health nursing education. To produce graduates who can meet the needs of service users as well as needs of the community, education providers need to work very closely with the various stakeholders. Stakeholders include but not limited to government, policy makers, healthcare administrators, frontline mental health

nurses, regulatory bodies, community leaders, multidisciplinary team including health and nonhealth disciplines, and very importantly the service user groups.

Innovations in curriculum design and delivery need to be grounded on the model of care accepted by all stakeholders, and continuing improvements must be supported by evidence. The education system needs to be organised in the way that can facilitate growth of mental health nurses along the journey of professional practice. Well-established education principles with innovations in teaching and learning technology are to be applied upon a framework of contemporary practice of mental health nursing. The nursing education system needs to support service development in different societies so that the adequate number of mental health nurses with the appropriate competency is available to meet the service needs. Finally, leaders in mental health nursing education from different countries should make efforts to promote international collaborations for improving the quality of mental health nursing education.

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Education in Psychiatry for Psychologists

5

Paul Hodiamont

Contents

Abstract

In educating psychologists in psychiatry, one should keep in mind the often implicit differences between psychiatrists and psychologists in viewing mental ill-health. In order to make these differences explicit, we discuss the various "models of madness" of professionals in mental health care and the difference between the clinical and the scientific approach. Then we go into the application of clinical rationality in the clinical process, its tactics and strategies, and the various technical skills and knowledge required to pass through it. From a (meta-) theoretical stance, we consider several aspects relevant to psychiatric diagnosis: its pros and cons, validity and reliability, the concept of (ab)normality, and the ways symptoms can be ordered. After a discussion of treatment planning, we conclude with points of interest in the process of teaching psychiatry to psychologists.

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Introduction

Somebody once said: you learn from your teachers, you learn more from your peers, but you learn most from your students. Teaching in general offers the opportunity to hone one's concepts and tenets in reaction to critical questions of one's students. In the course of my years of teaching psychiatry to students in medicine, psychology, social work, and counselling, I got a multitude of questions, most of which didn't concern so much the many similarities as well the usually implicit differences in viewing mental health and mental health care. Often these questions appeared to rise from the heterogeneous presuppositions, ingrained in the basic training of the questioner. Because every discipline has its own good reasons and traditions for its points of departure, I learned that the best possible answer was making the differences explicit and illuminating their background and consequences. So, in this chapter, I will try to do just that. Inevitably, the presumptions of psychiatry and medicine will color my argument.

As a first step, the differences in basic assumptions about mental health and mental health care of psychiatry in comparison with those of other approaches will be addressed.

As far as psychology is concerned, there are excellent textbooks about abnormal psychology (Comer 2016). However, they seldom address in enough detail the differences in attitude to the patient, in kind of rationality applied to the clinical process and in diagnostic approach between psychology and psychiatry. We proceed, therefore, with a discourse about the difference between the clinical and the scientific approach and about the application of clinical rationality in the clinical process, its tactics and strategies, and the various technical skills and knowledge required to pass through it. Where appropriate, we will make comments. Both the processes of diagnostic classification, i.e., assigning the psychiatric problem to a class of similar problems (the *nomothetic* approach), and of diagnostic formulation, i.e., conceiving what is going wrong with this specific patient (the *idiographic* approach) play a key role. Together they aim at an individually tailored diagnosis, in fact a hidden prescription how the "what's going wrong" is to be remedied. From a (meta-)theoretical stance, we will consider several aspects relevant to psychiatric diagnosis: its pros and cons, validity and reliability, the concept of (ab)normality, and the ways symptoms can be ordered. Then we go on with a discussion of treatment planning. We will conclude with an enumeration of points to consider in the process of teaching psychiatry to psychologists.

The Models

The questions mentioned above reflect to a certain extent the sometimes acerbic differences of opinion among various disciplines we see in mental health care to this very day. An adequate response to this kind of questions should, as stated earlier,

take into account the professional presuppositions about mental health care of the disciplines concerned, their implicit "models of madness." In order to compare and discuss these models, they have to be made explicit. Since the sixties of the last century, when the discussion about the societal role of psychiatry culminated in the publications of Szasz (1961) and Scheff (1966), several attempts to clarify that role have been made by psychiatrists (Siegler and Osmond 1976), a psychologist and a psychiatrist (Davies and Bhugra 2004), and sociologists (Rogers and Pilgrim 2010). In this case, we opt for the approach of Siegler and Osmond, because their description of the models allows for most ways of dealing with or thinking about mental health care. In their analysis of the different approaches to mental health problems, they used 12 common dimensions: definition or diagnosis; etiology; interpretation of behavior; treatment; outcome; suicide; function of the hospital or institution; professional background of the practitioner; rights and duties of the patient/client, of the family, and of the society; and goal of the model. They succeeded in distinguishing seven models: the medical, the moral/behavioral, the impaired, the psychoanalytical, the social, the psychedelic, the conspiratorial, and the family interaction model.

The goals of these models respectively are: to treat patients for their illness (medical model), to alter behavior towards more acceptable norms (moral/behavioral model), to protect and care for the permanently impaired (impaired model), to resolve the analysand's unconscious emotional conflicts (psychoanalytical model), to reform society and create a healthy environment in which people can grow without mental illness (social model), to allow people to develop their inner potential (psychedelic model), to protect people persecuted because of their deviance (conspiratorial model), and to restore healthy family dynamics (family interaction model). The first three models put forth a partial view of the problem of mental ill health rather than the global one presented by the last four. In spite of their somewhat outdated titles, these models cover, mutatis mutandis, the actual practices in the field of mental health care surprisingly well. The conspiratorial model, for instance, refers to the processes of trying to maintain the status quo in the community by segregating deviant people at the one hand and at the same time trying to protect them by legal measures at the other. It is the model used by ambulatory crisis intervention teams, when they are called to evaluate a person labelled as psychiatrically deviant and, while doing so, try to protect that person by applying the principles of the appropriate mental health act. The psychedelic model draws attention to the fact that psychiatric disorders might also have a positive side. A significant proportion of people who later became schizophrenic, for instance, were initially academic overachievers. The relatives of bipolar patients appear to be substantially more intelligent than the general population. In other words, schizophrenia and bipolar disorder seem to comprise not only the worst but also the best of the human condition (Horrobin 2001). The other models describe more or less the current practice of the established disciplines in mental health care. Psychiatrists find their core business within the medical model, psychologists within the moral/behavioral and the psychoanalytic model, social workers within the social model, social psychiatric nurses within the impaired model, and family therapists within the family interaction model. The medical model of psychiatry distinguishes itself from the other models in two

major respects. The doctor determines disease in a sufferer, the patient, and this diagnosis defines his treatment. Psychiatric diagnosis is not, as sometimes thought, restricted to the somatic domain but looks further for relevant psychic and social factors according to the biopsychosocial model. Furthermore, there is a special kind of authority invested in the doctor, by virtue of which he may allot the sick role to the patient. The sick role implies two rights and two obligations. The patient is not responsible for his illness and is exempted from his or her normal duties but must seek professional help and comply with treatment to get better. To sum up, the psychiatrist, like other doctors has to fulfil the interactive roles of medical practitioner and social gatekeeper.

In the other models, the person concerned is no patient but a client or a victim. Diagnosis, in the sense of discerning diseases and searching for its causes, is self-evident or irrelevant, and professionals within these models don't have the authority to confer the sick role. Below we examine these aspects in more detail.

As to the models of madness in general, teaching them will provide students and professionals with insight in the presuppositions and the do's and don'ts of the various disciplines in mental health care. They create the basis not only for understanding and mutual respect but also for fruitful cooperation.

The Clinical Mind

Psychiatry is a branch of medicine, and the spirit of medicine determines the education of its students. An important characteristic of this spirit is called "the clinical mind," a set of five features distinguishing the medical practitioner from the theoretician or the investigator in the way of looking at his work (Freidson 1988). First, the practitioner does not aim at knowledge but at action for the sake of an individual patient. To do something is judged better than to do nothing, even if there is little chance for success. This attitude reflects the traditional stance of medicine, reflected in the famous words of Amboise Paré: to cure sometimes, to ease often, to comfort always. This focus on action implies, secondly, that the practitioner has to believe in what he is doing and that his doing does good rather than harm. It also makes clear why the medical maxim – in case of doubt, refrain from action – is a difficult one to follow in daily practice. Given his commitment to action and his tendency to believe in the success of his handling a series of concrete and individual problems, the practitioner is not prone to the skeptical detachment of the scientist. Third, because of his action orientation and because of the variety of the concrete, the clinician is in essence a pragmatist, relying on apparent results rather than on theory. The validity of an approach is judged from its consequences: does it work? Fourth, the clinician is prone to trust his personal firsthand experiences collected over time in preference to abstract principles or "book knowledge." His approach is, in other words, determined by a certain subjectivism. In psychiatric training, for instance, emotional experience has an important place as a means of understanding what is going on in oneself and in the patient. And fifth, the practitioner has a tendency to stress the idea of indeterminacy, not the idea of

regularity or of strict scientific behavior. This idea represents partly actual deficiencies in available knowledge, partly the leap of faith, that ultimately is asked for when applying scientific knowledge to an individual patient. This last process is laid out in the evidence-based psychiatry model (Gray 2004). It requests the psychiatrist to: (1) formulate a clinical question, (2) search for answers in the literature, (3) appraise the validity and importance of the resulting article and the applicability of the results to a particular patient in a particular setting, (4) apply the results to the patient concerned, and (5) assess the outcome. Steps three and four form a significant challenge for the practitioner – ". . .where your clinical expertise is most important. . ." in the words of the author – because he has to make the decision whether he might translate and apply abstract probabilistic data about groups of patients to this individual patient in a concrete situation of time and place. Critics of the dominant method by which scientific investigation establishes the credentials of medical interventions tell us that it gives generic wisdom regarding what works in typical circumstances for average patients, while doctors need to know what is right for a unique patient in idiosyncratic circumstances (Lewens 2015). In recognition of precisely this problem for all of medicine and its patients, president Obama launched a Precision Medicine Initiative in his 2015 State of the Union Address (Collins and Varmus 2015). Precision Medicine is defined as treatments targeted to the need of individual patients on the basis of genetic, biomarker, phenotypic, or psychosocial characteristics that distinguish a given patient from other patients with similar clinical problems. An example of a psychiatric condition in which precision medicine has been used is alcohol-use disorder, with GRIK1 as a biomarker and Topiramate as intervention (Jameson and Longo 2015). Exciting and promising as this aspiration may be, we are still far from application of this kind of knowledge in daily practice. In the case of the individual patient, we have, for now, to rely on the traditional ways of formulating a specific diagnosis and prescribing a specific treatment on the basis of that diagnosis.

Given this commitment to action, faith, pragmatism, subjectivism, and emphasis on indeterminacy, the clinical mind is quite different from the scientific mind. In his practical application to concrete cases, the practitioner cannot suspend action in the absence of irrefutable evidence or harbor doubts about his work, nor can he depend ultimately on probabilities or general principles: he must act on his own clinical experience. The training of doctors is aimed at building up clinical experience. The greater the clinical experience, the greater not only is the freedom of the practitioner to deviate from routine procedures and basic guidelines but also the medical responsibility for his actions.

The difference between the clinician and the scientist is essentially that between clinical and scientific rationality. Other than scientific rationality is clinical rationality not a tool for the exploration of general principles but an instrument for sorting the relations of perceived and presupposed facts about clinical practice. This clinical rationality is embodied in the clinical process, especially in the activity of differential diagnosis: a succession of diagnoses in the form of hypotheses tested against the available signs and symptoms.

The Clinical Process

The clinical process is a series of steps proceeding from referral, initial contact, diagnostic encounter, formulation, and management planning, through negotiated implementation to termination. This process operates by feed-forward and by feed-back. Clinical rationality is the engine that drives the clinical process. Nurcombe and Gallagher (1986) call it the tactics and strategy of clinical reasoning and compare the clinician to detectives as Sherlock Holmes and Dr. Watson investigating a case, alert to clues, prepared to speculate about suspects and their motivation and dedicated in their search for evidence, in sum, following a path of hypothetic-deductive reasoning. Obviously, clinical hypothesis generation has its drawbacks. Memory is limited, humans are over impressed with evidence appearing early in the reasoning process at the expense of considering later information, and clinicians are better at reasoning about categorical diagnosis than about individualized diagnostic formulations. Keeping these potential drawbacks in mind, the authors mentioned above first formulate a tactical approach to diagnosis and then give strategic warnings for following the tactics.

The sequence of the *tactic* steps is as follows:

1. Elicit, recognize, and interpret important clues
2. Assemble initial patterns of primary clues and interpretations
3. Generate a range of categorical and dynamic hypotheses
4. Develop a search plan, based on the collected hypotheses
5. Elicit evidence for or against the diagnostic alternatives
6. Revise the hypotheses if new evidence demands so
7. Match the final pattern against abstract syndrome patterns
8. Develop an individualized diagnostic formulation

The *strategic* warnings are the following:

1. Tolerate uncertainty, consider alternatives, and don't close to early on one possibility
2. Give enough weight to negative evidence and to new evidence emerging later
3. Be prepared to revise
4. Try to separate observation from drawing conclusions
5. Don't go interminably. Reach a reasonable conclusion when sufficient information is gathered
6. Be aware of your personal reactions to the patient

Both the *tactics* and the *strategy* of the diagnostic process draw on *specialized knowledge*, concerning the clinical process as a whole, neurobiological systems, psychological functions, illness behavior, clinical syndromes and modes of treatment, as well as on a number of *technical skills,* which we will mention briefly and make comments on if appropriate.

The *technical* procedures to gather the relevant clinical information are the following:

1. Take and record history: Presenting complaint, past psychiatric and medical history, medication and other drugs, family history, personal history, sexual history, forensic history, and premorbid personality.
2. Perform mental status examination: Appearance and behavior, mood, speech, thoughts, perceptions, cognition, and insight.
   What the patient considers important, in giving his (history of) symptoms, may not necessarily be identical to what the examiner regards as significant. While the patient is concerned to communicate the distress experienced, the clinician will try to ascertain phenomena of psychopathological interest in order to make a diagnosis. In this context, two distinctions have to be bore in mind: the distinction between *form* and *content* and that between *subjective* and *objective*.

   Form refers to those impersonal aspects of mental symptoms that guarantee its stability in time and space, that is its "constancy" elements of a psychic experience. Content is the subjective coloring of the experience (Berrios 1996). The patient is concerned with only the content, for instance: "that I am pursued by dark spirits." The clinician is concerned with both form and content. Often the patient finds the doctor's interest in form unintelligible and a distraction from what he regards as important. An extreme example of the discrepancy between patient and doctor is the denial of illness by a schizophrenic patient, a phenomenon called impairment of insight by the doctor, and counted as one of the most significant and prevalent symptoms of schizophrenia (Carpenter et al. 1973).

   There are several definitions of subjectivity and objectivity (see among others Aggernaes 1972). Because there are always value judgments associated with both subjective and objective assessments, in general one cannot be considered better than the other. They have nevertheless different consequences. In the English literature, for instance, a meaningful distinction is made between illness, disease, and sickness, referring to the subjective experience of the patient, the objective judgment of this experience by the doctor, and a specific state of ill-health with specific social and legal implications, respectively. *Illness*, the lay experience of being ill, elicits a specific kind of behavior, called illness behavior, of presenting complaints of signs and symptoms to the doctor. *Disease* encompasses either a specific tissue lesion or a characteristic constellation of signs and symptoms, as diagnosed by the doctor on the basis of his clinical judgment. *Sickness* refers to the social deficit consequent of the symptoms and "being sick" may lead to an entitlement pursuant the Sickness Benefit Act. Either of these entities can exist without the other two. For instance, someone may subjectively experience a chronic fatigue syndrome and while "being ill" try to qualify for a sickness benefit. This subjective experience, however, may not be acknowledged by the medical profession as an established "disease" or disorder, which is a sine qua non for granting a sickness benefit (Rijnders 2008). The distinction between the subjective experience of illness and the (objective) professional judgment about

disorders can be overcome by a phenomenological method. One can try to increase the knowledge about subjective events by quantifying techniques. An example is the Present State Examination, a semi-standardized interview based on the phenomenological approach of Karl Jaspers (Wing et al. 1974). The questions in this interview are designed to elicit subjective responses from the interviewee, with whom the interviewer has built rapport. The answers of the interviewee are then tested against the professional definition of the symptom in question and the criteria for presence and intensity. After that, a computer program summarizes the recorded symptoms with perfect reliability in syndromes and ultimately diagnoses.

3. Perform physical examinations, because medical disorders can present with psychiatric symptoms and psychiatric disorders can have a medical etiology.
   Having taken the history and performed the mental and physical examinations, the clinician has to assign to his patient a category from the psychopathological spectrum, a spectrum that traditionally is ordered hierarchically. The debate about the background of this hierarchy has a long history. Jaspers (1913) thought the hierarchy artificial representing the idea that one person could have only one disorder. Foulds (1976) on the other hand saw it as a natural order, characterized by the fact that symptoms from a higher class of disorder will not occur without the simultaneous presence of symptoms from all lower classes of disorders and furthermore that a symptom can occur solely in one class of disorders. Whatever that may be, the concept of hierarchy is helpful for the clinician in his classifying attempts. Disorders with an organic etiology were deemed clinically most relevant in psychiatry. Thus they were placed at the top of the hierarchy, followed by the organic psycho-syndromes and addictions, the psychotic disorders, the non-psychotic affective disorders, the anxiety disorders, and the other nonorganic and nonpsychotic disorders. The presence of one of the disorders in the hierarchy excludes in principle lower placed disorders. In the course of time, psychiatry has more or less withdrawn from this principle. Since then, the concept of comorbidity is burgeoning. However, one should keep in mind that medical disorders can present with psychological symptoms. Typhoid ("cloudlike") fever is even called after one of its most obvious first symptoms: the clouding of consciousness. Anxiety and depression may have multiple somatic causes. The same applies to psychotic states. A physical cause must therefore always be ruled out when psychosis presents for the first time. Patients with psychiatric disorders in general have increased rates of medical illnesses. So, in every assessment, the clinician should take into account the physical appearance and status of the patient.
4. Order special investigations if necessary.
   Evidence elicited by appropriate physical examination allows the clinician to refine the diagnostic hypotheses. Special investigations should be used to test a specific diagnostic hypothesis, for example, a serum T3, T4, and TSH inquiry for thyroid dysfunction in a case of depression, a urine drug screen in suspected drug-induced psychosis, or a brain CT or MRI in someone with delirium and a history of a fall.
5. Interview informants.
   Information from people within the inner circle of the patient is usually essential, because subjective experiences have a substantial influence on psychiatric

symptoms. The point of view of a person with intimate knowledge of the patient may have a major impact on the diagnosis, especially in case of personality disorders and psychosis. Even if the patient is able to give complete and detailed information, getting an independent opinion about his course of life, personality, and relational circumstances is worthwhile.

6. Formulate a comprehensive diagnosis.
   For both psychiatry and psychology, diagnosis is a core concept, because it is supposed to direct treatment strategies. Psychiatry and psychology differ, however, not only in conceptualization of and approach to diagnosis but also in the width and depth of the therapeutic arsenal. These topics warrant separate discussions. In the next paragraphs, we will therefore elaborate the (meta) theoretical aspects of psychiatric diagnosis and of treatment planning, respectively.

Aspects of Psychiatric Diagnosis

Diagnosis is conceptualized as the identification of a disease, disorder, syndrome, etc. Etymologically, the term is derived from the Greek words δια (meaning: apart, through) and γιγνωσκω (meaning: to know). It refers to the act of *seeing through* a specific disorder. In other words, on the one hand the act of discerning one disorder from others – the diagnostic formulation – and assigning this particular patient's disorder to a certain class in a categorical system – the diagnostic classification- on the other. In practice, the clinician tries to have the best of both worlds. This means combining the *ideographic approach*, i.e., the diagnostic formulation by trying to capture the unique characteristics of an individual patient, with the *nomothetic approach,* i.e., bringing up the diagnostic categorization based upon consistent differences in symptomatology and course.

When a psychiatrist tries to diagnose the suffering of a patient, he should account for the specific characteristics of that patient but at the same time, abstract some characteristics in so far that the psychopathology the patient presents with can be classified. This dilemma has a theoretical and an ethical side: the greater the generalization, the less the significance for the individual; the greater the emphasis on the individual, the less satisfying the generalization. According to Kendell (1975), a human being has three kinds of characteristics: (1) those he shares with all mankind, (2) those he shares with some other men, but not all, and (3) those which are unique with him. Insistence on the uniqueness of every individual prevents all learning and all useful communication with others, whereas insistence on a unitary concept of mental illness condemns us to give the same treatment to everyone (Kendell 1993). As soon as a clinician is observing certain characteristics of his patient and tries to separate the relevant from the irrelevant ones, he is classifying. Ultimately, the value of such a classifying process depends on the degree of control over the patient's problems that the clinician gets from it.

In psychiatry, diagnoses are not so undisputed as they are in other branches of medicine, where a clinical diagnosis is object of confirmation by laboratory tests or

biopsies. According to some *critics*, psychiatric diagnoses convey limited information about etiology, symptomatology, treatment, or prognosis (*validity* aspects); have relatively *low reliability*; carry sometimes *pejorative connotations*; create a *spurious impression of understanding*; and are liable to the assumption that the condition is an "entity" with an independent material existence of its own, – a *reification* – instead of a man-made abstraction. Consequently, these critics have suggested to replace the nomothetic approach of categorical diagnosis by the ideographic approach of a detailed formulation of the patient's unique problem. However, not all these criticisms are justified and some are overstated, as we will see.

While it is true that psychiatric diagnosis may provide relatively little valid information, it has the important function of excluding many other issues from consideration and focussing on characteristics that the patient has in common with a class of people, for whom ideally an evidence-based treatment has been developed.

In general, a classification is thought *valid* in so far as it meets three goals: communication, control, and understanding. *Communication* means that the users of the system can exchange their experience about pathological phenomena. In the course of time, this exchange will develop into a system of names, summarizing data of which the description otherwise would require a great number of terms. The formation of keywords is the first stadium in the development of classification systems. The possibility to predict the course and sometimes the outcome of an (even untreatable) disorder or disease, gives a certain degree of *control* over the matter, that even increases as the categorical label leads to clues about the successful treatment of the disorder. *Understanding* means insight in the pathological process underlying the disorder. Effective treatment, for that matter, is often possible without a real understanding of the pathological process. The nomothetic approach is useful for summary communication between professionals and for prediction, while the idiographic one fosters control of the disorder.

With respect to the low *reliability*, there has been made much progress since the seminal work of Ward et al. (1962) that made psychiatry conscious of the various sources of diagnostic variance. Almost **one-third** of the inconsistencies could be assigned to the divergent approaches of the diagnosticians, either in a different interview technique (*information variance*) or in a different weighing the importance of symptoms (*observation- and interpretation variance*). To remedy these flaws, (semi)standardized psychiatric interviews have been developed such as the Present State Examination (PSE) (Wing et al. 1974) and its successor, the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) (Wing et al. 1998). They aim at the assessment of a subject's mental state with the object of achieving greater comparability between different examiners. The basis of the technique is a glossary of definitions of symptoms which is firmly grounded in the European school of psychiatry, with its long tradition of clinical observation and emphasis on the importance of listening to the a patient's description of unusual experiences. The definitions clearly set out the experiences which constitute psychiatric symptoms. The interview procedure allows the symptoms to be elicited and reliably recorded. The remaining **two-third** of the diagnostic (more specifically the *criterion) variance*

was explained by inadequate definitions of the diagnostic categories, notably unclear rules for inclusion and exclusion. This last observation has given an impetus to the development of modern diagnostic classifications. In the USA, this has led to the successive versions of the Diagnostic and Statistical Manual (DSM), the DSM-III (APA 1980), DSM-III-R (APA 1987), DSM-IV (APA 1994), DSM-IV-TR (APA 2000), and DSM-5 (APA 2013) successively, and internationally to the ICD-10 system (WHO 1990). Spitzer, the chairman of the taskforce to develop DSM-III, concluded on the basis of reported Cohen's kappa's of 0.8 plus: "*For adult patients, the reliability for most of the classes . . . is quite good, and in general higher than that previously achieved with DSM-I and DSM-II*" (Cooper 2014).

Though it is undeniable that our diagnostic terms carry *pejorative connotations*, these terms remain convenient labels for the experiences of psychiatric patients. This much is clear: the stigma attached to these labels in the way Goffman (1963) elucidated will not disappear if the diagnoses were abolished. Furthermore, we would lose the key to the library where centuries of psychiatric knowledge lay accumulated, if we would remove our psychiatric diagnoses.

Attaching a name to a condition may indeed stop worrying not only the patient but also the clinician. But the naming of a condition, e.g., as schizophrenia, may carry the spurious implication that the clinician understands what is wrong and is in control of the situation: it is a disease that at least can be treated and may be cured. Some people insist, however, that psychiatrists should aim at understanding the patient in terms of his life experiences, rather than try to fit symptoms into a name from a classificatory system. On the other hand, labelling rather odd experiences or behavior as a disease has an exonerating effect, conform the first right of the sick role we discussed earlier. This effect holds, for that matter, only for patients, sufferers who need cure, care, or comfort, according to the medical concept, but not for clients, persons who receive a service, according to the psychological concept.

Often there is another important implication to the naming of a condition. A *reification* process may take place, the assumption that the condition is not a man-made abstraction, but an "entity" with evidently an independent material existence of its own. Mirowsky and Ross (1989) tried to explain this phenomenon historically. According to them, the linguistic legacy of nineteenth-century biology and epidemiology, the attempt to enclosure a scientific and professional domain and, maybe most importantly, the social construction of the need for mental health services have fostered this process. Nowadays, government agencies and insurance companies want to know exactly where the boundaries for reimbursement are drawn, the pharmaceutical industry wants to sell its drugs and mental health carers and institutions want to sell their services. So reification of psychiatric disorders might be qualified as an improbable necessity and people should be aware of that.

Traditionally, psychiatric disorders are classified on the basis of the *symptoms* the patient complains of and the behavioral abnormalities (*signs*) elicited on examination (Oyebode 2008). Symptoms and signs are the overt manifestations of illness. They are the reason for a patient to seek medical attention or being identified as suffering from a disorder. A symptom-based classification is not without problems.

Firstly, because the decision about the *presence or absence* of a symptom is notoriously difficult and at least unreliable. Secondly, because psychiatric disorders are now defined by the presence of some or most of a *collection* of symptoms rather than by the presence of one or more *key* symptoms. A syndrome classification, on the other hand, carries its own problems. We shall discuss all these problems below.

Wing et al. (1977) showed that psychologists interviewing patients referred to the psychiatric service of a health center, rated twice as much morbidity in terms of psychiatric symptoms as psychiatrists interviewing equivalent patients. They attributed this to probably different criteria for abnormality. Criteria for *(ab)normality* may vary strongly, not only between psychologists and psychiatrists but also among psychiatrists, depending on their theoretical orientation. At the one extreme are those of empirical/pragmatic orientation who use a number of operational criteria for perceived (ab)normality. They have a broad conception of normality and will settle for an average rather than aim for a level where a patient will function optimally. At the other extreme are those who consider the subjective experience of the individual (perceived morbidity) to be critical and who regard normality as an ideal. The word "normal" literally means "in accordance with the 'normae'," the Latin word for "rules" or "standards." What rules of standards are applied in deciding whether behavior is normal or not depends on a great number of interrelated factors. To reduce the influence of such factors, the behavior of the majority is sometimes taken as a standard. This statistic standard is commonly defined as the arithmetical mean plus or minus one or more times the standard deviation. If the frequency distribution of the phenomenon is symmetrical, 68.3%, 95.5%, and 99.7%, respectively are normal. Strictly speaking, for that matter, this approach starts from assumptions not always in agreement with reality. After all, extensive and representative research data on the population in question are not always available and the frequency distribution of the measuring results corresponds not always to a normal or Gauss curve. More generally, therefore, the statistical approach is used as a method of establishing the limits for the standard. So, for practical purposes, abnormal or pathological phenomena are characterized by a deviation from the individual standard and the population standard in respect of duration, intensity, or frequency, i.e., in *quantitative* terms. But the phenomena can also be tested against *qualitative* standards. Thus, suffering, loss of autonomy and one's sense of reality are considered essential features of a psychiatric disorder. Suffering is involved when the presented phenomenon is accompanied by an unpleasant affect. Loss of autonomy means that the symptom involved is beginning to lead a life of its own at the expense of the individual's possibilities of self-realization. Behavior is judged as out of reality when it is out of proportion to circumstances which are meaningful to the person involved. Hodiamont (1991) illustrated how quantitative and qualitative approaches may lead to different prevalence figures. Applied to pathological anxiety: quantitative criteria yield a three- to fourfold prevalence of this disorder compared to qualitative criteria. The remedy to the unreliable assessment of symptoms lies in developing clear definitions of symptoms and setting clear criteria for their determination as absent or present and a thorough training of clinicians in the application of both.

As mentioned earlier, the *systematics of classification* have changed dramatically with the transition from the second to the third DSM of the American Psychiatric Association. DSM-II was considered a monothetic conjunctive system. For each disorder to be diagnosed, the presence of a specific number of characteristics was requested, without exception. DSM-III and its successors, on the other hand, are polythetic and disjunctive: one or more but not all characteristics have to be present for the diagnosis of a disorder. This prototypical classification of disorders minimizes the problem that most psychiatric disorders have unclear boundaries with each other, as well as with normality. The disorder in question is compared with the prototype and diagnosed if the required minimum of symptoms is present. An important disadvantage of the prototypic approach lies in the fact that people with strongly varying characteristics can meet the prototype. Assume, for example, that somebody should have four out of seven symptoms to qualify for a specific disorder. One cannot rule out the possibility that two persons with the same diagnosis have only one symptom in common. The prototypical approach might thus interfere with the homogeneity of patient groups and consequently with the results of scientific research.

On the basis of certain key symptoms and signs, the clinician formulates a probabilistic working hypothesis, a diagnosis, and then checks whether the criteria for a specific disorder are met. When the emphasis is on determining *symptoms* as a starting point for the classification of a disorder, this is called the *bottom-up* approach. The *top-down* approach in contrast implies that a more or less obvious psychiatric *syndrome* is checked against the inclusion and exclusion criteria for the disorder in question. The valid use of the top-down approach is limited in time, because the inclusion and exclusion criteria for the various disorders are regularly revised in APA's Diagnostic and Statistical Manuals.

Aspects of Treatment Planning

The aforementioned list of do's and don'ts has given us some insight in the complex clinical process that the clinician ideally has to follow and in the necessary prerequisites of skills and knowledge. It takes time to master this process not only for doctors who want to become psychiatrists but even more so for psychologists with ambitions in mental health care. They have after all to make up arrears in biological knowledge to be able to diagnose correctly and refer their patient adequately if necessary.

In more concrete terms, the clinical process provides diagnostic information and an understanding of the patient's context. These data are combined to make a differential diagnosis, identify the factors which have contributed to the disorder, make a decision about the management of the disorder, and generate ideas about the prognosis (Harrison et al. 1998).

When considering causative factors, one has to bear in mind that psychiatry – different from the other "models of madness," each of which stipulates one specific cause – has an open attitude as to the *type* of factors qualifying as possible causes.

Not only biological (genetic and environmental) but also psychological and social factors are eligible, bringing forth the biopsychosocial model in psychiatry. In terms of *timing*, causal factors can be predisposing (giving a tendency to a disorder such as genetic make-up and/or early childhood experiences), precipitating (eliciting the disorder in the here and now such as life events or a physical disease), and perpetuating (affecting the course of a disorder such as non-compliance with treatment). Combining the type and the timing of the causative factors leads to 3 × 3 box: predisposing, precipitating, and perpetuating factors on the x-axis and biological, psychological, and social factors on the y-axis. This causative overview may inform management and prognosis. As to management, one has to decide if the person really needs treatment; how urgent the problem is; when, where, and by whom treatment should take place; and at which goals the treatment is directed. Sometimes the aim is to eliminate distress and restore the patient to the status before the disturbance began, sometimes to maintain the status quo and prevent deterioration, and sometimes to come to a reconstruction.

Restoration and maintenance of the psychosocial equilibrium is sought for in the *supporting forms of psychotherapy* by means of evidence-based techniques such as boosting the therapeutic alliance, strengthening the patient's capacity to use his resources to solve his problems, reducing suffering and social dysfunction, and enhancing his autonomy, both with respect to his psychiatric disorder as to the management of treatment. Supportive psychotherapy is more problem – than theory oriented.

Within supportive psychotherapy there are two strategies available: an elucidating strategy and a directive strategy. The *elucidating* strategy can be applied on three levels: the communication level (empathic listening and talking, reassuring, emotional discharge, and management of transference), the confrontation level (aimed at illogical goals and patterns of behavior), and the clarifying level (the patient gets new information on his behavior). *Directive* strategies encompass suggestion, counselling, giving directives, drawing lines, teaching self-control and restructuring cognitions and behavior patterns, and last but not least enhancing medication compliance. Supportive psychotherapy is considered essential in everyday care, not only for psychiatric patients but for patients in general, and therefore should be part of the therapeutic arsenal of every professional in health care.

As points of action for the *reconstructive* psychotherapies may serve the behavior, the existential position, the interactional system, or the personality of the patient. Specific psychotherapies for these aspects are *cognitive-behavioral therapy, client-centered therapy, family therapy*, and the *psychoanalytic* therapies. These therapies are primarily theory oriented. Patients are selected to fit a specific psychotherapy and therapists are highly trained to administer that form of psychotherapy. The scientific evidence with respect to the relative efficacy of these specific therapies may be ranked according to the quality and statistical strength of the research. At the top of the list are findings based on consistent conclusions from a majority of high-quality studies, from a high-quality systematic reviews (A). Next come the findings based on a couple of high-quality studies, an inconsistent result of a high-quality systematic review or a consistent result in a less than high-quality review (B). Even lower status

have the results of separate studies that don't meet the criteria for high quality (C). Within that framework, remarks about psychotherapy might be provided with a credibility score, for instance: anxiety disorders can be treated best with CBT (A); psychotherapy ought to be considered as a routine in case of psychological problems (B); psychotherapy ought to be considered for persons with psychosomatic complaints (C).

Having formulated a diagnosis and designed a plan of management, the clinician must, of course, discuss those with the patient. Even when the patient has a disorder that compromises his grip on reality, some level of understanding and cooperation is usually possible and should be strived for. Most patients want some assurance that the conclusions of the clinician are consistent with their own view of the problem. By negotiation, the clinician persuades the patient to cooperate with treatment. Without an active therapeutic alliance, little hard-wearing aims can be achieved. Moreover, the awareness that therapy is a process of active collaboration towards agreed goals will counteract feelings of helplessness and hopelessness in both patient and clinician.

Treatment decisions depend not only on the diagnosis but also on the contextual information, for example, if the patient is motivated for psychotherapy.

As to prognosis, short-term prognosis depends mainly on the natural history of the disorder and on the treatment response of this specific patient. Long-term prognosis is difficult to make, although there are several nonspecific factors with higher risks of a poor outcome, such as insidious onset, comorbidity, and lack of close relationships.

Conclusion

From the argument above, we may conclude that educating psychologists in psychiatry implies, in short, teaching them psychopathology or abnormal psychology while at the same time paying specific attention to the implicit and explicit notions of clinical medicine and/or psychiatry. We identified several points of interests to be discussed.

First the models of madness were lined out, drawing attention to differences in basic assumptions about mental health and mental health care between psychology and psychiatry. Where the psychologist is dealing with clients mostly from a behavioral or psychoanalytical point of view, the psychiatrist not only is diagnosing and treating patients within the framework of the medical (i.e., biopsychosocial) model but also functioning as social gatekeeper by his authority to allot the sick role.

Next we discussed the clinical mind of the practitioner, characterized by his aim not for knowledge but for the sake of the individual, his necessary faith in his own doing, his pragmatism, his trust in firsthand experience in preference to abstract principles, and his emphasis on uncertainty instead of regularity in behavior. To put it briefly, the psychiatrist is first and foremost a clinician, not a scientist, because of the deficiencies in relevant knowledge and of the gap between scientific data and its applicability to the individual patient. The difference between the scientist and the

clinician is that between scientific rationality, aiming for the exploration of general principles, and clinical rationality, trying to sort out the various facts about clinical practice and embodied in the clinical process.

In accordance with Nurcombe and Gallagher (o.c.), we defined the clinical process as a series of steps proceeding from referral, initial contact, diagnostic encounter and formulation, management planning through negotiated implementation to termination, following a path of hypothetic-deductive reasoning. To account for the inevitable drawbacks of clinical hypothesis generation, we mentioned the tactics and strategies, as well as the specialized knowledge and the technical skills and procedures to secure the clinical relevant data. Within the framework of the technical procedures, we paid attention to the distinction between form and content and between subjective and objective aspects of psychiatric symptoms, to the hierarchy of the psychopathological spectrum and to the importance of being alert for disorders with organic etiology.

Because of its vital significance in psychiatry, we went into diagnosis in some detail and discussed the problem of reconciling the nomothetic and the ideographic approach, advantages and disadvantages of psychiatric diagnosis, its validity and reliability, quantitative and qualitative criteria for abnormality, the systematics of classification, and the consequences of classifying bottom-up versus top-down.

Finally, we dealt with the topic of treatment planning. Breaking down potential causes in predisposing, precipitating, and perpetuating factors of biological, psychological, and social origin may inform management of the disorder and prognosis. As to psychotherapy as a major kind of treatment, one has to decide if the aim is restoration and subsequent maintenance of the psychosocial equilibrium or reconstruction in a broad sense. The former goal is best pursued by supporting forms of psychotherapy, that should be part of the therapeutic arsenal of every professional in health care, while the latter is the domain of specific reconstructive psychotherapies, usually performed by highly trained specialists. For both forms of psychotherapy, however, an active therapeutic alliance between clinician and patient is essential.

All things considered, it appears that differences of opinion between psychiatrist and psychologists about mental health care often stem from implicit and/or unconscious presumptions about their own discipline. Teaching psychiatry to psychologists is an excellent means to make these presumptions explicit, so that one may take balanced decisions in the clinical process.

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Education in Psychiatry for Medical Specialists

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Abstract

Growing worldwide focus on mental health and sociocultural stressors has moved the paradigm of primary care practice from a predominantly biological model to a biopsychosocial model. Availability of psychiatrists and other mental health specialists is not homogenous across all geographic areas in the USA, let alone in the low-income countries. Moreover, the stigma associated with psychiatric diagnoses makes it harder for people to seek treatment timely in many societies. Thus other specialties are often required to evaluate, manage, and initiate treatment for psychiatric disorders. In developed countries, the only clinical teaching in psychiatry takes place in medical school. In many developing countries, undergraduate curriculum in psychiatry is insufficient and even rudimentary. With this limited background of training, other specialties do not feel competent and comfortable managing mental health problems. The barriers of adequate teaching in psychiatry are complex and multifactorial. In this chapter, we discuss the current status of psychiatry teaching for other medical specialties and also suggest potential methods of teaching within the nation and across other countries. Physician and other providers trained in internal medicine, family medicine, and pediatrics are usually referred to as primary care providers in the USA, where in Europe and Asia, these providers are usually called as general practitioners. Most of the published data on education in psychiatry for other medical specialties come from the experiences of family medicine and pediatric training programs. Obstetrics and gynecology have sparse data on this topic, so do the other subspecialties in medicine.

Keywords

Education · Mental health · Psychiatry · Primary care · Specialists · Learning theory · Self-awareness · Patient-centered care · Consultation-liaison psychiatry · Collaborative care · Integrated care

Introduction

The intertwined relation of physical and mental health cannot be emphasized enough. In the landmark study published by the Centers for Disease Control and Prevention, the authors reported that people with serious mental illness have an estimated average life expectancy of 25 years less than that of the general population (Colton and Manderscheid 2006). This mortality difference based on the data from

1997 to 2000 was 10–15 years wider than the difference in early 1990s (Dembling et al. 1999). The rates of obesity, diabetes, metabolic syndrome, hypertension, and hyperlipidemia are higher in mentally ill population, than that of general population. To describe the other side of the intertwined nature of mental and physical health, an estimated 20% or higher school age children in the USA are reported to have a diagnosable mental health disorder (Howell 2004). The proportion of mental health problems first seen in primary care setting is larger among children. An estimated 75% of all children with mental health problems are first seen in the primary care settings Ironically, more than 75% of these children do not receive specific care in the areas of behavioral medicine (Kataoka et al. 2002). Across all age group, an estimated 25–40% of people seen in the primary care have a comorbid mental health diagnosis (Mitchell et al. 2009; Kroenke et al. 2007). Given the limited encounter time, the complexity of various diagnoses and the primary care physician's comfort level in addressing mental health problems, these diagnoses are often underreported (Mitchell et al. 2009; Kroenke et al. 2007).

In this chapter, we discuss why it is critical for all medical specialties to have formal training in managing mental health problems. Nonpsychiatrist physicians' perception about their own capacity in mental health treatment often does not match with the mental health competency guidelines set up by the healthcare authorities. We discuss the gap between the current practice and proposed guidelines. Possible methods of translating theories into sustainable teaching model are discussed as well.

Primary Care: De Facto Mental Health Treatment System?

Despite increased treatment options, only one-third of the American population with mental health problems actually receives specific treatment. In 2008, the Mental Health Parity and Addiction Equity Act mandated group health plans to provide the same level of coverage for both mental and physical disease. However, access to mental health treatment remained a deficient area in many communities. Possible reasons for such deficiency could be an area specific shortage of psychiatrists, underfunding of public mental health services, lack of proper insurance coverage, and managed care restrictions on the use of mental health services and refer out services (Cunningham 2009). Almost two-thirds of the primary care physicians (PCPs) reported difficulty in referring out to outpatient mental health services, twice the rate for other specialties (Cunningham 2009) (Schulberg 1998). Problem with access to mental health care is more prominent in low income uninsured areas. Despite Medicare enrollment, the access is sometimes limited, due to a lack of adequate funding of community mental health. As managed care organizations control the expenditure of healthcare in America, PCPs are often encouraged to treat mild to moderate, even severe forms of depression, in an effort to limit referring out. As a result, primary care system has become the gateway to mental health treatment or "de facto" mental health care system, receiving more people with mental health problems than the psychiatrists (Wang et al. 2006).

Many people present to PCPs office with coexistent distinct mental health symptoms of depression, anxiety, sleep disturbances, and so on. However, mental health-related symptoms could be masked at times causing difficulty for less experienced nonpsychiatric providers. Noteworthy, there is a group of people that present with a pervasive pattern of new or recurrent physical symptoms, often not indicative of any major medical diagnosis but vaguely overlapping many diagnostic categories. Specific somatic pathology is often not present and symptoms do not seem to respond to standard treatment; but symptoms are impairing. Such constellation of symptoms is named as medically unexplained symptoms (MUS). A vast majority of MUS population was reported to have current or past family dysfunction or distress in the forms of substance use, fights between parents, childhood abuse, and molestation. This population can actually be described as a heterogeneous group of people with similar life experiences presenting with different perceptions and behavior. They typically seek emotional support and use more socially acceptable somatization defenses to avoid unpleasant emotional experiences. If physicians focus on symptom alleviation, they might inadvertently promote further use of immature defense mechanism. Empirical symptom-oriented treatment might by ineffective in this group of people, as their core schema is health-related anxiety. This creates an environment of frustration and antipathy between the patient and the physician, leading to a recurrent pattern of office visits resulting in higher utilization of resources. Some studies have suggested that excessive diagnostic tests and less-thought empirical treatment and surgical methods might lead to iatrogenic complications, increased treatment costs, and minimal relief in patients with MUS (Smith 2007; Fink 1992). Proper knowledge of psychiatric pathology of disease might help nonpsychiatric physicians to understand and manage this population better.

How Are Nonpsychiatry Physicians Feeling About Their Psychiatry Competency?

In a survey study done online (Ryan et al. 2011), 195 participating primary care providers reported professional training to be a predictor of both willingness and perceived competency to treat suicidality. There was a negative correlation between time elapsed since training and willingness to treat suicidality. Like any online survey, self-selection of participation was a limitation of this study. Another similar survey done in the UK found nearly half of the general practitioners did not feel that undergraduate level teaching in psychiatry delivered to them was adequate for the trainees for their future competency (Thompson et al. 2010). These studies often do not have homogenous participants. However, in clinical practice, it is very common for the psychiatrists to be consulted with vague questions, possibly reflecting the referring physician's inadequate understanding of the complex interplay between mental health and physical problems. In academic institutions and multispecialty

practice settings, psychiatric consultation is somewhat available, but it could be a challenge in settings that are not associated with mental health access.

A study conducted by the Pediatric Research in Office Settings and the Ambulatory Sentinel Practice Networks looked into the relation between fellowship training of pediatrics and family medicine clinicians and the likeliness to identify and manage psychosocial problems in children. This study found that the fellowship trained nonpsychiatry specialists were more likely to identify psychosocial problems in children between the age of 4–15 years (Gardner et al. 2000). However, they were not more likely to educate, use medication, or refer these children to psychiatrists. That raises the possibility that the fellowship training either was not effective enough or did not translate into the clinical practice.

Approaches for Training in Mental Health Domain: Theories

Reattribution Theory

Goldberg et al. (1989) proposed a structured approach for the family physicians (FPs) for an effective treatment of patients presenting with somatic symptoms without any specific pathology. It is a three-step process: (i) making the patient feeling understood, (ii) changing the agenda, and (iii) making the link. Other researchers later added a fourth step, negotiating further treatment (2006). The idea is built on the concept of patient-centered care and the steps are described in Table 1. Many randomized controlled trials studied the effectiveness of this method and showed consistent reduction of health anxiety, physical and psychological distress, frequent primary care contacts, overall healthcare costs, improvement of physical symptoms, and physician's attitude towards this population. This makes it a useful skill for nonpsychiatric providers in managing mental health-related problems.

Biopsychosocial Model

Initially described by George Engel in 1977, the **biopsychosocial (BPS) model** (Engel 1977) integrates molecular interaction at the cellular level, perception and cognition at a psychological level, and attribution of meaning at a social level. Biological model of disease has long been the mainstay of medical education. Evidences show that understanding and application of BPS model significantly improves treatment outcome. The model is focused on individuals' unique life experiences and environmental exposure. Patient-centered and relationship-centered cares have proven the efficacy of BPS model by using a repeatable method to generate relevant biological, psychological, and social information consistently. They key concepts of application of BPS model are described in Fig. 1. Teaching the application of biopsychosocial model is the primary step in teaching psychiatry to other specialties.

Table 1 Reattribution model, developed and modified from Goldberg and Morriss's models (Goldberg et al. 1989; Morriss et al. 2006)

Reattribution model for family practice consultation
1. Making the patient feeling understood Obtain history of presenting physical and psychological symptoms Focus on psychological cues: express empathy Focus on psychosocial factors and symptoms beliefs Note is taken of similar past symptoms Focused physical examination is done
2. Expansion of agenda Feedback results of physical examination and investigation Explanation of findings Acknowledgement of pain and impairment Suggestion of possible links between psychological factors and physical symptoms
3. Making the link Explanation of symptoms by linking them with psychosocial factors Explanation of possible mechanisms (e.g., HPA axis alteration) Use of normalization in linking psychological and physical symptoms Use of examples in different life areas
4. Negotiating further treatment Acknowledgement and validation of concern and worries Assess the need of medication: discuss Assess the need of psychiatric consultation: discuss Plan specific follow-up schedule Ask for the patient's view of treatment plan: affirmation of control over their own treatment plan

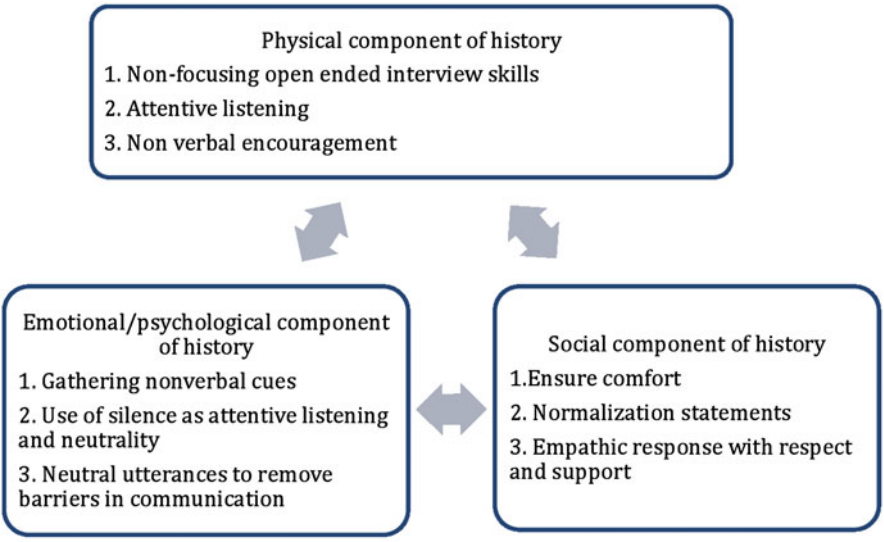

Fig. 1 Using patient-centered skills in application of biopsychosocial theory of medicine

Social Learning Theory

Learning process can be divided into three different dimensions: cognitive (what to learn), motivational (why to learn), and metacognitive (how to learn) domains. According to social cognitive theory, capacity of self-regulation and self-reflection determines the meaning and purpose of one's life goals. So it is very important to **motivate a person towards self-reflection** to regulate his or her own health goals. To implement this theory in treatment, the physician needs to have understanding of self-awareness and recognition of their own emotions. The importance of self-awareness training is discussed in details later in the section "Personal Awareness Training."

Changing Methods of Teaching

The Institute of Medicine (IOM) has recognized the gap in modern healthcare delivery system and has advised patient-centered practice as one of the six domains of quality. In 2004, IOM asserted improved psychosocial and mental health training across all years of medical school and residency. They recommended 6 domains with 26 subtopics to be included in the proposed behavioral and social science curriculum throughout the medical school education. The six domains include:

- Health policy and economics
- Patient behavior
- Physician-patient interactions
- Mind–body interaction in health and disease
- Physician role and behavior
- Social and cultural issues in health care

This recommendation identified the need for a major **redesigning of Medical College Admission Test (MCAT),** a required test for admission into US medical schools (IOM 2004). In 2015, a new subsection has been added to the test content, called "Psychological, Social and Biological Foundations of Behavior." This subsection aimed at critical analysis and reasoning replaced the writing sample, one of the four subsections earlier. The new subsection measures the foundation knowledge in five different content areas:

- Ways in which people receive information and react
- Factors that influence behavior
- Factors that influence self-perception and perception of others
- Ways in which social and cultural differences influence health and
- Ways in which social stratification affects access to resources

To improve the training experience during residency, American Academy of Family Physicians (American Academy of Family Physicians 2011) outlined a curriculum guideline for family medicine residency programs, to enable residents to ". . . recognize,

initiate treatment for, and utilize appropriate referral for mental health disorders." In 2009, the American Academy of Child and Adolescent Psychiatry and the American Academy of Pediatrics released a joint guideline (American Academy of Child and Adolescent Psychiatry Committee on Health Care Access and Economics Task Force on Mental Health 2009) stating that initial mental health assessment and care should occur in the child's familiar primary care setting (pediatrics practice setting), and primary care physicians should be trained to identify and coordinate mental health care.

Despite these efforts, the extent of training in psychosocial and mental health domain remains inadequate. Most of the US medical schools have a curriculum of 6–8 weeks of interviewing training in the first year and 4–8 weeks of psychiatry clinical rotation in the third year. Most of the training happens in the inpatient setting, often very dissimilar to the scope of future clinical practice of nonpsychiatry specialties. A vast majority of program directors in internal medicine, pediatrics, and obstetrics have recognized the psychosocial and mental health training to be minimal or suboptimal (Leigh et al. 2006). A little Less than half of the family medicine program directors had a similar report. Data from the UK is similar to the US data and the rest of the countries does not have sufficient data.

What Are the Barriers?

Clinician-Level Barriers

With IOM recommendations, many medical schools in the USA added comprehensive behavioral and social sciences courses in the medical school curriculum. One such institution was Oregon Health and Science University, where a 240-h long longitudinal didactics and small group discussion courses were added as part of a National Institutes of Health (NIH) grant supported program to improve behavioral and social sciences education. The course was offered during the first 2 years of medical school. A study published in 2011 describes the students' experiences and opinions about the effectiveness of the course (Peterson et al. 2011). The three main areas of difficulty to integrate the course in clinical practice were identified as:

- The didactics theory were not followed up in the last 2 years of clinical rotations
- Inconsistent modeling of behavioral and social sciences principals in clinical settings
- Dissonance between the cultures of behavioral and social sciences and biomedical sciences

Interestingly, these barriers are similar to what has been reported from other countries including the UK and Belgium (Litva and Peters 2008; Bombeke et al. 2010). This points toward a barrier beyond the pedagogical theory. Integration of the ideas of behavioral and social sciences can be time consuming for some clinical settings. Some of the barriers are identified as organization level issues. The influence of

organizational structure and culture often work as a "hidden curriculum," conceptualized by many authors in the literature. Some academic institutions came forward in effort to mitigate this challenge of hidden curriculum. University of Michigan proposed a concept of critical consciousness – an awareness of self, others, and the world, in practicing biological medicine and faculty development (Kumagai and Lypson 2009).

Several residency programs have developed and implemented models of collocated training for family medicine and pediatrics residents within the primary care office setting, with a psychiatry faculty staffing and supervising. Some of these models collaborated with local community mental health clinics (Romain et al. 2015) in an effort to address the educational gap. Some came up with a psychiatric consultation team, including family medicine residents and psychiatry faculty. In this model, family medicine residents rotate through several blocks of collaborative family medicine and psychiatry training, longitudinally over a period of at least 2 years of residency training. This approach recognized more specific barriers and developed some helpful approaches to overcome them (Table 2).

When addressing mental health issues, clinicians may rely upon anecdotal experience, lacking supporting evidence. This method can potentially be ineffective given the cultural, religious, or social diversity of patient population. So use of standardized methods of evaluation of psychiatric symptoms is needed. This is discussed later in the section "Use of Standardized Tools for Screening."

Psychiatrists specifically trained in collaborative care model are still not homogeneous in number in all parts of the country. With the newer subspecialty fellowship training in psychosomatic medicine, there have been a number of psychiatrists trained in the collaborative healthcare. Still the skills of these fellowship-trained psychiatrists depend on the scope of training in their fellowship programs. As a result, not all psychiatrists are competent in adapting their skills to the primary care setting.

Table 2 Ways to overcome some practical challenges in collaborative care approach aimed at psychiatric education for primary care trainees. Information was used from a study in a family medicine residency program (Romain et al. 2015)

Barriers	Measures to overcome
Limited patient contact time: difficult to generate a biopsychosocial formulation	Effective assessment tools addressing Relevant information Prioritizing treatment approach Inference and diagnoses Identification of need of referral Use of available resources The focus was on developing repeatable and teachable framework
Difficulty in accessing information in "refer-out" model:	Easily accessible psychiatry specific electronic medical record (EMR) tools (SmartPhrases for EPIC EMR): Allows the psychiatry specific template and information to be grouped together These were used both as notes and as reference information

System-Level Barriers

There are other barriers in teaching psychiatry to nonpsychiatry providers. The culture shift from "refer-out" to "shared care" model is often the cornerstone of implementing collaborative care. In the USA, many primary care residency-training programs have incorporated a collaborative care model to improve psychiatry education during training. The barriers in effective use of this model have been described in several reports. Firstly, having a mechanism to choose the correct population to be seen in a collaborative set up is a common problem. Triaging by a mental health specialist (often a social worker) is sometimes helpful to determine the need to be seen in a collaborative set up. Secondly, referral questions are often not clear and might not clearly depict the problem area. Consistent feedback from the psychiatry team is needed to ensure a focused referral question.

Another common concern expressed by many authors is the amount of time spent by the trainees on these collaborative care rotation blocks. Some programs are able to have a several days a week schedule for a month, several times a year consistently for 1 or 2 years. However, depending on the number of trainees, availability of faculty consistently becomes a problem.

Sometimes there is a resistance from the graduate medical education funding regulations deterring the expansion of training into other areas including collaborative care setting. When collaborating with different organizations, including community mental health clinics, the reimbursement between organizations, coordination of schedules and negotiation between different electronic medical records systems are some of the barriers in implementation of shared care model of training.

Growth of faculty, stability, and financial sustainability are some other problems in the shared care model of training in countries where third party payers regulate the health care system and thus influence the teaching environment in training programs. Faculty availability is often variable, even in academic institutions, and more so in the community set up. This influences the trainee's opportunity of receiving mentorship and expertized education on a longitudinal basis. Without commitment of departmental leadership and institutional support, these shared models of training are still not financially sustainable or replicable in a wider realm.

What Are the Helpful Skills and Domains in Learning and Implementing Mental Health Attributes Within Primary Care Setting?

Level of Advanced Training

Effective fellowship training and its transition into clinical practice are predictors of primary care physicians' role in providing mental health care. Pediatricians with advanced training in psychosocial issues were more likely to identify and use various management strategies for treating psychosocial issues in children in a training

intensity-dependent manner. A study (Leaf et al. 2004) stratified the intensity of training in psychosocial issues in three categories:

1. Pediatricians that were trained in fellowship in developmental or behavioral pediatrics, adolescent medicine, and/or participants in intensive Collaborative Office Rounds offered by the Yale Child Study Center were considered having *advanced training.*
2. Pediatricians who had one or more rotations in behavioral medicine during their residency were considered as *moderately trained*.
3. Pediatricians who had traditional medical school education and residency training, without any prior specific training in behavioral medicine, were considered as *no training.*

The advanced training and moderate training recipient pediatricians were more likely to identify behavioral problems than the no training group. However, the relationship between management of psychosocial problems and training was significant only for the advanced training group of pediatrician, not for the moderate and no training group. Effective management of psychosocial and behavioral problems was clearly dependent on the intensity of advanced level training.

Use of Standardized Tools for Screening

With the flow of busy work schedule and limited time allotment for each encounter, it is crucial to use standardized validated tools for screening of common mental health disorders. Use of tools like Hamilton Depression Rating Scale (HAM-D), Hamilton Anxiety Rating Scale (HAM-A), Clinician-Administered Post Traumatic Stress Disorder Scale for Diagnostic and Statistical Manual-5 (CAPS-5), and Edinburgh Postnatal Depression Scale (EPDS) have successfully improved the outcome of multiapproach intervention for identification and management of common psychiatric disorders in primary care setting.

Multicomponent Intervention

In a recent effort to evaluate the importance of training in improving the outcomes in treatment of depression, a systematic review compared the effects of a multicomponent training approach with that of a stand-alone training approach. Nine randomized controlled trials (RCT) were included in the review (Vohringer et al. 2016). Five of these trials tested the effectiveness of multicomponent intervention. The approach included:

- Training of clinicians (nurses, physicians) in common mental health problems
- Patient education on mental health symptoms and diagnoses
- Use of antidepressant medication and treatment coordination
- Use of support tools (algorithms, guidelines, screening instruments)

The other four out of the nine RCTs tested the effectiveness of specific stand-alone training programs in depression management. One of these studies (Morrell et al. 2009) was performed in the UK. In this study, health visitors were trained to identify depressive symptoms at 6–8 weeks postnatally using the Edinburgh Postnatal Depression Scale (EPDS). They were also trained to provide psychologically informed sessions based on cognitive behavioral or person-centered principles for an hour a week for 8 weeks. The effect of this training was compared with a control group of health visitors that provided traditional care to postnatal women. There was a significant reduction in depressive symptoms per EPDS in the intervention group. However, there was no differential benefit for either psychological approach (cognitive behavioral and patient-centered approach) over the other.

Overall, in this systematic review, all studies implementing multicomponent intervention showed efficacy in reduction of depressive symptoms. Half of the stand-alone training studies were effective in reducing level of depression. Two studies testing the effect of interventions focused on only physician training did no show significant differences in the outcome of depression treatment between the control and intervention groups. This indicates the need of a multicomponent training model beyond only physician training.

One commonly identified factor in the multicomponent intervention was task shifting. For example, nurses were specially trained to function as "case manager," to facilitate patient education and coordination of follow-up care.

Family Resilience Framework

This framework is particularly useful for the pediatric clinicians to help them in learning mental health attributes. The key process in family resilience is outlined in three domains (Walsh 2003):

- Family belief systems
- Organizational pattern
- Communication/interaction style

The core concept is to focus on the strength under crisis situation. Functioning of an individual is assessed in the context of family structure, resources, and challenges. Optimal functioning depends on the family dynamics. These concepts can be used as a common language by both primary care and mental health specialists to emphasize the strength of adaptation of a child with behavioral and psychological problems rather than the dysfunction.

Operant Learning-Based Mental Health Care Model

Theories of operant learning and cognitive behavioral skills have been successfully used in treating pain and other somatization symptoms and people with high

utilization pattern. Based on these theories, a model of mental health (Smith et al. 2014) training has been developed by a group of educators. This model is tested to be easily deployable by primary care physicians and is adapted for their needs. The approach of this model focuses on training other medical trainees to feel competent in managing mental health-related problems in their patient population. Some skills taught in this training model are application of cognitive reorientation of negative emotions, positive reinforcement for healthy behaviors, regular scheduling of follow-up appointments and problem-solving strategies. Implementation of this model was associated with significant improvement in physical and mental health status, physical disability, and patient satisfaction. Basic pharmacological principals for management of depression, anxiety, and prescription opiate use were integrated in this model. Subsets of this model were also developed using the theory of cognitive reorientation, for specific use in narcotic medication weaning treatment and in medically unexplained symptoms.

Dialectical Behavioral Therapy-Based Training

Dialectical behavioral therapy (DBT) is an evidence-based treatment for borderline personality disorder and suicidal behavior. Massachusetts Mental Health Center recently introduced an innovative DBT based 1-month long clerkship program (Carmel and Arevalo 2016) for medical students with focus on learning strategies to assess and manage suicide risks. In this model, the medical students take active part in implanting four strategies to assess, manage, and treat suicidality. The strategies include:

A. How to teach a skill-based group to avoid maladaptive behavior and replace them with more functional ones
B. How to apply commitment strategies to motivate people to stay alive and safe
C. How to administer a suicide risk assessment to know the risk and protective factors
D. How to conduct a chain analysis on incidents of suicidal behavior

This model of training is tested on medical students. As it uses a time-tested approach of DBT, this could be a very effective method of teaching in managing suicidality for other medical specialties.

Personal Awareness Training

Addressing learners' emotions and **ability to self-reflect** is a key determinant of whether a trainee will use the patient-centered skills effectively in the future practice to address psychosocial and mental health problems. Unconscious and unrecognized negative feelings about certain population (for example, people with substance use disorder or medically unexplained symptoms) can create a barrier in developing

effective physician-patient relationship and therapeutic alliance. Personal training awareness is helpful in successful use of patient-centered medical care.

Patient-centered interviewing skills are associated with positive outcomes. In most training models, patient-centered interviewing skills were used to train family medicine and pediatrics residents in their behavioral medicine rotations. The patient population included people with chronic pain, unexplored addiction problems, somatic symptoms preoccupation, and unexplained physical symptoms. In these models, trainees were asked to practice a skill that had conflicts with the traditional practice attributes in medicine. For example, the expectation from a physician to be pleasing (versus exploring unpleasant and painful emotions like anxiety, guilty, shame), doctors need to be in control of the doctor-patient unit (versus patients are the one to decide the trajectory of their management), some patients cannot be helped (versus listening and showing empathy can be more helpful than active intervention at times). To apply these contradictory skills in practice, reflection and self-awareness are needed.

Researchers systematically studied the effect of training in self-awareness on learning patient-centered interviewing skills within behavioral medicine rotations (Smith et al. 1999). It showed that teaching trainees to recognize previously unrecognized negative attitudes significantly improved patient-centered interviewing skills. Some of the deficiency areas identified, as targets of self-awareness training were lack of assertiveness, fear of discussing negative emotions, anxiety of giving bad news, and fear of discussing death. Some of the trainees were not receptive to the self-awareness training and some were not able to utilize it in applying the interviewing skills. Psychological maturity was thought to be a barrier in self-awareness training. This was a hypothesis generating study that needs further methodological rigor to look into the effect of trainee and teacher characteristics and trainee-teacher relationship on teaching self-awareness skills in clinical practice. However, this approach of training in self-awareness highlights the need of a major alignment of medical education system with the need of primary care mental health.

Integration of Mental Health Services in Primary Care

Integration of mental health care into primary care setting has long been discussed and implemented with various modifications depending on the available resources. The advocacy for integrating physical and mental health services started almost more than a decade ago. Evidences from randomized controlled trials showed that integrated mental health care improves process of care, clinical outcomes for both physical and mental health problems, and quality of life (Katon et al. 2004; Unutzer et al. 2002). A review report extensively analyzed all the studies done in various levels of integration of primary care and behavioral healthcare services. This report showed integration of mental health, substance use disorder, and primary care generally improved patient care outcome (Butler et al. 2008). In a multicenter study (Ede et al. 2015) involving five integrated care community health centers

across the USA showed improved access to mental health, improved patient satisfaction, and improved support staff comfort in the collaborative care model with behavioral health services within the primary care settings. More than half of the primary care providers reported being able to diagnose more than 40% of their patients with clinically relevant psychiatric disorder, without referring them out. Less than half of all the providers reported the need of referral to mental health specialists. In terms of using appropriate screening tools, a high percentage of providers used tools for measuring depression, but a variable number of providers used similar tools for bipolar and anxiety disorder diagnoses. Most providers reported increased comfort level regarding the access to mental health services.

The most frequently reported benefits of integrated care behavioral health services with primary care have been:

1. Mitigation of barriers due to perceived stigma of accessing mental health services
2. Availability of consultation and evaluation and active engagement when patients are most receptive to further assessment and interventions
3. Opportunities to improve access removing barriers of nonadherence with referrals to mental health services at a later time

The effects on positive patient outcome depend on the nature and levels of integration between mental health and primary care services. The different levels of integration may range from colocation of mental health consultants available at the point of care, eliminating the need for a return visit, or, colocated mental health specialist with easy access to referral, but through a separate visit, to available phone consultation for further direction from a mental health specialist. In integrated model, primary care offices are equipped with best practice/evidence-based screening tools for several common psychosocial aspects including tobacco use, pregnancy-related depression (in pediatrics and obstetrics practice), parental substance abuse (pediatrics practice), and screening instruments for depression, anxiety, and interpersonal and domestic violence. When used effectively, these tools can help in initial identification of mental health and substance use treatment needs in the primary care set up. A study has shown no significant difference in the use of these tools across the levels of integration of services (Bunik et al. 2013). In this study, performed among the academic and nonacademic pediatric primary care settings, constituting 30% of the US pediatric residency training programs, the only significant difference between integrated and nonintegrated sites was the access to both a psychologist and psychiatrist. Whether integration improved the quality of medical or mental health care was not explored. Similarly, there was no consensus on whether integration improved the ease of diagnoses and management of mental health problems by the primary care providers.

Colocation of mental health specialist within the primary care (family medicine and pediatrics) residency training set up has shown increasing the level of comfort for primary care trainees in managing psychiatric symptomatology and collaborating with mental health specialists. Noteworthy, a study (Garfunkel et al. 2011) implicated that pediatrics residents trained in an integrated care environment expressed more comfort in future practice in an integrated care setting but not necessarily felt

superior about their own competency in providing behavioral health services. This study compared conventional and integrated training models in a pediatric residency-training program. The authors pointed out the need of more directed training in handling mental health issues by the pediatrics residents without the support from behavioral health specialists.

In 2008, the USA passed legislation in healthcare reform, regarding medical home or health-care homes, as ". . . an approach to providing comprehensive primary care for children, youth and adults" (American Academy of Family Physicians 2007). The operational definition of a Patient Centered Medical Home was developed by consensus in Minnesota in 2010 (Peek and Oftedahl 2010). In a similar strategy Australia has long implemented an effective model of collaborative care called Consultation-Liaison in Primary Care Psychiatry (CLIPP), which is funded partly by state mental health agency and partly by a medicare expansion program that would allow psychiatrists to bill for shared care treatment planning (Meadows et al. 2007).

Behaviorally Defined Patient-Centered Communication

Patient-centered communication is the cornerstone of a systems approach to medicine, adapted by several federal, state agencies, and healthcare organizations and professional associations. Broadly describing, this approach encourages a paradigm shift from the disease approach of biological medicine to a biopsychosocial approach (described earlier). Since the promotion of the concept of biopsychosocial approach by Engel in the late 1970s, there have been many researches into this newer direction of medicine, but specific definitions broken into teachable components did not come out until another 40 years. The lack of explicit definitions led educators look into the prior randomized controlled trials using patient-centered communications. A narrative review (Smith et al. 2010) found many common behaviorally defined themes used by 13 randomized controlled trials studying the components of patient-centered communication. The overview of these behaviorally defined interventions is described in Table 3.

Table 3 Behaviorally defined patient-centered communication skills components, collected from a narrative review of all randomized controlled trials from 1975 to 2010 (Smith et al. 2010)

Behaviorally defined patient-centered communication skills components
1. Open-ended interviewing skills
2. Eliciting and responding to emotions
3. Expressing empathy and positive regard
4. Expressing willingness to help
5. Asking patients their understanding of the problem
6. Asking patients about their choice of management trajectory
7. Motivating and encouraging towards a positive approach
8. Linking treatment to patient's needs and level of understanding
9. Advising but acknowledging patient's choice

Teaching Medical Students by Psychiatry Trainees

Like in the USA, in many other countries including Canada and Australia, 6–8 weeks rotation in psychiatry is the only time for all future physicians to have basic clinical training in diagnosing and treating mental health disorders. Teaching medical students is an expected competency for residents in psychiatry training programs in all these countries. The respective accreditation bodies mandate the residency training programs in the USA and Canada to teach residents how to teach. However, only a few training programs concentrate on formal training in teaching for psychiatry residents. In a survey (Isenberg-Grzeda et al. 2016) constituting 7% of all US and Canadian residents, it was shown that the number of residents receiving some training in teaching went up steadily from post graduate year 1 (PGY-1) to post graduate year 4 (PGY-4). Most respondents agreed that residents had a significant impact on medical students' career choice. To have an effective curriculum on formal teaching has its unique challenges. As there are only a few training programs in the USA that has formal curriculum on teaching how to teach, there are debates about the best method of formal delivery of such teaching. There have been a few randomized controlled trials using workshops as a teaching tool to improve the capacity and quality of teaching among medical residents. The University of Toronto used a teaching-to-teach program (Dang et al. 2010) for more than 15 years. It developed a specific teaching curriculum based on the feedback from psychiatry residents on their perceptions of strong and weak teachers, their anxieties about teaching medical students, and their preferences of tools of teaching. In literature, some areas of challenges in teaching psychiatry to medical students are outlined as:

1. Helping to overcome students' prejudice against mental health disorders
2. Helping students to develop empathy and "microskills"
3. Developing interest in learning psychiatry when the student is not particularly inclined to pursue it as a future career option
4. Translation of scientific literature into clinical practice
5. Not having formal teaching on how to teach during the initial years of training
6. Not having enough feedback on their teaching skills from the supervisors and the students

Specific training in teaching medical students improves confidence among the trainees. However, whether this confidence correlates with competence and translates into positive learner outcomes in psychiatry setting remains a matter of further systematic study.

Targeted Mental Health Training Programs

With the emerging need of psychiatrists and the contrasting lack of mental healthcare access in developing countries, targeted mental health training programs are being used to train primary care physicians in the countries of need. According to the

United Nations High Commissioner for Refugees in 2009, approximately 43.3 million people were displaced worldwide (UNHCR 2009). There have been several reports of increased incidence of depression, anxiety, posttraumatic stress disorder, and other trauma-related psychiatric manifestations resulting from the wars, displacements, starvations, torture, and several other forms of trauma. While the World Health Organization urged for training of general health personnel in mental health care, targeted programs have evolved to help the enormous need. One such example is a 2-week culturally sensitive psychiatry-training program at the Harvard Program in Refugee Trauma (HPRT) (Borba et al. 2015). This program trained the primary care physicians in Peru in managing trauma-related mental health problems. The program significantly improved the primary care physicians' confidence in psychiatric diagnoses, assessment of risk of violence, prescribing psychiatric medications, and counseling trauma victims. Noteworthy, the confidence faded among the primary care physicians in the 1 year follow-up, indicating a need of periodic training to reinforce these skills.

Role of Consultation-Liaison Psychiatry in Educating Other Specialties

Consultation-liaison psychiatry has a long history of treating psychiatric disorders in medically complex patient populations in inpatient setting in general hospitals. Academic medical centers usually have dedicated consultation-liaison services that cater the need of the interface between psychiatry and other specialties. Scope of delivering psychiatric education for other specialties is huge in consultation-liaison setting, as teaching is often direct, case-specific, yet longitudinal. There are several examples of positive outcomes in patient management and other specialties' clinical acumen in managing psychiatric problems with intervention of consultation-liaison service.

Management of delirium is a common area of interface between psychiatry and other areas of medicine. Delirium is one of the most common reasons for psychiatric consultation in a general hospital. Noteworthy, the reason for consultation may not be obvious given the heterogeneity of clinical presentation of delirium. The scope of education begins with the clarification of consultation question. Delirium is often under-diagnosed due to inadequate recognition of symptoms and contributing causes by various specialties. A study (Beach et al. 2013) showed significant improvement in attitude towards delirium among the critical care nurses after a consultation liaison psychiatrist performed collaborative weekly rounds with the critical care service for a period on 9 months. More nurses agreed that delirium was under diagnosed and a significantly higher percentage of them recognized new onset anxiety and depression in critical care setting as potential confounders in the diagnosis of delirium. In a similar effort to educate and incorporate nursing expertise in psychiatric diagnosis, Stanford Proxy Test for Delirium (SPT-D) was developed to facilitate intervention by nursing in general hospitals (Moldonado 2008). In another open label study (Kratz et al. 2015), education about a nonpharmacological protocol was provided by a trained geriatric

psychiatric nurse for a 10-month period of time, aiming to prevent delirium during the postoperative period. This study found significant difference in rates of postoperative delirium between the intervention and control groups.

With the growing interest in psychosomatic medicine or consultation-liaison fellowship, there is a unique role that can be played by these advanced level trainees. There are examples of advanced year psychiatry residents playing a consultant role in family medicine clinic as a part of an integrated care setting. Many psychosomatic medicine fellowship programs are specifically designed to have the fellows deliver formal teaching in basic psychiatric skills to primary care providers including residents, nurse practitioners, social workers, and medical students. The format of teaching is often clinical case presentation with tailored topics on specific problems in the interface of those specialties and psychiatry. Examples are effective and safe use of antidepressant and antipsychotic medications in reproductive population, management of personality disorder and substance use issues in family medicine practice, management of somatization and sleep disorders, monitoring people on psychotropic medication, and so on. Besides traditional hospital-based services, consultation-liaison psychiatry is also effective in providing collaboration with primary care providers, emergency physicians, and other specialties in remote areas with sparse psychiatric care. There is evidence that telephone consultation with a focus on educating primary care providers is associated with improved prescribing practices and higher satisfaction among primary care providers (Hilty et al. 2006). Other countries have utilized this approach in rural and remote areas to provide mental health care to a larger population.

Innovative Approaches for a Global Outreach of Psychiatric Education

With the help of telemental health, providing mental health care in remote areas has been possible. Technology is also being used in educating peers from other countries. For example a non-live (asynchronous) "store-and-forward" clinical information platform was used to transmit clinical and educational material to health care providers to help in the treatment of specific cases with mental health problems in countries where mental health access is sparse. As this telecommunication system was asynchronous, it needed a lower bandwidth and less robust internet arrangement. This was an advantage over videoconferencing that can be challenging in some geographical areas. The clinical and educational material was encrypted through a safe server protected by firewalls. The store-and-forward platform provided consultation, training, and education for other specialties. This technology can be used in the remote areas. Currently, Syrian TeleMental Health Network (Jefee-Bahloul et al. 2016) is using this technology in four countries to connect the refugee clinics to have mental health education and consultation from 16 mental health specialist located in North America, Europe, and Middle East. This technology has the potential to engage the academic mental health departments to be directly involved in global mental health teaching in an effective and sustainable way.

Conclusion

Education in psychiatry for all other medical specialties should be guided by the understanding that treating mental health problems is a critical need in public health. So it might need a system-based change in the approach of teaching. This includes pedagogical changes like competency based clear measurable learning objectives and fellowship level training for the teachers along with changes in the funding system. Solving the multitude of barriers towards a better mental health care needs consistent efforts in improving reimbursement issues and widespread implementation of collaborative teaching. However, effectively training other medical specialties in mental health care is the most crucial part of the approach. Realignment of medical education approach is a pivotal step in the training physicians to serve one of the greatest needs of the society.

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Training in Psychopharmacology-Pharmacopsychiatry for Residents in Psychiatry

7

Pierre Baumann

Contents

Abstract

In the majority of the countries, specialization in psychiatry comprises a 4–6-year training program, but the number of hours declared as psychopharmacology teaching comprises only 20–40 h within a 5-year resident teaching program. This chapter presents the actual situation of psychopharmacology-pharmacopsychiatry training for specialization in psychiatry, and it proposes a curriculum and a learning catalogue. Indeed, among the rare instruments available, there is

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the curriculum of the American Society of Clinical Psychopharmacology (ASCP), but it is not widely introduced. The chapter also presents teaching forms and discusses the question about who should teach these disciplines and how both learning and teaching should then be evaluated. It is concluded that a curriculum should include 150–200 h of theoretical teaching in psychopharmacology-pharmacopsychiatry and contain additional 300–400 h centered on practical bedside teaching and provided by senior psychiatrists and other experienced colleagues.

Keywords
Curriculum · Learning catalogue · Psychopharmacology · Pharmacopsychiatry · Teaching · Psychotropic drugs

Introduction

According to the "Psychiatric training atlas" (WHO, WPA, 2005: www.who.int/mental_health/evidence/Atlas_training_final.pdf; accessed April 11, 2018), specialization in psychiatry comprises a 4–6-year training program in the majority of the countries. On the other hand, the WPA's "Institutional program on the core training curriculum for psychiatry" published in 2002 presents mainly the training programs of the countries which replied to a questionnaire and shortly displays a list of about three dozens suggested seminar topics. There is no recommendation regarding the overall duration of training but about 200–300 h of teaching should be made available between the 1st and 3rd training years (www.wpanet.org/uploads/Education/Educational_Programs/Core_Curriculum/corecurriculum-psych-ENG.pdf; accessed April 11, 2018). In particular, for each of the following disciplines – adult psychopathology, psychopharmacology, psychotherapies, neurosciences – at least 20 h teaching should be included.

Due to the lack of a worldwide harmonization of the matters to be taught and the time allotted to the different matters which compose the curriculum, recognition of the specialization degree obtained in one country may not be automatic in other countries. At least in the European Union, despite the curricula in different European countries vary greatly, qualification in one country is recognized within other countries of the Union. Due to the high migration rate of physicians between countries, there is certainly a general need for standardization and regulation of psychiatric education in the world which would then facilitate recognition of the specialization obtained for a particular discipline all over the world.

The literature is scarce about teaching of psychiatry and in particular of psychopharmacology for the specialization in psychiatry. The content of teaching programs and the time allotted to theoretical and bedside teaching

is described in some earlier publications, such as the already mentioned WPA's "Institutional program on the core training curriculum for psychiatry" (WPA 2002) (www.wpanet.org/uploads/Education/Educational_Programs/Core_Curriculum/corecurriculum-psych-ENG.pdf; accessed April 11, 2018), but apparently, the quality of the teaching programs has not been evaluated in a research project. Information available by internet sources reveals that teaching is decentralized and differs even by regions in specific countries. The European Psychiatric Association (EPA) guidance on postgraduate psychiatric training in Europe does not mention psychopharmacology training but it is centered on psychotherapy education (Mayer et al. 2014). On the other hand, another group of European authors considers that psychotherapy training is neglected and that it should be implemented in psychiatric practice together with other therapies such as pharmacotherapy (Brittlebank et al. 2016). On a national level, for example, the learning catalogue implanted in Switzerland (Program for specialization in psychiatry in Switzerland (www.fmh.ch/files/pdf19/psychiatrie_version_internet_f.pdf; accessed on April 11, 2018) informs on the number of hours dedicated to psychotherapy, but there is no information available for psychopharmacology. A short review on psychiatric training in Europe presents some information on education in psychotherapy but not on psychopharmacology (Oakley and Malik 2010). The situation is similar in other European countries such as Austria, Germany, and Hungary (Baumann et al. 2017). The probably unique study on medical specialization psychiatry training in Europe showed that all 22 participating countries offer training programs in psychopharmacology and pharmacotherapy, but there are no quantitative data (Lotz-Rambaldi et al. 2008). Probably, the number of hours declared as psychopharmacology teaching does generally not exceed two dozen hours within a 5-year resident teaching program.

On a worldwide level, no international organization has made available a curriculum or a learning catalogue in psychopharmacology-pharmacopsychiatry for residents in psychiatry. These instruments exist however in a most elaborated form in the USA, as described below in extenso (www.ascpp.org/wp-content/uploads/2012/11/Volume-I-8th-Edition-TOC-Only-1-23-2015.pdf) (Glick et al. 2012). The German Association of Neuropsychopharmacology and Pharmacopsychiatry (AGNP) (Breyer-Pfaff et al. 1995a, b) has published a learning catalogue, and recently, proposals for such catalogues were also developed for Europe (Baumann et al. 2017) and Germany (Laux 2014).

This chapter aims at presenting the situation of psychopharmacology-pharmacopsychiatry training for specialization in psychiatry, and it proposes a curriculum and a learning catalogue. In addition, it comprises the presentation of teaching forms and discusses the question about who should teach to residents in psychiatry and how both learning and teaching should then be evaluated. It is based on a review paper published by several European authors (Baumann et al. 2017), which includes a recently proposed learning catalogue (Laux 2014).

The Situation of Psychopharmacology at the Beginning of the Twenty-First Century

There is a gap between the recent spectacular research progress in neurosciences which allows a better understanding of the functions of the human brain and the absence of new psychopharmacological agents which should have resulted from these activities. Indeed, almost all drugs which constitute the therapeutic tools introduced in the area of modern psychopharmacology got available between 1950 and 1975. They include antidepressants, antipsychotics, anxiolytics, sleep inducers, and mood stabilizers such as lithium. During the past 40 years, new drugs were actually made available, but their mechanisms do not fundamentally differ from those developed earlier. While the "Decade of the Brain" commenced after its proclamation in 1990, which boosted then research in neurosciences during the following 25 years, the majority of the few, more recently introduced psychotherapeutic drugs still display a noradrenergic, serotonergic, dopaminergic, and/or a GABAergic mechanism of action. This was already the case for the first generation of drugs. A dysfunction of these neurotransmitters in any psychiatric disease which would then lead to a clinically relevant diagnostic test remains to be demonstrated. Some novel agents like substance P-antagonists and CRH-receptor antagonists (R121919) for depression, or NMDA-antagonists such as bitopertin for schizophrenia, the mechanisms of which differ from those enumerated above were withdrawn before commercialization. Consequently, many pharmaceutical companies withdrew from psychiatric neurosciences and research in psychopharmacology (Fibiger 2012; Nutt and Goodwin 2011). Actually, this situation has prompted some authors to publish extremely critical articles about the biomedical model which predominates today. One of the authors (Deacon 2013) cites Michael First who stated: "Although the past two decades have produced a great deal of progress in neurobiological investigations, the field has thus far failed to identify a single neurobiological phenotypic marker or gene that is useful in making a diagnosis of a major psychiatric disorder or for predicting response to psychopharmacological treatment." Deacon suggests to give some new chances to the biopsychosocial model and to intensify dialog and collaboration between the actors representing different disciplines. Indeed, he admits (Deacon 2013) that today available psychotropic drugs have largely contributed to efficiently treat patients suffering from mental diseases. Other, nonpharmacological treatments of the majority of patients suffering from a severe condition have also limits. As a consequence, mainly in the absence of novel, more efficient drugs, psychiatrists are invited to optimize the use of available drugs for which comprehensive knowledge of pharmacodynamic mechanisms, pharmacokinetic compatibility, and clinical efficacy is essential and to combine psychotherapy, sociotherapy, and pharmacotherapy. It has also to be considered that today, there is an entirely justified demand of the patients that pharmacological treatments should not only be efficacious but also provide a better quality of life by demonstrating good tolerance and safety. Therefore, psychopharmacotherapy presents multiple challenges and has increasingly become a complex and demanding task for psychiatrists. However, in order to ensure that such knowledge may be pervasively attained,

improvement of postgraduate teaching and certainly also continuous education is essential (Baumann et al. 2017).

Present Situation of Postgraduate Psychopharmacology Teaching

The already mentioned WPA document (cf also Montenegro 2002) mentions the following disciplines under the subtitle "Recommendations: I. Basis sciences Human growth and development – Behavioral and social sciences – Genetics – Neurosciences – Psychopharmacology, and in: IV Therapeutics, the discipline "Psychopharmacotherapy." The chapter "VIII. Minimum number of suggested seminar topics, lengths and year" proposes "over 20 h" of seminars in psychopharmacology during the 1st, 2nd, and 3rd year of residency training. It has to be considered that, for example, also "over 20 h" and "2–4 h" of seminars in neurosciences and toxicology, respectively were listed. In addition, 36 worldwide educational programs participated by completing a survey's questionnaire: 3, 5, and 10 institutions listed 1–10 h, 11–20 h, and > 20 h of psychopharmacology teaching (mainly between training years 1–3), respectively, while 8 institutions did not provide any information. Apparently, since then, no other document was published by WPA about this topic.

The "Atlas: Psychiatric education and training across the world 2005" published by WPA and WHO (www.who.int/mental_health/evidence/Atlas_training_final.pdf; accessed on April 11, 2018) compares psychiatry teaching between most countries of the world. No comprehensive presentation of psychopharmacology teaching is available but a reported "case study" on Switzerland (in comparison to Uganda) reveals that in the field of biological psychiatry, teaching of psychopharmacology "consists of compulsory graduate courses (60 h) as well as a host of elective postgraduate options." This does seemingly overemphasize the actual situation (cf below). On the other hand, the number of hours of psychopharmacology teaching in Uganda is not reported.

Anyway, the literature is scarce with regard to the situation of psychopharmacology teaching for psychiatry residents at a worldwide level. The situation is hardly better when continents or individual countries are considered. Most information about psychopharmacology teaching is delivered by Academic Psychiatry, the Journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry. Psychopharmacology training in psychiatric education was the main topic of volume 29, issue 2, published in 2005, with almost 20 papers, but since then, no other issue was specifically dedicated to this discipline.

The Accreditation Council for Graduate Medical Education (ACGME) published "ACGME Program requirements for graduate medical education in psychiatry" (www.acgme.org/Portals/0/PFAssets/ProgramRequirements/400_psychiatry_2017_07-01.pdf; accessed on April 11, 2018), but psychopharmacology is only marginally mentioned.

Studies on postgraduate teaching of psychiatry and the respective percentages of time and emphasis devoted to psychotherapy and psychopharmacology are very rare. In the USA, a questionnaire was sent to 621 general psychiatry residency directors, but only 100 members returned it. While 93 of them replied to have a separate psychopharmacology curriculum at their institutions, 9 out of 10 replying members considered having such a curriculum "very important." Interestingly, 66% reported that teaching comprised more than 30 h within 4 years of overall training, while only 2% devoted less than 10 h to psychopharmacology (Prabhakar et al. 2012).

The European Board of Psychiatry in the UEMS (Union Européenne de Médecins Spécialistes) carried out a survey in 22 European countries; a structured theoretical training in psychopharmacology is available in almost all of them, namely in about 380 centers, but no statistical data on the number of hours dedicated to its teaching is available (Lotz-Rambaldi et al. 2008). Unpublished inquiries in European countries including Austria, Germany, France, Hungary, and Switzerland suggest that within 5-year postgraduate teaching programs, only about 20–40 h are dedicated to theoretical psychopharmacology teaching and a similar number of hours are added for practically oriented teaching (Laux 2014). These figures do not include psychopharmacology teaching in courses focused on individual psychiatric pathologies – this is of course difficult to quantify. The scarce data available nevertheless suggest that the overall percentage of time devoted on psychopharmacotherapy teaching does probably not exceed 5%, while psychotherapy teaching frequently exceeds 1000 h. The fact that in some countries, such as in Germany (Naber and Hohagen 2008) and in Switzerland, the specialization defined as "psychiatry" was replaced by "psychiatry and psychotherapy" resulted in an increase of training in psychotherapy; in Germany, it reaches now 100 h of theoretical courses in psychotherapy, 120 h of therapy in a primary method, and 80 h in a secondary method (The denomination "psychotherapists" used in this chapter therefore applies for physicians specialized in psychiatry but considering themselves mainly psychotherapeutically oriented.). They add to further requirements for participation in a comprehensive psychotherapeutic curriculum. This contrasts with the only 40-h course on pharmacological and other biological therapy procedures, in addition to case-related advanced training. As shown later on, this is clearly insufficient. Actually, the overall curriculum should comprise additional 300–400 h centered on practical bedside teaching and provided by senior psychiatrists and other experienced colleagues.

As already mentioned above, there is very little research carried out on psychopharmacology-psychopharmacotherapy teaching and evaluation of the clinical practices of psychiatric residents. A survey was performed in the USA on the practice patterns of psychiatric residents in their treatment of patients with bipolar disorder. Out of 769 residents, who had achieved postgraduate year levels 3 and 4, only 23% replied to the questionnaire. Surprisingly, more than 25% of them did not initiate treatment with a mood stabilizer including lithium, lamotrigine, or valproate, apparently as a consequence of a lack of confidence in prescribing these treatments, because they had insufficient opportunities and experience in treating bipolar

patients (Rakofsky and Dunlop 2012). This study shows that not only theoretical teaching has to be given, but residents should also benefit from adequate training opportunities in the daily clinical context.

One could argue that it is a priority for a psychiatrist to acquire a maximum of knowledge to exert psychotherapy professionally, and that psychopharmacotherapy could at least be partly shared with physicians highly specialized in clinical pharmacology. In an editorial entitled "The Ten Cs of Good Clinical Care," the clinical pharmacologist Shader clearly expressed that "central nervous system disorders, whether neurologic or psychiatric in their classifications, should be treated with the same quality and intensity of care as all other medical conditions; there should be no discrimination against persons with mental or neurologic impairments" (Shader 2016). Even if the WHO recently published a position paper "Clinical Pharmacology in Health Care, Teaching, and Research" (www.who.int/medicines/areas/quality_safety/safety_efficacy/OMS-CIOMS-Report-20120913v4.pdf?ua=1; accessed on April 11, 2018) (Gray 2013), which emphasizes the role of clinical pharmacologists, it is a fact that clinical pharmacologists represent a rare species; the number of clinical pharmacologists which presently would be available for these activities is certainly too low. Many of them work in pharmaceutical companies or in governmental offices, and rare are hospitals who have a clinical pharmacologist in their staff. As an example, there are still 12 European countries which do not recognize clinical pharmacology as a medical specialty. This explains why, e.g., in UK, there is less than one clinical pharmacologist per million inhabitants. The situation is not very different in Austria, Germany, Czech Republic (2–4), Denmark, Finland, Spain, and Switzerland (5–10), while countries such as Hungary, Norway, Slowakia, and Sweden present the highest figures (> 10 clinical pharmacologists per million inhabitants). As a matter of fact, the majority of the European countries display less than 5–10 clinical pharmacologists per million inhabitants (Sjoqvist 2014).

Present Situation and the Need for a Worldwide Curriculum of Psychopharmacology-Pharmacopsychiatry

In a remarkable article, Glick and Zisook (Glick and Zisook 2005) present historical aspects of psychopharmacology teaching and the development of the first curricula, firstly by the American College of Neuropsychopharmacology (ACNP) in the early eighties of the last century, and later on by the American Society of Clinical Psychopharmacology (ASCP).

In Europe, nationwide programs based on a catalogue of psychopharmacologic learning objectives do not appear to be the rule. There are often only rather general statements defining the knowledge the candidate must acquire before he presents for a board examination for specialization. The programs are often influenced by regional customs or practices at individual institutions, and their content is primarily defined by a few available teachers, who are often specialized in particular fields of psychopharmacotherapy but not in others. This bears the risk that some issues are not dealt with in particular curriculums, as also observed in Germany (Laux 2014).

The Association of Neuropsychopharmacology and Pharmacopsychiatry (Arbeitsgemeinschaft für Neuropsychopharmakologie und Pharmakopsychiatrie; AGNP) published in Germany a detailed catalogue of learning objectives about psychopharmacology education for residents (Breyer-Pfaff et al. 1995a, b) but nothing is known about its implementation in institutions and use as an instrument for the design of local or regional teaching programs. Almost 20 years later, the working group "Research and Science" from the German Medical Director Conference of Psychiatric Hospitals, headed by Gerd Laux, also published a proposal for a psychopharmacology curriculum in Germany (Laux 2014).

Therefore, the ASCP curriculum, which was developed by a committee composed of about a dozen well-known authors, has to be considered a gold standard and it merits further analysis. The use of this curriculum was evaluated in 1998 in order to improve the design of future versions (Glick and Zisook 2005). The first versions were hardly used (Prabhakar et al. 2012; Zisook et al. 2009), but later on, their utilization by dozens of institutions rapidly showed that either marketing or an official support was necessary in order to implement such curricula at a significant rate. Besides a strong content of the curriculum, other issues appeared to be of importance: (1) the pedagogy to facilitate use of the huge teaching material; (2) advanced technology to make the content current, adaptable, and both teacher- and student-friendly; (3) accompanying strategies to allow buy-in from training directors and teachers who have had no role in development; (4) reasonable cost to allow wide-spread dissemination while covering preparation expense (preferably without industry support); and (5) evaluation of competence both at the end of training and postresidency in actual practice (Glick and Zisook 2005). According to the authors, it is necessary to accept the proposition that scientifically based psychopharmacology is and will be a major player in the panoply of psychiatric treatments (Glick and Zisook 2005). The content of the last (8th) edition is readily available as a summary (Glick et al. 2014) (http://psychopharmcurriculum.com/preview/8thTOC.pdf; accessed on April 11, 2018). After an introduction to the ASCP's model curriculum, its core content is presented in about 45 pages: educational objectives, what and how to teach (The didactic program, Literature review seminar, Case conference, Computers and psychopharmacology, Supervision, Off-label prescribing, Reading material, etc.), How to evaluate. Another dozen pages are dedicated to curricula for special areas, and special areas are enumerated (Child and adolescent psychiatry; Geriatric psychopharmacology; Alcohol and substance abuse psychiatry; Clinical algorithms). In addition, ten appendices provide important information about, for eample, objective assessment measures: rating scales; forms for evaluation of trainees, clinical supervisor, teaching faculty, and of the entire course; psychopharmacology algorithms; recommended reading list for residents, etc. As during the last decades, there was a tremendous increase in the knowledge and understanding of neuroscientific and psychological aspects of mental diseases (Glick and Rush 2016), it is almost impossible for individual teachers to provide a teaching which includes all these topics in an equilibrated way. The teaching material includes 4500 slides divided into 90 lectures prepared by numerous authors (Glick and Rush 2016). It covers most domains of disciplines centered on psychopharmacology or related to it.

The lectures are presented under the subtitles: crash course, basic course (postgraduate years I and II), advanced course (postgraduate years III and IV), lectures which can be included in any course or may be optional, child and adolescent psychopharmacology, geropsychiatry psychopharmacology, alcohol and substance abuse psychopharmacology, and algorithms. A sample lecture with 80 slides may be downloaded (M.D. Jibson, Psychopharmacology in the emergency room; http://psychopharmcurriculum.com/preview/Sample.pdf; accessed on April 11, 2018). According to Zisook, one of the main authors of the different editions of these curricula, these lectures are also considered useful for continuous training of already trained psychiatrists (Glick et al. 2014). Recently, some of these authors implicated in the ASCP module published a multimodal psychopharmacology curriculum centered on major depression (Deligiannidis et al. 2012). As some authors consider that training in geriatric pharmacology is clearly insufficient (Keijsers et al. 2012), it is worth mentioning that teaching programs have not only been proposed for residents in geriatric psychiatry (Glick et al. 2012) but also in pediatric psychopharmacology (Chrisman et al. 2007), as for the population of children and adolescents, only few drugs are available for on-label prescription (Giles and Martini 2016; Glick et al. 2012).

There is certainly a need for a curriculum in psychopharmacology at a worldwide level. It provides a basis for planning and teaching psychopharmacology in a psychiatric residency program (Glick et al. 2012). Its elaboration at an international level by specialists recruited from all over the world will help to develop instruments that can be further adapted to individual countries or regions. The time and energy invested by international experts emphasizes psychopharmacology's relevance and its weight in psychiatric education. Such a curriculum will yield the basis for a training of psychiatry residents in a way, which will allow them exerting their profession in other countries than only in their own. Its lack suggests that the low numbers of hours dedicated to this discipline is sufficient. On the contrary, a learning catalogue as that presented recently demonstrates the need for a dramatic increase of training time which should be dedicated to the teaching of this discipline (Baumann et al. 2017; Laux 2014). On the other hand, while the English language may be considered as the language used by the majority of scientists in the world, there is the problem that its knowledge may be limited in many residents in psychiatry the aim of whom is not to develop a scientific career but to practice psychiatry in their environment. This explains why authors of the already mentioned US curricula seek for colleagues willing to translate them in, for example, Asian languages (Glick and Rush 2016).

As already stated elsewhere (Baumann et al. 2017), the patient-related benefits of a psychiatric and specifically psychopharmacologic curriculum in improving the quality of psychiatric care are evident. A curriculum fosters standardization and quality control on multiple levels. Firstly, the quality of education can be assessed across various countries, regions, and centers through testing. Secondly, the curriculum emphasizes a structured therapeutic decision process, which is likely to positively benefit treatment safety. Lastly, the curriculum stresses regular assessment of treatment response and drug tolerability, hereby improving patient well-being.

From a trainee point of view, a structured psychopharmacologic curriculum greatly improves learning efficiency. Psychopharmacologic practices vary throughout regions, centers, and even among mentors, as they are currently strongly influenced by physician experience and empirical information. Trainees therefore spend large amounts of time and effort sifting through input and comparing learned information to international guidelines. A curriculum that emphasizes teaching guidelines and evidence-based psychopharmacology and ensures that trainees receive this information as a fundament (this may of course be supplemented by personal and mentor experience), may circumvent or simplify this step. Streamlining of psychopharmacological education therefore also provides more room for clinical practice and patient-based learning. A curriculum would also foster bilateral accountability between institutions and their residents. While residents must fulfil curriculum requirements and demonstrate their comprehension of the material, which may be assessed through testing, centers are required to provide access to necessary expertise either within their staff or by supporting resident mobility. Furthermore, by familiarizing trainees with guidelines and learning resources, a curriculum provides the tools necessary for long-term learning across a career. Physicians can therefore adapt their practices to the evolving literature, guidelines, and recommendations (Baumann et al. 2017).

Structure and Content of a Curriculum and Learning Catalogue in Psychopharmacology-Pharmacopsychiatry for Residents in Psychiatry

The literature mentions the structure and content of a few curricula and/or learning catalogues, as those of the ASCP (www.ascpp.org/wp-content/uploads/2012/11/Volume-I-8th-Edition-TOC-Only-1-23-2015.pdf; accessed on April 11, 2018) (Glick et al. 2012) and of the AGNP (Breyer-Pfaff et al. 1995a, b). The ASCP also published a Model Psychopharmacology Curriculum for Training Directors and Teachers of Psychopharmacology in Psychiatric Residency Programs (8th edition, 2014) (http://psychopharmcurriculum.com/preview/8thTOC.pdf; accessed on April 11, 2018). In 2009, a first evaluation of the ASCP curriculum (Keijsers et al. 2012) concluded that a dynamic, adult-centered curriculum that is exciting, innovative, and informative enough for a wide variety of programs can be developed; however, the development and programmatic barriers require considerable time and effort to overcome.

The following presentation is mainly centered on those published recently by the group of European authors (Baumann et al. 2017; Laux 2014). They include tables dealing with a learning catalogue comprising 160 h of psychopharmacology-psychopharmacology teaching, presented here in slightly adapted form (Tables 1–4, Fig. 1). Besides, the use of elements of curricula designed for residents in clinical pharmacology appears to be helpful for the elaboration of a learning catalogue for residents in psychiatry, such as the 83 pages curriculum for pregraduate and graduate students in UK (Ross and Maxwell 2012), but also the Specialty Training

Table 1 Proposal of a psychopharmacology-psychopharmacotherapy learning catalogue for the professional training of specialists in psychiatry and psychotherapy. I. Basic principles and general pharmacology (slightly adapted from Laux (2014) and Baumann et al. (2017))

Items	Number of hours
1. Pharmacokinetic and pharmacodynamic principles (absorption, distribution, metabolism, elimination of pharmaceutical agents; dose-effect relationships; assessment of plasma drug levels/therapeutic drug monitoring; receptor pharmacology, imaging techniques: fMRT, PET); pharmacogenetics	6
2. Neurobiological principles (basic neurosciences, neurotransmitters, psycho-neuro-endocrinology)	4
3. Experimental psychopharmacology (animal experimentation, pharmaco-EEG, pharmaco-psychology)	2
4. Methodology: clinical studies/trials, assessment of efficiency (efficacy, tolerance, safety), drug registration processes, critical reading of psychopharmacological study reports, and guidelines (statistics, meta-analyses, recommended procedures)	6
5. Psychopathometry (rating scales for assessment of mental status)	4
6. Adherence/compliance, doctor-patient relationship, psychoeducation	4
7. Issues associated with placebo and nocebo effects	2
8. Side effects/adverse drug reactions (ADRs), intoxications	4
9. Pharmacological interactions	2
10. Control investigations, pharmacovigilance, and medication errors	4
Total numbers of hours	38

Table 2 Proposal of a psychopharmacology-psychopharmacotherapy learning catalogue for the professional training of specialists in psychiatry and psychotherapy. II. Psychopharmacological agents: General issues (slightly adapted from Laux (2014) and Baumann et al. (2017))

Items	Number of hours
1. Definition, classification	1
2. Overview of the history of psychotropic substances	2
3. Pharmacoepidemiology (pharmaceutical agent usage statistics)	2
4. Significance of and attitude to psychopharmacological agents	1
16. Pharmacoeconomics, cost effectiveness	2
Total number of hours	8

Curriculum for Clinical Pharmacology, August 2010, published by the Joint Royal Colleges of Physicians Training Board (www.gmc-uk.org/Clinical_Pharmacology_and_Therapeutics_curriculum_2010.pdf_32486220.pdf_43283103.pdf; accessed on April 11, 2018). As commented by Gray (2013), the WHO, IUPAC and CIMS published in 2010 a highly informative document "Clinical Pharmacology in Health Care, Teaching and Research" http://www.who.int/medicines/areas/quality_safety/safety_efficacy/OMS-CIOMS-Report-20120913v4.pdf; accessed on November 28, 2016, accessed on April 11, 2018), which contains also a model core curriculum in clinical pharmacology for both medical students and for medical specialization in clinical pharmacology (Birkett et al. 2010).

Table 3 Proposal of a psychopharmacology-psychopharmacotherapy learning catalogue for the professional training of specialists in psychiatry and psychotherapy. IV. Implementation of psychopharmacotherapy (slightly adapted from Laux (2014) and Baumann et al. (2017))

Chapters	Number of hours
1. Combination therapies	2
2. Substance abuse, dependency, withdrawal syndromes	2
3. Procedures for switching between pharmacological agents	1
4. Effects of psychopharmacological agents upon general safety and driving ability	1
5. Psychopharmacological agents during pregnancy and nursing Gender-related aspects	2
6. Psychopharmacotherapy in aged patients	2
7. Psychopharmacological agents in child and adolescent psychiatry	3
8. Transcultural aspects (therapy in migrants)	1
9. Ethical and legal aspects (patient rights, informed consent, off-label prescribing, legal responsibility, prescribing guidelines)	2
10. Combined pharmaco- and psychotherapy; collaboration between psychotherapists and pharmacotherapists	4
Total number of hours	20

Table 4 Proposal of a psychopharmacology-psychopharmacotherapy learning catalogue for the professional training of specialists in psychiatry and psychotherapy. V. Applied psychopharmacotherapy (slightly adapted from Laux (2014) and Baumann et al. (2017))

Chapters	Number of hours
1. Therapy of acute and chronic organic disorders (delirium, dementia)	4
2. Therapy of schizophrenic psychoses and psychotic disorders	4
3. Therapy of depressive disorders	6
4. Therapy of bipolar affective disorders	4
5. Therapy of anxiety and panic disorders	4
6. Therapy of compulsive disorders	1
7. Therapy of neurotic, stress-related, and somatoform disorders	2
8. Therapy of eating and sleep disorders, and of disorders of sexual function	2
9. Therapy of chronic pain syndromes	1
10. Therapy of personality and conduct disorders	2
11. Pharmacotherapy in patients with intellectual deficits	1
12. Psychopharmacotherapy of ADHD	2
13. Psychopharmacotherapy in patients with tic and other motor disorders	1
14. Therapy of withdrawal syndromes and addiction disorders, substitution therapies	2
15. Emergency psychiatric therapy (agitated states, acute suicidality, acute anxiety and panic disorder, delirium)	6
Total number of hours	42

Class of drugs	Number of hours
❑ Antidepressants	12
❑ Mood stabilizers	6
❑ Antipsychotics	8
❑ Tranquilizers/anxiolytics	6
❑ Hypnotics	4
❑ Anti-dementia medications	6
❑ Psychostimulants	4
❑ Agents for the treatment of withdrawal and dependency	4
❑ Other pharmacological agents (Agents for the treatment of sexual disorders; anti-parkinsonian drugs; anti-epileptic agents)	2

- ❖ Definition
- ❖ Classification
- ❖ Pharmacology and biochemistry
- ❖ Indications
- ❖ Course and duration of therapy, withdrawal syndromes, resistance to therapy
- ❖ Side effects and contraindications, interactions
- ❖ Differential indications
- ❖ Specific agents
- ❖ Guidelines

Fig. 1 Proposal of a psychopharmacology-psychopharmacotherapy learning catalogue for the professional training of specialists in psychiatry and psychotherapy. III. Special psychopharmacotherapy (total number of hours: 52) (slightly adapted from Laux (2014) and Baumann et al. (2017))

Basic Principles and General Pharmacology (Table 1)

Despite residents in psychiatry should not be submitted to a teaching plan which is designed for future specialists in clinical pharmacology (Birkett et al. 2010; Ross and Maxwell 2012), psychopharmacotherapy requires qualified knowledge about the pharmacokinetic and pharmacodynamics properties of the prescribed drugs (Table 1, item 1). Genetic and environmental factors determine interindividual differences in the fate of the drug in the human organism. Pharmacotherapy in patients suffering from somatic and psychiatric comorbidity increases the risk for pharmacodynamics and pharmacokinetic interactions. Many drugs are used off-label in children, adolescents, and elderly patients, whose organism differs from that of "adult" patients regarding drug metabolism and dynamics. Therapeutic drug monitoring and pharmacogenetic tests are increasingly used as pharmacotherapeutic tools, but they require knowledge about drug metabolism (Hiemke et al. 2017). On the other hand, there is the risk for misuse of pharmacogenetics tests as recently summarized by de Leon in his critical analysis: Pharmacogenetic Tests in Psychiatry: From Fear to Failure to Hype (de Leon 2016).

Despite a gap between developments in basic neurosciences and the use which is made by the pharmaceutical industry for the creation of novel drugs, basic and clinical neuroscience (item 2) should also be part of the teaching to psychiatry

residents (Perez et al. 2016; Schildkrout et al. 2016; Torous et al. 2015), despite there is a risk of over interpretation of the significance of neuroscientific data at the clinical level: "Real dangers are associated with propagating poorly substantiated theories of neurobiological underpinnings of mental illness" (Tandon et al. 2015). As recently summarized, about a dozen articles were published in Academic Psychiatry about teaching neurosciences for residents in psychiatry (cf Coverdale et al. 2014) and about half a dozen curricula are described, which deal with topics such as neuroanatomy, functional neural systems, neurobiology, molecular biology, clinical neuropsychiatry, social, cognitive, and existential neurosciences, "brain at the bedside", etc. (Coverdale et al. 2014). This knowledge helps to understand the complex action of pharmacological agents and in particular, their new nomenclature (cf below).

Before initiating a pharmacological treatment, the psychiatrist will consider handbooks and summaries of product characteristics (SPC) of available drugs but also rely on his own experience as a pharmacotherapist. However, for some pathologies such as substance abuse (cocaine, cannabis, etc.) or symptoms of personality disorders, only off-label medications are to be envisaged. In most situations, the doctor is advised to consult guidelines (item 4). They are available for the majority of pathologies and are written by experts, most often members of working groups of international (e.g., World Federation of the Societies of Biological Psychiatry (WFSBP) (www.wfsbp.org/educational-activities/wfsbp-treatment-guidelines-and-consensus-papers.html;); accessed on April 11, 2018) or national scientific societies. However, for difficult to treat patients, drugs are frequently recommended in off-label conditions, which comprise diagnosis, drug, dose, and duration (the "4 D") (Baldwin and Kosky 2007), but on-label medications in a particular country may qualify as off-label in other countries and vice versa. This may result in a treatment contradictory to regulations dictated by national drug authorities, and it exposes the psychiatrist to ethical and legal problems. Clearly, the optimal use of these different steps should be part of the teaching at a postgraduate level.

Periodically, treatment efficacy in particular of antidepressants (Kirsch et al. 2008) is questioned by some groups of authors, but admittedly, many placebo-controlled studies show that differences in clinical efficacy between psychotropic drugs and placebo are often low. The validity of such studies is then questioned by others (Fountoulakis and Moller 2011). On the other hand, it is clear that not all studies result in a "positive" trial, but some of them have to be considered as either "failed" or "negative." This vocabulary should be familiar to the treating physician. This means that his teaching plan at a postgraduate level should include basics about methodology of clinical trials, and the resident should then learn to read critically a scientific paper (Table 1, item 4). Certainly, vocabulary such as LOCF, ITT, NNT, NNH, Kaplan Meyer presentation, etc. but also basic statistics should be taught to residents in psychiatry. Even high-standard journals such as Journal of Clinical Psychopharmacology, which are generally read by specialists, are not ashamed to present short articles which recall some fundamental statistical definitions. The resident in psychiatry will advantageously learn the difference between "narrative" and "systematic" reviews, as this knowledge will help him to read critically literature not only in the field of psychopharmacology but in all disciplines related to his profession. He should

therefore be familiar with the "Preferred reporting items for systematic reviews and meta-analyses" (Prisma) (Liberati et al. 2009; Moher et al. 2009).

Among the tools which could be useful for teaching psychopharmacology are expert guidelines. However, "expert guidelines" which include all types of algorithms, guidelines, and expert consensus statements may contain biases of the authors and be merely a "cookbook" approach to psychiatric care, as many of them are not suitable for the treatment of complex situations encountered in treatment resistant and comorbid patients, and insensitive to the characteristics of individual patients (Salzman 2005). In particular, according to the author, there does not seem be enough room for the clinician to tailor medication individually, taking account of the medical history and the personal environment of the patient. Certainly, most expert guidelines are based on the scientific literature, but for many situations, there are not enough published studies with a sufficient number of patients treated during an adequate treatment period, etc. Moreover, expert guidelines do not concentrate on the "art" of psychopharmacotherapy, as they often neglect nonpharmacological aspects of a therapeutic strategy, such as the therapeutic alliance between the psychiatrist and the patient, and the communication with patients presenting different clinical pictures such as anxiety, paranoid features, or deception about previous unsuccessful treatments. On the other hand, the trainee should also be able to critically evaluate the quality of the guideline. In a study, 6 publications were submitted to reading by 58 trainees, and the papers were then evaluated using a scale with 23 items, including questions about the existence of a clearly stated hypothesis, the presentation of the design and conduct of the study, the validity of methods applied, of statistical issues, and consideration of comedications (Mohr et al. 2012). The instrument can be considered as a valuable tool for teaching critical lecture of scientific papers. On the other hand, psychiatrists and other physicians do not readily get access to the scientific literature and therefore restrict their reading to abstracts. This is partially explained by the expensiveness of papers.

Since the introduction of the first rating scales for assessment of mental status – one of the first still in use is the Hamilton depression rating scale created in 1960 – psychopathometry has developed rapidly and in order to understand studies on the efficacy, tolerance, and safety of psychotropic drugs, this matter should be taught to residents in order to allow reading of published clinical studies (Table 1, item 7), but these instruments should also be used daily in psychiatric institutions and in private practice. The authors of the ASCP Model Psychopharmacological Curriculum state: We believe in incorporating the reliable assessment of target symptoms and outcome into routine clinical practice, because this is becoming increasingly important in the current climate demanding outcome justification. Thus, rating scales should be introduced early and residents should learn to use the relevant assessments. They are nearly cost-free and are as sensitive and relevant as an electrocardiogram (ECG), a complete blood count (CBC), or ventilation-perfusion (V/Q) scans (Glick et al. 2012).

The rates of nonadherence to medication are high, and they differ reportedly between psychiatric diagnoses: major depressive disorder: 28–52%; bipolar disorder: 20–50%; and schizophrenia: 20–72% (Julius et al. 2009). According to Weiden and Rao (2005), teaching adherence/compliance to medication (Table 1, item 6)

could be a specific training goal, but this theme appears to be lacking in, for example, the core curriculum of the American Board of Psychiatry and Neurology (ABPN). This could be explained by the fact that this is an "orphan topic," as this is neither clearly and exclusively a domain of psychopharmacology nor does it fit in another formal part of the curriculum. This situation prompted the authors to propose a highly valuable formal teaching program on the domain of medication adherence – it is centered on the following issues: (1) assessment of compliance behavior; (2) maintaining the therapeutic alliance when addressing compliance; and (3) tailoring the medication to the patient. Therefore, despite teaching of the use of expert guidelines is clearly valuable, effective psychopharmacological training should include skills in communication with a patient, the development of a therapeutic alliance, and the combination of pharmacological treatments with other forms of therapy. Actually, it is not only important to know what has to be described but also how it should be performed, and therefore, the psychodynamic aspects of drug prescription should be part of teaching psychopharmacology (Mintz 2005). Indeed, the patient should not be considered only as a biological object who responds to medication by neurochemical mechanisms but as a partner who should communicate his preferences regarding medication. As an example is the high response rate to placebo medications (Table 1, item 7). Psychological variables such as perception of alliance and readiness for change have to be considered, as they may largely contribute to therapeutic response. The author (Mintz 2005) then proposes a 10-h curriculum for teaching psychodynamics of psychopharmacology. It comprises general issues in mind-body and psychodynamic-somatic integration, the patient's use of medications, countertransference issues, and triadic/systems issues relating to psychopharmacology. It has to be considered that the doctor may largely both under- and overestimate the adherence of the patient to a psychopharmacological treatment (Loayza et al. 2012). On the other hand, if physicians experience excessive pressure to please patient's nonmedically founded wishes or as a consequence of the patient having an inappropriate role in deciding for a most appropriate therapy, potentially inappropriate prescribing may then be frequently the result. Physicians may also feel compelled to give preference to personal and empirical experience in situations in which they do not find guidelines convincing.

The frequency of medication errors (Table 1, item 10) is clearly underestimated and insufficient teaching in basic sciences including pharmacology is likely to increase the risk of such mistakes (Keijsers et al. 2012). A recent study carried out in mental hospitals of the UK shows that of 4427 screened prescription items, 281 were found to have one or more prescribing errors (error rate 6.3% (95% CI 5.6 to 7.1%)). This study has a considerable didactic value as it describes their nature, their potential risks (from minor to life threatening) and it lists predictors (Keers et al. 2014). Fatal adverse drug reactions range between the 4th and 6th leading cause of death in the USA. The nature and extent of medication errors varies widely: drugs other than those prescribed may be administered; wrong dosages in wrong frequencies at the wrong time may be prescribed. Patients may miss doses, treatment effect and safety monitoring may be deficient, administration may be abruptly discontinued, or interacting drugs may be given without sufficient monitoring

(Ito and Yamazumi 2003; Mann et al. 2008; Soerensen et al. 2013). Young European psychiatrists recently observed that benzodiazepines are not optimally prescribed (Dell'Osso et al. 2015). They concluded that teaching of their use should be improved in that integration of previous knowledge with more recent evidence will result in an improvement of the clinician's therapeutic skills. Residents should be trained to consider appropriate control investigations. As an example, algorithms were proposed for monitoring cardiovascular functions (Fanoe et al. 2014). Besides the use of the "WHO Guide to Good Prescribing" (Ross and Loke 2009), specially designed treatment programs (Jayaram et al. 2011) and recommendations aiming at preventing medication errors (Likic and Maxwell 2009; Members of Emerge et al. 2009) should be emphasized in pharmacopsychiatry training. Finally, residents should also have a good knowledge about pharmacovigilance in general and especially be informed about the national laws which regulate the announcement of adverse effects to the authorities (Table 1, item 10).

Psychopharmacotherapy: General Issues (Table 2), Drug Categories (Fig. 1), Implementation of Psychopharmacotherapy (Table 3), and Pathology-Oriented Indications of Psychotropic Drugs (Table 4)

The history of modern psychopharmacology (Table 2, item 2) teaches us that the classification of psychotropic drugs commenced in the fifties of the past century with the introduction of the first neuroleptic drugs, followed by antidepressants – it was then continuously adapted. However, many drugs introduced for a particular pathology are now also available for the treatment of other disorders: e.g., some "neuroleptics" (antipsychotics) developed for the treatment of schizophrenia are now also prescribed for bipolar disorders. As a consequence, the hitherto valid classification of psychotropic drugs became obsolete and confusing. This prompted international organizations specialized in psychopharmacology to develop a new nomenclature based on five axes ((1) Primary pharmacological target, relevant mechanism; (2) Family (primary neurotransmitter(s) and relevant mechanism); (3) Neurobiological activities, animal human neurotransmitter effects, brain circuits, and physiological axis; (4) Efficacy and major side effects; and (5) Indications). Since January 2017, this nomenclature is used mandatorily in almost two dozens of major scientific journals in psychiatry/neuropsychopharmacology (Stahl 2016; Zohar et al. 2014). While this new nomenclature will help the pharmacotherapist to choose an optimal treatment, it requires adequate training in psychopharmacology for its comprehensive understanding.

Somewhat paradoxically, the "old" nomenclature is still used in Fig. 1, which presents a list of issues to be taught in relationship with the different categories of psychotropic drugs. In contrast, Table 3 summarizes clinical situations which require therapeutic measures adapted to patients belonging to "special populations": elderly patients, children and adolescents, pregnant women (Table 3, items 5–7). Clearly, knowledge about the safety of drugs in driving conditions is precious (Table 3, item 4 (Brunnauer and Laux 2013)). Table 4 is centered on the therapy of psychiatric

patients in function of the pathology they are suffering from. An important issue (Table 4, item 10) addresses the collaboration between physicians differing by their specializations in somatic and psychiatric medicine and especially that between psychotherapists and pharmacotherapists. As an example, according to a recent study (Ryan et al. 2014), prescribing errors occur at the time of patient admission to a hospital, due to difficulties in establishing the current medication of the patient, which results frequently from prescriptions by different medical doctors before the patient's hospitalization. This may be the result in an insufficient communication between treating physicians, especially in the situation of comorbidities which require numerous comedications. However, even a single psychiatric pathology often demands polymedication. Clearly, on the one hand, monotherapy of mental diseases represents the generally recommended treatment strategy due to associated benefits regarding safety and side effects. However, psychiatric comorbidities and poor response to single treatment regimens often prompt psychiatrists to prescribe combination therapies (Blier 2014; Diaz-Caneja et al. 2014; Fleischhacker and Uchida 2014; Millan 2014; Moller et al. 2014). For example, schizophrenia is associated with high rates of somatic and psychiatric comorbidities such as substance abuse (lifetime prevalence: 47%), anxiety, and depressive symptoms (estimated prevalence: 15% for panic disorder, 29% for PTSD, 23% for OCD). Furthermore, about 50% of schizophrenic patients suffer from comorbid depression (Buckley et al. 2009). As a consequence, therapeutic drugs often must be combined in order to treat the symptoms of each disorder (Table 3, item 1). Pharmacoepidemiologic studies (Table 2, item 3) such as those performed by the AMSP, the German drug surveillance program, show that more than 50% of patients suffering from schizophrenia are comedicated with 2 antipsychotics. Twenty-five percent of inpatients are simultaneously prescribed at least four psychotropic drugs (Moller et al. 2014). However, combination therapy bears the risk of pharmacodynamic and pharmacokinetic interactions (Table 1, item 9). Furthermore, the importance of emphasizing monotherapy in a teaching curriculum is demonstrated by recent studies suggesting that antipsychotic polypharmacy for schizophrenia is frequently overemphasized and that educational interventions should stimulate pharmacotherapists to switch from polypharmacy to monotherapy (Fleischhacker and Uchida 2014). The current schism between an increasing emphasis on the benefits of monotherapy on the one side with complex psychiatric patients and clinical experiences of nonresponse on the other demonstrates the challenges faced by psychiatrists in balancing empiric evidence, clinical experience, and the facts of clinical necessity in multimorbid patients. Such hurdles might be counteracted using structured, therapeutic decision processes. Such thought processes focused on effective and safe treatment should be conveyed as part of psychopharmacological education as they may serve as essential tools in daily clinical practice.

Clearly, specialists in psychiatry who almost exclusively act as psychotherapists readily admit that they do not have sufficient skills and knowledge for exerting an efficient psychopharmacotherapy, and the inverse is also true that some pharmacotherapists are not trained in all psychotherapeutic therapies in order to combine pharmacotherapy and psychotherapy (Glick et al. 2007). This results in the

need for a close collaboration, at least in difficult to treat patients, between pharmacotherapists and psychotherapists (Table 3, item 10). It has also to be considered that psychotherapy and psychosocial therapy are often delivered by a nonmedical staff, who are not drug prescribers. In order to avoid a "split treatment," a "collaborative treatment" should be the rule, but this treatment strategy needs an appropriate teaching (Ellison 2005). It has also to be considered that a patient may refuse such a collaboration. In a situation of collaboration, each therapist should respect the specific knowledge of his partner and avoid interpretations which go far beyond his proper domain. The authors list a series of possible factors which may contribute to an end of the collaboration such as ideological differences, different styles of work and communication, and doubts in the ethical value of the complementary therapeutic approach. If a collaborative approach ends, this should occur in a manner which does not result in harming the patient. The authors present 12 valuable recommendations for training in collaborative pharmacotherapy, under the headings: didactic, practical experience, supervision, and evaluation (Ellison 2005). Collaboration between psychotherapists and pharmacopsychiatrists is also recommended, e.g., in form of a "psychodynamic pharmacotherapy approach," in order to improve the treatment adherence of the patient (Julius et al. 2009; Vlastelica 2013). In this context, the teaching of ethical aspects in clinical training of psychopharmacology (Table 3, issue 9) merits particular consideration as recently presented in a remarkable analysis (Strous 2011).

Pedagogy of Teaching

Teaching Methods

In a study on certification and recertification of general psychiatry and in subspecialties by the American Board of Psychiatry and Neurology, it appeared that the most common problem of examinees resided in their inability to develop an appropriate pharmacological treatment plan for patients. Some of candidates proposed an appropriate medication but used incorrect dosages and/or incorrect dosing regimens. They were insufficiently informed on side effects, interactions with somatic medications, and on the implications of a drug treatment in patients presenting comorbidities (Juul et al. 2005). The authors concluded that trainees need more experience in applying their theoretical knowledge to specific patients. This underlines the need for bedside teaching of psychopharmacology but also for further studies aiming at evaluating the evolution of the capacities of trainees. Indeed, on the basis of this and other previous studies, other authors plead for improving the pedagogy and clearly define the needs and actions to be taken in order to optimize psychopharmacology teaching (Glick et al. 2007), as presented here in a slightly adapted form:

- Devote increased resources to residency and medical student teaching of psychopharmacology

- Develop "expert teachers"
- Create a structured psychopharmacological curriculum available to residency programs
- Develop evidence-based psychopharmacology competencies that residents are required to meet before graduation
- Improve standards of teaching and supervising psychopharmacology by having a collaboration with specialized organizations
- Require residents to have long-term (2 to 3 years) follow-up of a group of patients for psychopharmacology training, just as they are required to have long-term psychotherapy patients
- Teach residents critical reading skills and methods to understand and incorporate various levels of evidence for psychopharmacology treatment into their practices
- Develop a Web-based course in basic and clinical neuropsychopharmacology so that all residents have a core knowledge base and literature reference

The ASCP model psychopharmacology curriculum (Glick et al. 2012) clearly differentiates objectives with respect to acquisition of "knowledge" and "skills." It recommends "crash courses" for the 1st and 2nd year of residency, "basic courses" for the 2nd and 3rd year, and "advanced courses" for the 3rd year, as well as optional advances neuroscience courses for 3rd and 4th year residents and it presents details about the content of these courses. A "literature review seminar" should be provided during all 4 residency years, but at least during the 4th year, while "case conferences" should be part of the teaching program throughout the 4 years of residency. The chapter "Computers and Psychopharmacology" presents a list of websites which provide helpful information on issues related to psychopharmacology and related disciplines, including journals, research centers, professional organizations. A more practice-oriented approach concerns weekly supervision, modelled after individual or small-group psychotherapy supervision. This means that the resident should regularly meet with psychopharmacologists and review individual patient treatment problems. They also propose that junior residents learn from senior residents, but in each case, a senior resident should be named Chief Resident in Psychopharmacology (Glick et al. 2012). The authors added precisions regarding the number of outpatients (with some of them an initial contact should already have been established during their hospitalization) residents should have treated within their psychopharmacology training program: 50–150 patients for at least 1 year; 5–10 patients for at least 2 years. Moreover, they suggest precise numbers of patients which should be included according to their pathology. Finally, "at least 2-3 of integrated and 2-3 of combined psychopharm-psychotherapy cases are suggested" (Glick et al. 2012).

Authors who contributed to the above mentioned curriculum summarized alternative teaching methods – they called them "nonlecture" methods: (1) Journal clubs, (2) Problem-based learning, (3) Formalized patient-centered training, (4) Games, and (5) The use of modern technology (Zisook et al. 2005). In particular, emphasis is laid on the training of skills, by "bedside teaching," "real-time, patient-centered" psychopharmacology training. A very practically oriented teaching is provided at the Brockton Campus of VA Boston Healthcare Systems: residents in the 3rd year

acquire experience in the comprehensive psychiatric assessment and ongoing treatment of patients with severe mental illness (http://www.harvardsouthshorepsychiatry.org/curriculum/, accessed on April 11, 2018). At their *Clozapine Clinic*, residents live specific training in the use of clozapine to treat patients with treatment-resistant schizophrenia during ½ day per week for 3 months. They collaborate with colleagues as part of a multidisciplinary team and thus gain experience and guidance in functioning as an effective member of a clinical team. The experience includes direct assessment of patients and adherence to standardized protocols for clozapine initiation, maintenance, and monitoring. In addition to clozapine maintenance, each patient's overall psychopharmacologic treatment plan is evaluated and modified with the goals of maximizing the patient's quality of life and functional status and minimizing polypharmacy. An attending psychiatrist directly supervises the clinical work of each resident. A Clinical Pharmacy Specialist also staffs the clinic. She is an integral member of the clinical team and works closely with the residents.

Recently, it was proposed to develop "telepsychiatry" and how it should be trained, especially for rural populations (Shore et al. 2011); while not specifically mentioned, psychopharmacology-pharmacopsychiatry could also be part of the teaching program.

Who Teaches and Who Teaches the Teachers

This question appears to be justified when some authors consider that teaching of these disciplines is often poor (Glick et al. 2007). As a first step, the core competencies of leaders in psychopharmacology-pharmacopsychiatry with regard to their task as teachers in these domains have to be defined. The authors claim that there are at least three categories of problems which characterize inadequate teaching: (1) the structure of the teaching program, in that seemingly teaching depends too much on the opinion of the teachers and (2) the use of treatment algorithms is overemphasized but that at the same time, the familiar and psychodynamic context is underappreciated. As medicine in general, prescribing psychotropic drugs is as also an "art," which requires an appropriate teaching. Therefore, a subtle equilibrium has to be found in order to have teachers who provide teaching based on an up-to-date psychopharmacology, personal experience, and inclusion of the above mentioned context; (3) finally, more emphasis should be laid on emerging neuroscience discoveries, but on the other hand, on the opposite end of the spectrum, teaching the psychological aspects of psychopharmacology is required.

An earlier investigation about teaching in psychopharmacology at different levels (pregraduate students, residents in psychiatry, etc.) allowed the author (Dubovsky 2005) to conclude that despite the existence of a few recommendations and curricula, they do not give precisions about who should teach psychopharmacology. He observed, however, that in some programs, the course director is a pharmacist, but probably, in most institutions, it is a psychiatrist. Pharmacists may contribute to build a bridge between pharmacy and psychiatry, but an interdisciplinary model could help to integrate different aspects of knowledge and medical care. The article also deals

with the role of the industry, which at least in many countries like USA heavily sponsor teaching of psychopharmacology. There is the risk for bias in this activity, as some more or less important pressure cannot be excluded. The author mentioned the interesting aspect that in this context, the teacher restrains his teaching to material available in package inserts and neglects teaching of off-label prescriptions which constitute almost the major part of prescriptions. It has also to be considered that teachers may market their own experience and ideas and exclude guidelines from other groups of experts. In conclusion, there are no careful studies about who should teach psychopharmacology, but seemingly, the main quality of the teacher should be to be able to communicate information enthusiastically – not really an unexpected finding. In addition, the author supposes that psychopharmacology education should be directed by physicians, probably in the same specialty, but this seems to be somewhat in contradiction with above mentioned statements about the competence of pharmacists. Actually, for the author (Dubovsky 2005) it is difficult to understand how anyone other than a clinician can fully appreciate the complexities of the application of pharmacological knowledge in actual patients.

This is also highlighted by Mallo and Mintz (Mallo and Mintz 2013), who consider that knowledge, skills, and attitudes relating to the integration of meaning and the prescribing process are neglected in psychiatric training curricula. However, for them, an evidence-based training focus on psychological aspects of psychopharmacology is needed. Therefore, they presented the evidence base relevant to psychodynamically informed prescribing. Their statement that "training programs should aim to develop psychiatrists who are able psychologically minded in their prescribing" allows the conclusion that besides, e.g., clinical pharmacists, teachers trained in psychotherapy and psychopharmacology should be included.

The role of "Big Pharma" in teaching postgraduate level psychopharmacology should also be considered in this context (Peglow et al. 2014; Riese et al. 2015). A recent European study on the interaction between residents in psychiatry and representatives of pharmaceutical companies showed that trainees in psychiatry attribute an educational role to the pharmaceutical industry (Riese et al. 2015). Furthermore, others (Peglow et al. 2014) reported that in their hospital, the access to newer drugs is limited and therefore, the trainees could not learn from clinical experience, but their knowledge was provided by sponsored CME-sessions. These seem to be extreme situations but they, nevertheless, demonstrate the importance of structured psychopharmacologic training in order to provide well-rounded education independent of the influence of the industry. There are interesting differences in the recommendations of various American professional societies regarding the funding of CME teaching by the industry, from absolute "prohibition" to "unrestricted grants" (Dubovsky et al. 2010). Similar recommendations could of course be extended to postgraduate teaching.

Finally, a study will be mentioned about a 1-year psychopharmacology course which was implemented using residents in psychiatry as teachers and active-learning exercises. Its evaluation by the residents and the faculty showed that this course was well accepted by the residents. The authors conclude that residents should have a more active role in their own teaching (Muzyk et al. 2013).

Evaluation

The ASCP curriculum contains a chapter about evaluation and evaluation forms for (1) supervisors to evaluate residents, (2) residents to evaluate their supervisors, (3) their courses, and (4) their psychopharmacology program (Glick et al. 2012). There is an interesting study about evaluation – a survey of psychiatry residency training programs in relationship with the obligation of psychiatrists in the USA to complete a training course in order to be qualified to prescribe buprenorphine (Suzuki et al. 2016). The authors included all 188 accredited psychiatry residency programs identified from the ACGME (Accreditation Council for Graduate Medical Education) website, but only 41 completed the survey. Some of the barriers to providing buprenorphine training were: buprenorphine training is not a priority for our residency program, lack of organizational support, and insufficient number of faculty with expertise in addiction to supervise residents. Actually, this illustrates the general necessity to develop and implement a curriculum and learning catalogue in psychopharmacology – pharmacopsychiatry.

Conclusion

An Editorial of the British Journal of Psychiatry was entitled "No psychiatry without psychopharmacology" (Harrison et al. 2011). The statements of the authors offer a summary and a conclusion of this chapter, in that anyone who prescribes should not only know the indications and contraindications but also the effects, adverse effects, and interactions of the drugs. Expertise should include not just the practicalities of prescribing and the evidence on which it is based, but the mechanisms of action of the drugs and the underlying science should also be part of their knowledge (Harrison et al. 2011). They also confirm that teaching of knowledge and especially also of skills should be improved, but "the teaching provision is often limited or difficult to obtain". Therefore, the creation and implementation of a curriculum and learning catalogue of psychopharmacology-pharmacopsychiatry at a worldwide level and then adapted to the conditions encountered in the individual countries should be envisaged. It should not only include 150–200 h of theoretical teaching but also additional 300–400 h centered on practical bedside teaching and provided by senior psychiatrists and other experienced colleagues.

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Training in Psychotherapy

8

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Contents

Abstract

Psychotherapy is the use of psychological methods and techniques to treat mental and physical disorders. The development of evidence-based psychotherapies is one of the key achievements of modern health care. Its further evolution is one of the important tasks for contemporary medicine and psychology.

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Psychotherapy is based on a complex declarative knowledge that comprises knowledge about psychological mechanisms relevant for mental and physical disorders, theories of psychotherapy (e.g., psychodynamic theory, cognitive-behavioral theory, humanistic theory, systemic theory), psychotherapeutic principals, methods, and techniques described in manuals that have been empirically investigated. At the same time, psychotherapy is an art and craft with a complex implicit knowledge and procedural skills that are difficult to describe in words. Psychotherapeutic principals may be contradictory within the same method (e. g., instruct the therapist to be confrontational and empathic at the same time) resulting in the situation that the therapist can follow only one principle at the same time or needs to find a dialectic synthesis. Therapeutic decisions have to be taken in the presence of incomplete sets of information. This means that problem solving requires individual solutions based on rules, decision trees, and specific experiences. There is a need for dealing with contradictory rules and missing consolidated know-how. Knowledge that was acquired in controlled situations has to be applied in complex clinical situations. The psychotherapist needs to integrate rules, experience, procedural knowledge, and intuition to act successfully.

To be successful within our health care system, psychotherapy must not be an occult science that is exclusively transmitted within an exclusive personal relation between a charismatic teacher and a dedicated scholar or reinvented by each young psychotherapist.

Similar to other health care specialties like surgery or internal medicine, psychotherapy needs specific training structures that may be situated in universities, inpatient, and outpatient clinics and training institutes.

Keywords
Psychotherapy · Medical education

Stages

Becoming a psychotherapist in Germany requires a university degree in medicine (6 years) or psychology (5 years). After that there is a 3- to 5-year training in psychological psychotherapy for psychologists provided by specialized private or university training institutions. For physicians, psychotherapy training is integrated in the residency training in psychiatry or psychosomatic medicine (5 years) ("Psychiatry and Psychotherapy" and "Psychosomatic Medicine and Psychotherapy" are separate specialties in Germany with a divergent curriculum.). In addition, there is psychotherapy training for members of medical specialties like internal medicine or gynecology. According to a current legislative initiative in Germany aiming at streamlining the training of psychotherapists, this would require them to have a university master degree in medicine or psychology before starting their

psychotherapy training. The license to provide training in psychotherapy requires three more years of experience in the field. This license is provided by the State Chambers of Physicians (Ärztekammer) or State Chamber of Psychotherapists (Psychotherapeutenkammer), respectively (In Germany the responsibility for education resides with the states (Länder).).

Knowledge

Basic Knowledge

There is no formal consensus on what constitutes the canon of basic knowledge of psychotherapy. An important reference point therefore is the content of bachelor and master courses in psychology with a focus on clinical psychology. Most of this knowledge is not specific for psychotherapy but shared with other fields of medicine, psychology, or social sciences. A complete and detailed list would go beyond the scope of this chapter. The following table links basic knowledge to examples of practical application in modern psychotherapy.

Subject	Example for application
Human Biology	Being able to explain to patients the differential role of inheritance, biology, and environment in the genesis and maintenance of specific disorders
Developmental Psychology	Evaluating patients for developmental deficits Attending to specific developmentally based skills deficits, e. g., to deficits in operatory thinking in cognitive behavioral analysis system of psychotherapy (CBASP)
General Psychology	Using the principles of learning to modify behavior Being able to explain to patients the adaptive role of negative emotions like fear and to coach action opposite to emotion driven behavior Being able to teach patients about the role of metacognition in the maintenance of worry and rumination processes
Science Methodology	Being able to judge and to explain to patients the evidence base of psychological treatments. Being able to select treatments on the basis of their evidence base
Biological Psychology	Understanding and being able to explain to patients basic facts about topics like sleep, eating behavior, sexuality, exercise, and their effects on human well-being
Social Psychology	Understanding and being able to explain to patients basic facts about interpersonal relationships (pairs, families, groups, organizations). Supporting patients in making wise choices in interpersonal behavior

(*continued*)

Subject	Example for application
Personality Psychology	Understanding the heterogeneity of human behavior with respect to adaptation to changing environments and the functioning of groups. Understanding the individual benefits and trade-offs of this heterogeneity
Comorbidity of mental disorders and physical illness	Dealing with patients at the interface of medical specialties (like internal medicine, gynecology, or surgery) and psychotherapy, e.g., treating patients with coronary heart disease and anxiety, patients with eating disorder and infertility, patients with diabetes and depression
Educational Psychology	Counseling patients with learning problems Improving psychoeducational skills and teaching skills
Occupational and Organizational Psychology	Counseling patients with problems related to the work place Primary prevention of mental disorders within companies and organizations
Nosology of Mental Disorders	Knowledge about the defining and clinical symptoms of mental disorders (e.g., depressive disorders, bipolar disorders, anxiety disorders, somatic symptom disorder, substance related disorders, psychotic disorders, eating disorders, disorders of sexual function, personality disorders) Knowledge about the associated epidemiology, risk factors and putative psychological and biological mechanism Ability to communicate with patients about mental disorders
Nosology of Neurological disorders	Knowledge about alterations of cognitive and emotional functioning associated with brain disorders (e.g., stroke and other vascular disorders, neurodegenerative disorders like Alzheimer's disease, epilepsy), associated epidemiology, risk factors, mechanisms Ability to communicate with patients about the psychological implications of these disorders
Diagnosis of mental disorders	Ability to use standardized or semi-structured diagnostic interviews, self-rating or expert rating scales

Specific Knowledge

The specific knowledge of psychotherapy can be described on three levels:

Therapeutic Systems	Theories about the origin, maintenance, and treatment of mental disorders. Main theories are cognitive behavioral therapy (CBT) and psychodynamic psychotherapy (PT). Debated and not universally recognized theories are systemic psychotherapy and humanistic psychotherapy
Psychotherapeutic Methods	Algorithms that link patients with certain characteristics to specific therapeutic technics. There is a plethora of methods within the CBT and PT families Important examples in the behavioral field are specific CBT formulations for depression, anxiety, obsessive-compulsive disorder, eating disorders, somatic symptom disorders, disorders of sexual

(*continued*)

	function, acceptance and commitment therapy, dialectic-behavioral therapy, schema therapy, mindfulness-based cognitive therapy, cognitive behavioral analysis system of psychotherapy and metacognitive therapy. Important examples in the psychodynamic field are mentalization based therapy and transference focused therapy It is important to note that the evidence base of psychotherapy is on the level of the method and not on the level of the therapeutic systems or techniques
Psychotherapeutic Techniques	Interventions apt to change behavior, emotional experience, or cognitive processes. There is a huge list of techniques. Examples in the behavioral field are exposure training, use of situational analysis, practicing opposite action. Examples from the psychodynamic field are free association or transference interpretation. The selection of the set of techniques used in the treatment of an individual patient is mainly determined by the method selected

Whereas every psychotherapist needs to be acquainted with the basic theories of the major psychotherapeutic systems, it has become impossible to have an in depth knowledge of all psychotherapeutic techniques and all disorder-specific applications. While the personal psychotherapeutic practice may be focused on one specific method (e.g., CBT for depression), it seems not acceptable to limit in depth knowledge to just one method. This would in particular hinder an optimal fit between individual needs and therapeutic methods.

Skills

Professional Skills

Professional skills are skills that everybody in a profession is expected to have who claims to be a professional. Professional skills should be defined in a way that makes them observable and teachable. Most of the skills refer to the translation of the basic and specific knowledge into patient care. Professional skills are both *declarative* in that they follow identifiable rules and *procedural* in that they are based on experience and practice, and can be modeled but are difficult to describe.

Skill	Details
Communication to the patient	Collecting information from patients requires the ability to talk about topics that evoke emotions like anxiety, fear, shame, disgust. The psychotherapist is in the special situation to deal with information that is kept secret in other contexts. She needs to be able to actively address "difficult" topics like sexuality, aggression, or deceit and to talk about this subjects in an empathic but also a matter of fact way. She has to be able to explain complicated matters in simple words
Clinical reasoning	The psychotherapist needs to be able to build plausible functional models out of the information. She needs to decide which aspects of the presentation are central and relevant to the treatment and which parts are

(*continued*)

Skill	Details
	less. She has to be able to apply the algorithms provided by diagnostic manuals to clinical situations of diagnosis and differential diagnosis
Decision making	The psychotherapist needs to be able to make diagnostic decisions and recommendations for treatment (e.g., psychotherapy, pharmacotherapy, or a combination of both). She needs a critical understanding of the varying degree of uncertainty associated with decision making and the strength and pitfalls of using heuristics
Treatment skills	The psychotherapist needs to be able to apply psychotherapeutic methods and the respective therapeutic techniques with adherence to the specific requirements, e.g., know how to apply and structure the method cognitive behavioral analysis system of psychotherapy, offer psychoeducation in accordance with the model and use its techniques of situational analysis, interpersonal discrimination exercise, and continuation strategies
Trouble shooting	The psychotherapist needs to be able to deal with undesirable events in therapy like deterioration of a patient's health despite treatment, crisis generating behavior of the patient She needs to be able to deal with emergency or catastrophic events like aggressive or suicidal behavior, a patient's suicide, or death
Professional self-management	The psychotherapist needs to be able to work independently, driven by her own initiative, in a structured, scheduled manner. She has to be aware of economic and legal aspects of her work and loyal both to the patient and the service provider
Professional self-care	The psychotherapist needs to be able to deal with personal issues and health problems that potentially interfere with the professional activities
Life-long learning	The psychotherapist needs to be able to acquire new knowledge and to implement it into her daily practice, this way allowing her patients to profit from innovation in psychotherapy Deliberate practice requires to attend to the long-term outcome of treatments, feedback from patients and colleagues
Communication to peers	The psychotherapist needs to be able to communicate about her patients to peers, in particular within therapeutic teams and supervision groups Advanced psychotherapists need to be able to teach students and younger colleagues and provide supervision

Personal Skills

Personal skills depend on the personality and life experience of the psychotherapist and vary to a considerable degree between professionals. They are partly teachable, but teaching requires a trusting personal relation between a mentor and a mentee.

Skill	Details
Maintaining a professional attitude	The psychotherapist needs to have specific attitudes necessary for her work like behaving benevolent, trustworthy, respectful, considerate, dependable, cooperative, committed, maintaining integrity
Awareness of personal values and goals	Human beings are heterogeneous with respect to adopted values, value hierarchy and derived goals. Value awareness helps the

(*continued*)

Skill	Details
	psychotherapist not to inadvertently mix up patient values with her own values
Empathy and authenticity	The psychotherapist needs to be able to shift perspective, to "see the world through the eyes of her patients" and to "walk in her shoes." She needs to be faithful and truthful following the goals of therapy
Personal social skills	Social skills comprise declarative and procedural knowledge and skills on the level of perception and behavior. To teach social skills, it is necessary to dispose of a large repertoire of well-practiced skills and coping strategies for interpersonal conflict. It is not necessary for the psychotherapist to be free from mental disorders, problems, or challenges. The aptitude as a psychotherapist is mainly influenced by the personal skill level
Mindfulness skills	Mindfulness consists mainly of procedural knowledge. To teach mindfulness, a psychotherapist needs experience with a spectrum of mindfulness techniques and to practice mindfulness on her own
Personal problem solving skills	Problem solving is a skill that is influenced by emotional states. Therefore, problem solving is much more difficult in situations with a personal emotional involvement. The psychotherapist has to be able to do problem solving under stress or under the influence of emotions like sadness, fear, or shame
Awareness of one's own personality	Humans are heterogeneous with respect to their behavioral style and personality. They may be cautious or curious, organized or easy-going, introverted or extroverted, critical or friendly, and sensitive or confident. This heterogeneity is normal and adaptive but may lead to therapeutic traps like a cautious therapist reinforcing excessively cautious behavior in her patient. Changing the personality of psychotherapists towards a "norm" would be an elusive goal. But psychotherapists should be continuously aware of their own behavioral style and its interaction with the behavior of the patient and her learning goals

Training Formats

The traditional way of learning psychotherapy required the trainee to have her own training analysis (Lehranalyse) with the goal to reduce own neurotic ways of behavior and to form the appropriate therapist personality. The concept was learning on the model of the training analyst (Lehranalytiker) and by own experience of the patient role. There were no specific requirements with respect to basic knowledge. Everybody with an academic training in medicine, psychology, education, philosophy, or other sciences in the humanities in general was welcome. The tradition of training analysis is continued in the current psychoanalytic training and has indirectly been taken up by CBT in the concept of self-practice/self-reflection (Selbsterfahrung.) (Bennett-Levy and Lee 2014).

Newer concepts of psychotherapy training are more complex (as described in the next paragraphs). New training content adjusted to the expanded role of psychotherapy in modern healthcare. It allowed to address the needs of patients with severe mental illness (e.g., chronic depression combined with personality disorder, schizophrenia) and to treat specific target groups. A further challenge is to involve psychotherapists with a psychology training as a background in the treatment of patients with severe mental illness. These new concepts require specific basic knowledge, typically acquired by masters in psychology or medicine during their university training. They gain-specific knowledge and professional skills while attending training seminars and foster personal skills in self-practice/self-reflection groups. They provide training on the job in psychiatric and psychosomatic hospitals and specific outpatient clinics. The training on the job is accompanied by continuous supervision, peer group support, and professional mentoring. After certification, there is a life-long phase of continuous education.

Training Elements

Theory Seminars

The task of the seminars is to provide advanced knowledge about the specific knowledge underlying psychotherapy building on the knowledge acquired during medical education and bachelor and master courses in psychology. The seminars should be provided by experts that have a profound knowledge in treating the target group (e.g., patients with depression or patients with an eating disorder) and long-standing experience with the methods and techniques presented. Seminars are typically provided in a workshop format with 8 to 16 participants allowing presentation of the key techniques in role plays, small-group exercises, and in-depth discussion.

Training on the Job

Training on the job has in particular the task to provide the procedural aspects of the professional skills. It is best provided by hospitals and clinics specialized in the treatment of specific target groups and the application of specific psychotherapeutic methods. The hospitals and clinics should have a sufficient number of patients in psychotherapeutic treatment and well-trained therapeutic teams that allow learning from the model of experienced therapists and learning with a peer group of other trainees. Training hospitals and clinics should provide an atmosphere of fearless learning and exchange for everybody. Psychotherapy is a difficult craft that is only partially defined by rules and principles. So there frequently is no simple right or wrong. Training on the job allows the young psychotherapist to do what she is going to do during her professional life without restriction to “easy cases for beginners” but with continuous expert supervision. This provides security for both patient and

trainee. Training on the job should have sufficient duration. Training in medical specialties typically takes 5 years. This is very close to the 10.000-h rule to reach mastery in an advanced skill. Five years allow to experience treatment with sufficient numbers of patients including the long-term course of their disease. Five years also allow to work with several groups of patients (e.g., patients with obsessive-compulsive disorder or patients with borderline personality disorder) and to experience the different requirements for the formation of the therapeutic relationship. Five years allow to experience the full spectrum of therapeutic settings, i.e., inpatient, outpatient, individual therapy, group therapy, couple therapy, family therapy, and the spectrum of intensities of patient care ranging from combinations of individual, group, and complementary therapies to long-term individual, short-term individual, or maintenance psychotherapies.

Psychotherapy Supervision

Supervision has a key role in training in psychotherapy. Some definitions of supervision are so broad that the impression arises that all elements of training are supervision (Milne and Watkins 2014). We recommend a more focused definition. Supervision should follow specific goals, in particular teach the specific knowledge and professional skills that cannot be found in books and seminars or be easily derived from rules and principles. Supervision also teaches personal skills if relevant for the concrete patient situation. Supervision uses the techniques of the system of psychotherapy the trainee is working with. In the case of cognitive-behavioral therapy, for example, supervision uses the problem solving model and other standard techniques of CBT.

Characteristics of the Structure of Supervision for Individuals or Groups

- The supervisor and the trainee(s) set up an agenda and discuss priorities
- They establish ties to earlier sessions and the cases presented then
- They discuss home-work and associated experiences
- They set up goals for the supervision session
- They work through the agenda until goals are attained
- They adapt and change goals if necessary
- They give feedback about the supervisory process

Features of the Content of Supervision for Individuals or Groups

- Pragmatic orientation towards the learning process of the trainee.
- Use of case conceptualizations according to the system of psychotherapy and methods the trainee is using.
- Using techniques according to the system of psychotherapy and methods the trainee is using.
- Collaborative approach, the supervisor, and the trainee communicate with each other as equals.
- Attention to professional and personal skills that influence therapy and supervision.

- The supervisor orients the trainee towards evidence-based methods and associated techniques.
- The supervision uses direct observation of therapist and patient behavior using video and audio material, life-supervision, and role plays.

Goals of Psychotherapy Supervision

- Problem solving: The trainee comes into the psychotherapy session with a treatment-related problem she cannot solve using information from manuals or where standard approaches using manuals have failed. The procedure used in this case usually follows the problem solving model with a definition of the specific goal of the trainee for the supervision session and a selection of techniques to solve the problem. Problem solving and support by the supervisor continues until a solution of the problem is achieved.
- Skills deficits: Here the implicit or explicit question of the trainee is "What skill do I need to deal with this therapy situation?" The procedure here also follows the problem solving model but with more room for the observation of therapist behavior using video, audio, or life observation.
- Adherence check: Here the question of the trainee is "Am I applying this method according to professional standards?" Here observation of therapist behavior and feed-back with respect to adherence criteria are the main focus.

Patient-Centered Self-reflection

Patient-centered self-reflection groups focus on the interaction of patient behavior with professional and personal skills and the impact of this interaction on the psychotherapist. Techniques used correspond to the therapy methods and techniques used by the participants in their treatments: e.g., therapists applying dialectical-behavioral therapy need to collect personal experience with emotion regulation skills. Therapists applying the cognitive behavioral analysis system of psychotherapy need to gather personal experience with the situational analysis. The format allows every topic if it is relevant for treatment. Patient-centered self-reflection can be done at the workplace but definitively requires a frame of trust, openness, confidentiality, and cooperativeness. The groups can best be directed by an experienced, senior psychotherapist. Most training programs require a minimum of 70 training sessions of Patient-centered self-reflection (70 training sessions are the minimum requirement proposed by most State Chambers of Physicians.).

Characteristic issues are:

- Feeling frustrated or helpless about lack of progress in treatment
- Frustration about patients that are uncooperative or reject treatment
- Feeling overwhelmed by aversive life events or trauma reported by the patient
- Anger about condescending behavior of patients
- Problems with not being able to like a specific patient

- Problems building a therapeutic relationship with a specific patient
- Problems with seductive behavior of patients
- Problems with own feelings of friendship or love for patients
- Problems arising from cultural diversity
- Patients reporting illegal activities
- Problems with the limits of confidentiality
- Fears about patient suicide or violent behavior
- Fears about patients in dangerous medical condition
- Team conflict about treatment of patients
- Conflict with superiors about treatment of patients
- Dealing with own factual or presumed mistakes in therapy
- Feelings of confusion in complex situations
- Coping with patient suicide attempts, self-injury, or death
- Problems with bringing bad news
- Dealing with VIP patients
- Therapist personality issues and its interaction with patient care

Self-practice/Self-reflection (SPSR)

Self-practice/self-reflection (SPSR) groups focus on applying psychotherapeutic methods and techniques to one's own life with its challenges and problems. The applied techniques can represent the full spectrum provided by the respective system of psychotherapy. The SPSR groups usually take place independent of the workplace and are directed by experienced senior psychotherapists. They require a high level of confidentiality, trust, and openness. Most training programs require a minimum of 150 training sessions of SPSR (150 training sessions are the minimum requirement proposed by most State Chambers of Physicians).

Characteristic content issues are

- Personal goals and values
- Personal life history and being a psychotherapist
- Relationship problems of the psychotherapist (own partner, parents, children, family, and friends)
- Problems arising from conflicting value priorities (e.g., time allocated to intimate relationship vs. work)
- Problems with perfectionism
- Problems arising from identity issues (e.g., therapist sexual orientation, migration status)
- Problems arising from learning history in childhood and adolescence and other family of origin related issues
- Problems arising from psychotherapist mental health (e.g., personal history of depression, eating disorder or substance abuse)
- Problems arising from the relationship to the professional peer-group

- Problems with self-management
- Failure, loss, grief, social exclusion, rejection, mobbing
- Worry, rumination, regret, threat monitoring

Characteristic technical issues

- Doing behavior analysis on one's own behavior (SORCK according to Kanfer, chain analysis, situational analysis, matrix)
- Practicing opposite action
- Doing exposure training
- Practicing interpersonal skills
- Practicing mindfulness skills
- Doing behavioral experiments
- Doing chair dialogues on personal challenging issues
- Doing imaginary rescripting
- Exploring personal family history using genograms
- Exploring personal personality issues
- Analyzing cognition using the ABC model or similar approaches
- Using metacognitive techniques to deal with worry, rumination, or threat monitoring

Controversies

Is There Expertise Behind Psychotherapy or is it Just Relationship Skills?

There is extensive evidence supporting the assumption that psychotherapy is effective for a broad spectrum of patient groups, when compared to no treatment or treatment as usual. Yet, several meta-analyses have shown that there are few differences in effectivity between bona fide treatments targeting the same condition or target group (Baardseth et al. 2013) (The term "bona fide treatments" describes treatments that are delivered by trained psychotherapists, based on sound psychological theories, described in publications and typically endorsed with high allegiance by the therapists involved.). This has fostered the assumption that the key for success in psychotherapy is not the quality of psychotherapeutic technique but common factors like instillation of hope or the creation of a good therapeutic relationship. This view neglects that the explanations provided by the psychotherapist, the plan for overcoming the symptoms, the plausibility and acceptability of psychotherapeutic techniques, cannot be separated from the relationship factor. Furthermore, there are no prospective, experimental studies that systematically vary the relationship factor. The evidence for the dominance of the relationship factor is purely cross-sectional.

A further argument is that in contrast to other skills, like playing chess, there is little documented increase in success rates in psychotherapy with long-term experience (Goldberg et al. 2016). This argument neglects that young psychotherapists during their work are typically embedded in a structure of teaching, supervision and peer-group support. This kind of support is not allowed during a chess tournament. In summary, the debate reminds us that there is an urgent need for more research into the mechanisms of psychotherapy. Continuous deliberate practice of psychotherapy needs continuous feedback from patients and colleagues with respect to short-term and long-term patient outcomes.

Is Psychotherapy Training Effective?

Experimental studies show that therapist behavior can be influenced by training in methods and techniques (for a review see Rakovshik and McManus 2010). There is a lack of published sufficiently powered studies systematically examining the effect of training on patient outcomes. The same applies for psychotherapy supervision and self-practice/self-reflection. These elements of psychotherapy training are highly estimated by the participants of training programs but understudied with respect to their effects on patient care.

Can Psychotherapy Be Done on a Bachelor Level?

Staff that has a bachelor degree (e.g., in nursing or in psychology) can be trained to apply psychotherapeutic methods (e.g., prevention groups) with an outcome that is comparable to the performance of fully trained psychotherapists. Yet we have doubts whether at this training level it is possible to make diagnoses and treatment decisions at a sufficient level. Quality psychotherapy is a full academic profession.

Can Psychotherapy Training Be Shortened to Two or Three Years?

Two years are sufficient to achieve proficiency in one psychotherapeutic method. The preference for this short-training model is associated with the view of psychotherapy as a “complementary” therapy. In this model, the psychotherapist limits herself to applying a psychotherapeutic method. The diagnostic work-up and decisions about therapy are done by a physician coordinating diagnostics, pharmacotherapy, psychotherapy, and other complementary therapies and rehabilitation. In our view, this is an obsolete model. Modern health care requires psychotherapy experts that are familiar with all aspects of behavioral life-science and health care. The claim for 5-year training is supported by the fact that the

breadth of knowledge and the difficulty of the skills that need to be acquired are similar to other specialties in healthcare. Research on the development of expertise equally suggests that 5 years are rather a minimum time for the development of expertise. In addition to diagnosing and treating patients with mental disorders, a board certified psychotherapist can be expected to be able to lead a team, e.g., at a mental health care center, to teach students and young psychotherapists, to participate in treatment development, and to decide what innovative treatment shall be implemented in a psychiatric hospital. The ability to perform at this level cannot be developed within 2 or 3 years.

Is There a Difference Between Medical and Psychological Psychotherapy?

Traditionally psychotherapists started training coming from a heterogeneous spectrum of academic professions. Most had a degree in medicine or psychology, but some also in other humanities (e.g., sociology, theology, history) or educational sciences. This has created the impression that basic knowledge may be irrelevant or that there are different kinds of psychotherapy based upon the starting competency of the respective therapist. From the perspective of the patient, this situation is unacceptable. She wants to be confident that she receives quality psychotherapy and this depends at least in part on the presence of a basic body of knowledge in every psychotherapist. Still the differential focus set by psychotherapists coming from medicine and psychology is meaningful for the field. About half of the patients with mental disorders have a severe comorbid medical condition or need pharmacotherapy. So the knowledge about the interface between medicine and psychotherapy is extremely valuable. On the other hand, the standard curriculum in medical schools leaves only limited space for the current psychological body of knowledge, giving an easier start to therapists *in spe* coming from psychology. In summary, the discussion about a core canon of knowledge for all psychotherapists is an important task for the future. Heterogeneous ways of psychotherapy based on differences in the basic study period are not acceptable. Psychotherapy training has to build upon a degree in medicine and psychology. This is necessary given the heterogeneous level of medical comorbidity and the need to integrate psychotherapy and pharmacotherapy.

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Teaching Neurobiology in Psychiatry

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Abstract

The relationship between psychiatry and neuroscience has been constantly evolving since the conception of our field. The past two decades have witnessed a steep rise in research related to neurobiology in psychiatry. Advances in neuroscience have led psychiatry residency programs to steer towards a neuroscience-based approach instead of the traditional focus. Despite increased advances and interest in neuroscience and psychiatry, residency programs are not required to integrate neurobiology in psychiatry. There are several difficulties residency programs face when attempting to teach this subject area, including having availability of knowledgeable faculty, knowing what to teach, and how to deliver the information. Psychiatrists across all levels of training are enthusiastic about learning neuroscience. With the current advances in biological psychiatry, neurobiology needs to be integrated in the training and teaching of psychiatry residents. The approach of integration has to be transdiagnostic, clinically relevant, and applicable to both trainees and psychiatry educators.

We will discuss the importance of teaching neurobiology in psychiatry residency programs, outline specific areas we recommend teaching, and propose teaching strategies that may enhance learning by psychiatry residents. The neurobiology topics we recommend psychiatry programs to teach their residents include neuroscience literacy, neuroanatomy, neuroimaging, neuropathology, neural circuits and neurotransmitters, neuroendocrinology, psychoneuroimmunology, neurophysiology, genetics and epigenetics, and neuropsychological testing. There are different strategies to teach residents that enhance adult learning, which include formal discussions, clinical case presentations, journal clubs, specialized neuroscience rotations, neuroanatomy modules, grand rounds, and classes discussing topics at the interface of neuroscience and psychiatry in the media.

Keywords

Neurobiology · Teaching · Neuropsychiatry · Residency program · Adult learning · Neuroscience

Introduction

Psychiatry is the medical specialty involved in diagnosing, treating, and caring for those affected by disorders that have their pathologies directly linked to the brain and lead to emotional or behavioral conditions that affect the individual's functioning.

Neuropsychiatry is described as the clinical study of brain-behavior relationships as manifested by the psychiatric symptoms of neurological conditions and the neurobiology of psychiatric disorders (Benjamin 2013).

The relationship between psychiatry and neuroscience has been constantly evolving since the conception of our field, leading researchers to delve into the need of teaching neurobiology in residency training programs for more than half a century (Roffman et al. 2006; Rose 1966). Interestingly, during the past few decades, this bond has become much more complex and entwined. From the relationship between neurotransmitters and mental illness, to the most recent genomic and epigenetic developments, scientific advances have filled gaps in knowledge about the pathophysiology of psychiatric illnesses at such a pace, it is at times hard to follow.

The past two decades have witnessed a steep rise in research related to neurobiology in psychiatry, expanding our profession in a way we had never seen before. Advances in deep brain stimulation have allowed us to treat obsessive-compulsive disorder and neuroimaging has allowed us to visualize the neural connections and activity of healthy and ill brains, as well as help us make better clinical decisions.

Moreover, advances in neuroscience have made psychiatry residency programs steer away from the traditional focus given to residency training education with its emphasis on a more clinical framework, to a much needed neuroscience-based approach. Despite this, there are several difficulties that residency programs face when attempting to teach neuroscience. What should be taught is not clearly regulated by governing institutions and, just to add an extra layer of complexity, the material that should be taught is constantly evolving. Knowing which of the new findings will be relevant and useful in the next few decades proves to be challenging.

Another obstacle in teaching neuroscience relates to the worldwide diversity of the programs, with faculty in each institution having individual strengths, and not all programs possessing resources that include neuroscience competency. This could be addressed by recruiting faculty in departments of neuroscience, neurology, pharmacology, and other basic sciences to contribute to neuroscience teaching to psychiatry residents and fellows. Additionally, residents vary in their interest in this topic. Some of them find it complex and hard to digest, many times giving priority to other areas they believe are more clinically relevant. In a national survey by Fung et al. (2014), the group found that only a small proportion of psychiatrists across all training levels (residents, practitioners, and psychiatry department chairs) admitted to a strong knowledge base in neuroscience. This same study concluded that there is a need to bring education on this topic to psychiatry trainees and practitioners, and that this knowledge will help them provide better treatment and psychoeducation to their patients, in addition to reducing mental illness stigma.

In this chapter, we will discuss the importance of teaching neurobiology in psychiatry residency programs, outline which specific areas we recommend be taught, and propose teaching strategies that may enhance learning of this subject by psychiatry residents.

Residency Program Requirements

Despite increased global interest, exponential advances in psychiatric research, and our increasingly better understanding of the neurobiology of mental illness, the Accreditation Council for Graduate Medical Education (ACGME), which is the entity that guides the content of residency programs across the United States, does not require that neurobiology be taught and integrated in psychiatry residency training programs (ACGME 2015a). Moreover, there are multiple other requirements that residency programs may deem more clinically relevant, such as psychopharmacology or psychotherapy, which compete directly with neuroscience education.

ACGME requires that residency programs include in their curriculum a specific set of skills and knowledge, such as acquiring competency in neurological examination and knowledge of the diagnosis and treatment of neurologic disorders commonly encountered in psychiatric practice (ACGME 2015a), which are the requirements most closely related to neuropsychiatry. Table 1 presents a complete list of the mandatory requirements pertinent to neuroscience.

Table 1 Summary of ACGME-required competencies related to neuroscience

1. Medical knowledge: Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social behavioral sciences, as well as the application of this knowledge to patient care Residents must demonstrate competence in their knowledge of:
biological, genetic, psychological, sociocultural, economic, ethnic, gender, religious/spiritual, sexual orientation, and family factors that significantly influence physical and psychological development throughout the life cycle
diagnosis and treatment of neurologic disorders commonly encountered in psychiatric practice, including neoplasm, dementia, headaches, traumatic brain injury, infectious diseases, movement disorders, neurocognitive disorders, seizure disorders, stroke, intractable pain, and other related disorders
reliability and validity of the generally accepted diagnostic techniques, including physical examination of the patient, laboratory testing, imaging, neurophysiologic and neuropsychological testing, and psychological testing
indications for and uses of electroconvulsive and neuromodulation therapies
2. Patient care and procedural skills: Residents must demonstrate competence in:
performing a physical, neurological, and mental status examination, including use of appropriate diagnostic studies
formulating an understanding of a patient's biological, psychological, behavioral, and sociocultural issues associated with etiology and treatment
3. Curriculum organization and resident experiences: Required clinical experiences:
Resident experience in neurology must include 2 months FTE of supervised clinical experience in the diagnosis and treatment of patients with neurological disorders/conditions At least 1 month of this experience should occur in the first or second year of the program

Adapted from ACGME program requirements for graduate medical education in psychiatry (2015a)

The ACGME has also implemented milestones that are designed for Psychiatry training programs to track residents' performance and progress in a semiannual review (ACGME 2015b). Table 2 sums the elements of the clinical neuroscience milestones, which include neurology, neuropsychiatry, neurodiagnostic testing, and clinical neuroscience.

In order to help residencies meet these requirements, it is mandatory for residency programs in the United States to have their residents complete a 2-month rotation on a neurology service, where they are taught these concepts. Generally, these rotations are delegated to, and managed by, the neurology department. Psychiatry residents spend 2 months working as neurology residents, commonly during their first year of training. These rotations cover basic aspects of the neurological evaluation and illnesses they see during these 2 months from a neurologic perspective. Many times

Table 2 ACGME milestones for psychiatry residency programs relevant to neuroscience

PC5. Somatic Therapies. Somatic therapies including psychopharmacology, electroconvulsive therapy (ECT), and emerging neuromodulation therapies
A: Using psychopharmacologic agents in treatment
B: Education of patient about medications
C: Monitoring of patient response to treatment and adjusting accordingly
D: Other somatic treatments
MK1. Development through the life cycle (including the impact of psychopathology on the trajectory of development and development on the expression of psychopathology)
A: Knowledge of human development
B: Knowledge of pathological and environmental influences on development
C: Incorporation of developmental concepts in understanding
MK2. Psychopathology. Includes knowledge of diagnostic criteria, epidemiology, pathophysiology, course of illness, co-morbidities, and differential diagnosis of psychiatric disorders, including substance use disorders and presentation of psychiatric disorders across the life cycle and in diverse patient populations (e.g., different cultures, families, genders, sexual orientation, ethnicity, etc.)
A: Knowledge to identify and treat psychiatric conditions
B: Knowledge to assess risk and determine level of care
C: Knowledge at the interface of psychiatry and the rest of medicine
MK3. Clinical Neuroscience. Includes knowledge of neurology, neuropsychiatry, neurodiagnostic testing, and relevant neuroscience and their application in clinical settings
A: Neurodiagnostic testing
B: Neuropsychological testing
C: Neuropsychiatric co-morbidity
D: Neurobiology
E: Applied neuroscience
MK5. Somatic Therapies. Medical Knowledge of somatic therapies, including psychopharmacology, ECT, and emerging somatic therapies, such as transcranial magnetic stimulation (TMS) and vagus nerve stimulation (VNS)
A: Knowledge of indications, metabolism and mechanism of action for medications
B: Knowledge of ECT and other emerging somatic treatments
C: Knowledge of lab studies and measures in monitoring treatment

Adapted from ACGME The Psychiatry Milestone Project (2015b)
PC Patient Care, *MK* Medical Knowledge

their instruction does not tap deeply into the overlap between both specialties but focuses only on neurological aspects of the illnesses.

In a traditional residency program, residents are taught neurobiology in an illness specific fashion during their psychiatry rotations. For example, they learn about "neurobiology of bipolar disorder" or "neurobiology of schizophrenia," and these topics would be embedded in their lectures on specific illnesses. With the current model, residents learn about neurobiology only superficially, as an add-on. In fact, a survey found that 78% of psychiatry chief residents felt unprepared to translate neuroscience research findings into clinical practice and 80% of them felt that neuroscience should be incorporated in their residency curriculum (Benett et al. 2014). For this reason, it is important to have dedicated neuroscience teaching activities focused on the details of normal neuronal and brain function that are not linked to disease. Having this as part of the curriculum in residency training programs will help residents learn the basic knowledge important to understanding the neurobiology of psychiatric diseases, paving the way for them to the next steps in learning.

Psychiatry Residents and Neuroscience

Many psychiatrists and residents in training are not commonly motivated primarily by an interest in neurobiology when choosing their careers. They normally enter this specialty attracted by the intricacies of the mind and its workings, lured by its practical clinical implications. What usually sparks their interest in neuroscience is when a clinical question leads to an explanation provided by neurobiology, thus instilling curiosity about the subject.

Psychiatry has been increasingly more popular as a choice for residency specialization in the United States, with the number of positions available increasing from 1117 in 2012 to 1384 in 2016 (National Resident Matching Program (NRMP) 2016). Furthermore, increasingly higher numbers of competitive MD-PhD students are interested in psychiatry. In Latin American countries, such as Colombia and Argentina, some universities offer psychiatric neurobiological training as part of a postgraduate program, intended to immerge biologically inclined psychiatrists into this topic. The Argentinean Association of Psychopharmacology and Neurosciences, imparts psychoneuropharmacology knowledge through a postgraduate course for interested mental health graduates with an emphasis in neurobiology. In Colombia, several residency training programs discuss this content in their curriculum and are working on having neuropsychiatry included as a postgraduate program (Holguin and Cardeno 2007).

As noted above, in the large multinational study conducted by Fung et al. (2014), only a small portion of US psychiatry department chairs, psychiatrists and trainees reported a strong knowledge base in neuroscience. However, a large portion of them were enthusiastically interested in learning neuroscience from a transdiagnostic approach, for example, emotion regulation, attention/cognition, and neural circuits. This study also found that a large portion of respondents believed that neuroscience

would help supplement new future treatments and evolve the area of personalized medicine in the next 5–10 years, as well as aid in reducing the stigma against mental illness.

Relevance of Neuroscience in Clinical Practice

The prevalence of mental illness and the morbidity and mortality associated with these disorders has been steadily increasing over the years, yet our practices and interventions have not changed all that much. It is vital that our practice in psychiatry evolves such that our treatment approaches change based on pathophysiology, in order to achieve our goal of reducing the toll of mental illness.

Neuroscience Curriculum

Currently there is no formal outline instructing which subjects should be included in a neuroscience curriculum for psychiatry training programs. The following are suggested topics that we feel should be integrated into all psychiatry residency programs, both didactics and teaching curricula, based on the most updated review of the literature.

Neuroscience Literacy

Neuroscience literacy is what the public learns and understands about neuroscience research developments usually through schooling, the media, news sources, and web-based online searches (Herculano-Houzel 2002). Neurology and psychiatry share the brain as the major mutual organ of interest. However, training and educating future psychiatrists in neuroscience continues to lag behind despite revolutionary advances in neuroscience in the past 20 years. This creates a discrepancy with patient expectations because patients now have easy access to the most recent neuroscientific advances through the media and the internet, and expect their doctors to be able to educate them about their illness from a neuroscientific perspective.

It is important for psychiatry residents to know how neuroscience's new advances are being perceived by, and communicated to, lay audiences. Psychiatrists need to act as liaisons between the information described in the media and the actual scientific information. Moreover, as academic institutions, psychiatrists are constantly requested by TV, radio, and printed news outlets to provide expert opinions on new advances in our field. Residents should be prepared to interpret this new information, be familiar with the original source, and be able to provide a clear conception of the findings to patients and other interested audiences. Understanding latest developments in neuroscience research through reading journals and being up to date with neuroscientific media coverage can aid clinicians'

understanding of their patients' cognition, emotional regulation, behavioral changes, and social encounters. Some examples of recent patient-directed questions include the indication, risks, and benefits of using cannabis, especially in the light of legalizing medical and recreational use of cannabis in some states, and also the use of ketamine in the treatment of depression. With the large number of articles written by the media and news coverage, being informed about these topics from clinical research and the media helps bridge patient education with patient perceptions from the media.

Neuroanatomy

The human brain contains 100 billion neurons that make 800 trillion connections. This organ allows the person to experience emotions, behaviors, sensations, and mediates interactions and learning from the surrounding environment. Through neuroanatomical brain imaging and postmortem studies, changes in the frontal-temporal lobes in certain dementias and changes in the limbic system in mood disorders were elucidated. Learning what is considered "normal" versus "abnormal" in brain anatomy has stemmed from mapping the brain architecture and understanding the location and functionality of the different brain structures. The long-standing classification of cerebrocortical regions by Brodmann based on cytoarchitecture has recently been supplanted by a new multimodel parcellation based on magnetic resonance imaging. This map, based on 210 healthy young adults, revealed 180 distinct cortical areas (Glasser et al. 2016). Especially important are areas suspected to be involved in major psychiatric disorder, for example, the dorsolateral prefrontal cortex (DLPFC) for executive functions and problem solving, and the orbitofrontal cortex (OFC) for regulating impulses and compulsions. It is important to understand the frontal lobe's role in executive functioning, such as motivation, attention, impulsivity, and curiosity because this helps understand the symptoms in cases of frontal lobe trauma and tumors, as well as schizophrenia, such as poor judgment, irritability, social withdrawal, and inattention. Furthermore, functional neurosurgery, i.e., psychosurgery, has been steadily growing, with deep brain stimulation being used for highly resistant obsessive compulsive disorder and more recently depression (Mayberg et al. 2016), though the latter clinical trial results have been disappointing.

Noninvasive neuromodulation procedures such as repetitive transcranial magnetic stimulation (rTMS) and electroconvulsive therapy (ECT) (Nuttin et al. 2014) are both US Food and Drug Administration approved treatments for major depression, especially treatment-resistant depression (Fitzgerald et al. 2012) that has not responded to antidepressants or psychotherapy. rTMS targets the right and/or left dorsolateral prefrontal cortex, whereas ECT uses a small electrical current that passes through electrodes placed on the unilateral temporal, bilateral temporal, or bilateral frontal areas to produce a short generalized seizure. This procedure is often used in both inpatient and outpatient settings to treat a variety of conditions including psychotic depression and catatonia.

Neuroimaging

In the past, psychiatric conditions were regarded as brain-related disorders in the absence of an "organic lesion" (White et al. 2012). Multiple imaging resources are currently available for psychiatrists to aid in diagnosing and differentiating among different pathologies. Studying glucose metabolism and cerebral blood flow with positron emission tomography (PET) have helped identify areas of hypo- and hypermetabolism for illnesses such as Alzheimer's disease (AD), schizophrenia, bipolar disorder, and epilepsy. PET scans utilizing specific radioactive ligands for transporters and receptors have helped elucidate the role of specific neurotransmitter systems in the pathophysiology of depression, schizophrenia, and substance abuse to name a few. In addition, specific amyloid imaging techniques are now routinely applied as adjuncts in the diagnosis of AD.

Neuroimaging techniques, especially functional neuroimaging, have reliably and repeatedly demonstrated abnormalities in the brain in psychiatric disorders. These methods such as functional magnetic resonance imaging (fMRI) may serve as trait or state biomarkers for disease. fMRI has been helpful in measuring neural activity in the presence of auditory hallucinations in patients with schizophrenia. For example, a study by Shergill et al. (2000) revealed activation in the inferior frontal insula and bilateral temporal cortex, particularly in the right hemisphere (Fig. 1). This study demonstrated activation was also present in the anterior cingulate, right thalamus and inferior colliculus, and left hippocampus and parahippocampal cortex.

Schizophrenia has been the focus of multiple imaging studies, revealing several consistent findings related to this disorder. For example, structural imaging studies using computed tomography (CT) and MRI of patients with schizophrenia, revealed enlarged lateral and third ventricles when compared to healthy matched normal comparison subjects as well as nonaffected monozygotic twins of those patients. MRI also revealed decreased cortical volume and disproportionate volume loss from temporal lobes, notably in the hippocampus. Hippocampal volume reduction has been observed and is also the focus of considerable research in patients with major depressive disorder, posttraumatic stress disorder (PTSD), Alzheimer disease (AD), and other psychiatric conditions.

Brain PET scans in patients with schizophrenia show regions of abnormal metabolic activity, with some of the most consistent findings revealing a difference in the dopaminergic neurotransmission in the anterior cingulate gyrus, the prefrontal cortex, and the hippocampus between controls and those with schizophrenia.

Structural brain imaging including CT and MRI have been an important aid in the diagnosis and progression of AD, because changes in the rate of atrophy observed in these studies strengthen the likelihood of the diagnosis, as does the finding of widened sulci and dilatation of the third and lateral ventricles in the brain. Progressive changes in brain size have been associated with longitudinal progression of cognitive loss. Moreover, disproportionate atrophy of the medial temporal lobe, particularly in the volume of the hippocampus by more than 50%, is also associated with AD. In fact, dilatation of the perihippocampal fissure is a useful imaging marker for the diagnosis of AD.

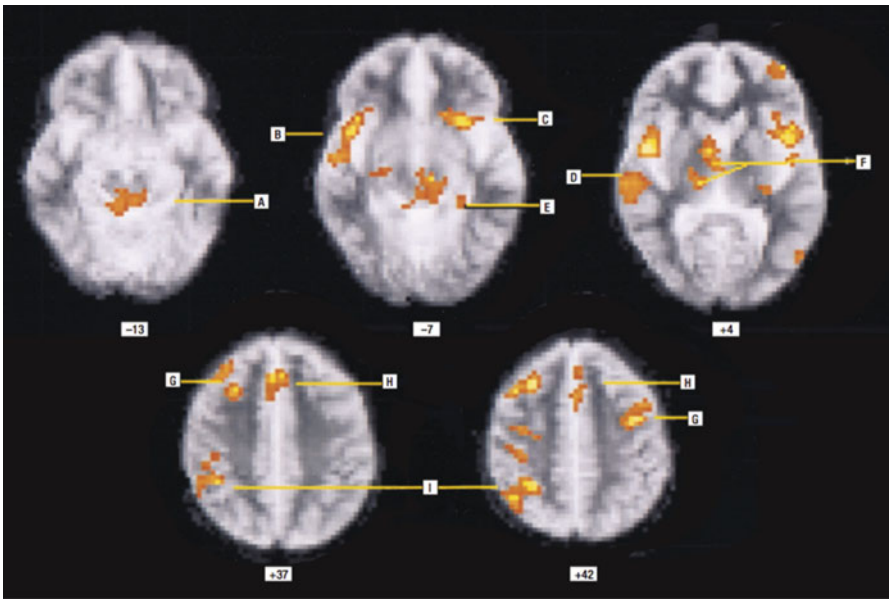

Fig. 1 Measuring neural activity in the presence of auditory hallucinations in patients with schizophrenia using fMRI. Group brain activation during random sampling of hallucinations. Five transverse sections through the brain, at different levels relative to the intercommissural plane (in millimeters). The right side of the brain is shown on the left side of each section. The colored areas are regions that were activated during auditory hallucinations, with the foci of maximal significance shown in yellow. The main activations ($P < 0.001$) were in the right inferior colliculus (*A*), the right and left insula (*B* and *C*), the left parahippocampal gyrus (*E*), the right superior temporal gyrus (*D*), and the right thalamus (*F*). Activation was also evident in the middle frontal (*G*) and the anterior cingulate gyri (*H*), and in the right inferior and superior parietal lobule (*I*). (From Shergill et al. (2000). Reprinted by permission from The JAMA Network)

In yet another striking example of the pertinence of advances of neuroscience to psychiatry are the structural and functional brain imaging applied alterations reported as a consequence of childhood maltreatment, with different subtypes of abuse and neglect producing distinct effects on particular brain regions and circuits (Nemeroff 2016). Hanson et al. (2012) studied 61 children with structural MRI and reported that increased early life trauma (ELS), as measured by the Youth Life Stress Interview, was associated with reduced prefrontal cortex volumes in both gray and white matter, specifically between the anterior cingulate and the frontal lobes, and poor executive functioning.

In a small study of young adults, Sinha et al. (2016) used fMRI to detect the central nervous system (CNS) response to stress-inducing images in order to assess coping. During active coping, the ventromedial prefrontal cortical region exhibited initial reductions in brain activation, followed by increased activation. Their study suggested that individuals who had a high risk of maladaptive coping, such as binge-drinking, emotional-eating, and being involved in more frequent fights, maintained low activity in the ventromedial prefrontal region.

A systematic review by Dichter et al. (2014) concluded that there was an association between antidepressant treatment response and neural circuit connectivity in the frontal lobe and limbic system. More recently, our group demonstrated that the interaction between early life stress and amygdala activation assessed by fMRI, in response to socially rewarding and threatening stimuli, predicted remission to escitalopram, sertraline, and venlafaxine in depressed patients (Goldstein-Piekarski et al. 2016).

Resting-state fMRI measures spontaneous brain function at rest by using blood oxygen level-dependent (BOLD) contrast in the absence of a task. This technique of neuroimaging has helped elucidate many Resting State Networks (RSN) including the somatosensory and visual networks (Lee et al. 2013). The pattern and level of connectivity in these RSNs have been studied in many psychiatric disorders including AD (Chen et al. 2011), schizophrenia (Bassett et al. 2012), and autistic spectrum disorder (Anderson et al. 2011).

Neuropathology

Postmortem brain studies have clearly shown differences between healthy brain tissue and tissue derived from patients with well-documented psychiatric disorders. It has also helped identify differences between disorders that present similarly in clinical symptoms, as for example neuropathologic differences between neurocognitive disorders. The essential neuropathologic changes in AD, including neuritic plaques, deposition of beta amyloid plaques, and neurofibrillary tangles, are quite distinct from Lewy body dementia, characterized by round, eosinophilic, intracytoplasmic neuronal inclusions (Lewy bodies), mostly clustered in the substantia nigra. Recently, postmortem studies have now confirmed the presence and rate of neurogenesis in the adult human hippocampus (Spalding et al. 2013).

Neural Circuits and Neurotransmitters

Alterations in neurotransmitter systems have been demonstrated in several psychiatric disorders. Most of the treatments available in psychiatry are believed to exert specific effects on these systems. For example, in unipolar depression, alterations in serotonin, norepinephrine, dopamine, corticotropin-releasing hormone (CRH), and to a lesser extent gamma-aminobutyric acid (GABA) and glutamate circuits have been reported.

Numerous studies have implicated multiple alterations in various components of the serotonergic system in mood disorders, including genetic polymorphisms in the promotor region of the serotonin transporter gene that interact with early life trauma (Caspi et al. 2003; Hoefgen et al. 2005) to increase depression risk, reduced plasma tryptophan concentrations (Caspi et al. 2003), the rate-limiting step in the serotonin biosynthesis pathway, and increased activity of monoamine oxidase. In clinical settings, the understanding of neural circuits and neurotransmitter changes in mood and anxiety disorders is helpful in explaining how antidepressant medications exert their desired effects as well as their unwanted side effects.

Traditionally, for example, it is taught in residency programs that dopamine acts at D2 dopamine receptors in the anterior pituitary gland to suppress prolactin secretion, and therefore typical antipsychotic drugs, as well as high doses of atypical antipsychotic risperidone, which act as antagonists at these D2 receptors, reduce psychotic symptoms but may also lead to elevated prolactin levels, which can result in amenorrhea and gynecomastia. For example, as illustrated below (Fig. 2), antipsychotics have a high affinity to a number of serotonin, muscarinic, cholinergic, histaminergic, adrenergic, and dopaminergic receptors, which are believed to mediate both their therapeutic and unwanted effects.

Understanding neurotransmitter receptor subtypes is also vital, because most psychotropic medications are selective in their effects on certain receptor subtypes. Atypical antipsychotics not only exert their main effects on dopamine D2 receptors but also on serotonin 5HT2A receptors, which are thought to possibly mediate mood stabilization and reduce extrapyramidal symptoms. However, certain atypical antipsychotics also act by antagonism or partial agonism at serotonin 5HT1A, 5HT2C, and 5HT7 receptors, which have unknown secondary effects but have been posited to contribute to anxiolytic properties (Stahl 2013). The D1 and D3 receptors are receiving much more attention lately due to their interest as putative targets in treatment of psychosis.

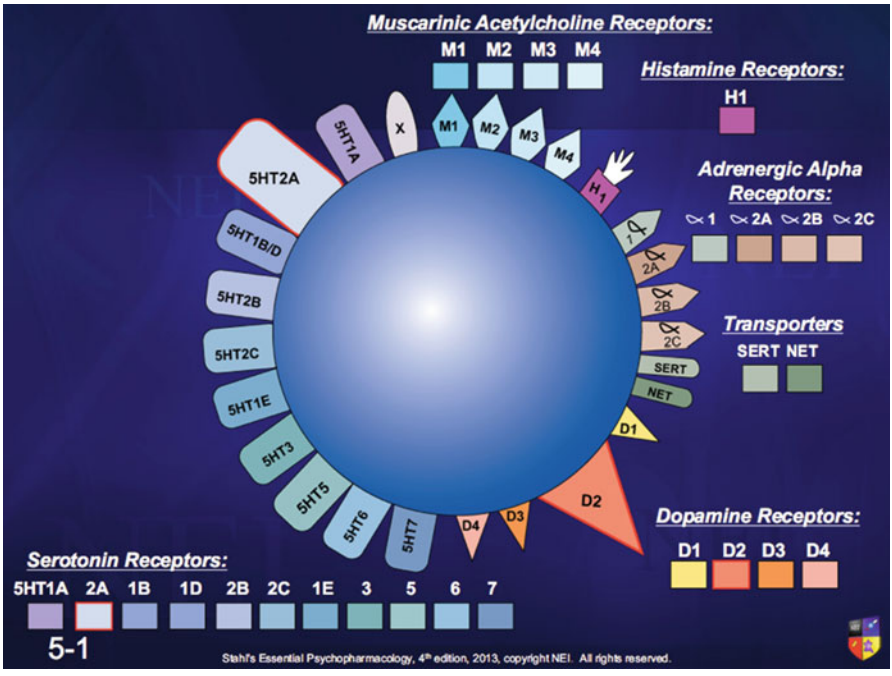

Fig. 2 Antipsychotics have high affinity to a number of serotonin, muscarinic acetylcholine, histamine, adrenergic, and dopamine receptors. (From Stephen M. Stahl (2013). Reprinted by permission from Stephen M. Stahl, copyright Neuroscience Education Institute)

Neuroendocrinology

It has long been known that the endocrine system and the CNS interact in a complex fashion which affects emotions and behavior. The thyroid axis certainly plays a critical role in the pathophysiology of mood disorders with occult primary hypothyroidism representing the number one medical cause of depression. Another cause of depression in men is testosterone deficiency. A significant minority of depressed men who are hypogonadal are returned to euthymia by testosterone replacement alone. Oxytocinergic systems, which play a major role in social bonding, attachment, sexual pleasure, and lactation, have been reported to be altered in mood and anxiety disorders, especially in victims of child abuse and neglect.

The most widely studied endocrine system relating to stress and stress-related psychiatric disorders is the hypothalamic-pituitary-adrenal (HPA) axis, and numerous studies have implicated a seminal role for this system in depression (Gillespie and Nemeroff 2005), anxiety disorders and PTSD.

Assessing HPA axis function includes measuring basal hormone levels or by provocative challenges, such as the dexamethasone suppression test or the CRH stimulation test. A substantial number of depressed patients fail to suppress cortisol secretion when challenged with the synthetic glucocorticoid dexamethasone, which reflects feedback regulation impairment and hyperactivity of the HPA axis (Nemeroff 2016). The degree of change in the HPA system in relation to early life trauma is influenced by a number of factors, which include: the nature, frequency, age of onset of the trauma, availability and access to psychosocial support, later life trauma, family history of mental illness, and genetic and epigenetic contributions. This hyperactivity of the HPA axis is in part due to hypersecretion of CRH, which has now been unequivocally shown to occur after exposure to child abuse and neglect. It is also well known that the iatrogenic use of hormones, or hormone derivatives such as cortisone, may lead to side effects that manifest as depression, mania, or psychosis (Brown and Chandler 2009; Dubovsky et al. 2012).

Psychoneuroimmunology

Since the 1980s, research has burgeoned in the area of psychoneuroimmunology, which revealed complex interactions between the brain and the immune system. Several studies have demonstrated an increased rate of depression in disorders characterized by increased inflammation such as cancer, diabetes, and ischemic heart disease. Moreover, multiple studies have shown higher concentrations of inflammatory markers in patients with depression, including cytokines IL-1, IL-6, tumor necrosis factor α (TNF α), and C-reactive protein (CRP) (Howren et al. 2009). A meta-analysis revealed significantly higher concentrations of the proinflammatory cytokines TNF and IL-6 in depressed patients compared to controls (Dowlati et al. 2010). This effect is particularly prominent in suicidal patients. There is increasing evidence that certain anti-inflammatory agents may possess antidepressant properties (Raison et al. 2013).

The Adverse Childhood Experience (ACE) study was one of the first and largest studies that illustrated the association between childhood trauma and an increased risk for a variety of inflammatory medical conditions including ischemic heart disease, cancer, chronic obstructive pulmonary disease, asthma, obesity, autoimmune disease, and liver disease. Danese et al. (2008) completed a large prospective longitudinal cohort study to determine whether a history of childhood abuse in depressed patients resulted in elevated levels of CRP and other markers of inflammation. Their group assessed approximately 1000 subjects that were followed to age 32 in the Dunedin Multidisciplinary Health and Development Study for a history of childhood maltreatment and subsequent medical and psychiatric disorders. Children with a history of childhood maltreatment exhibited a significant increase in CRP concentrations that continued throughout adulthood; this was independent of other risk factors including depression, low socioeconomic status, poor health, or smoking. This study has subsequently been confirmed in a large meta-analysis (Baumeister et al. 2016).

Neurophysiology

Understanding neurophysiology and electrophysiology aids in the use, understanding, and interpretation of results of electroencephalograms (EEGs), which are used to rule out epilepsy as a cause of psychiatric symptoms, as well as during ECT and in the diagnosis of sleep disorders. Deep brain stimulation, which is FDA-approved for treating resistant obsessive-compulsive disorder (Kisely et al. 2014), uses an electrophysiological technique known as microelectrode recording (MER) to micro-tune the specific target site locations. During this procedure, electrodes are slowly advanced to targeted brain structures, which are identified based on the patterns of electrode firing. This involves not only knowledge of neurophysiology but in neuroanatomy as well. EEG also holds the promise for identifying subtypes of patients with schizophrenia and mood disorders, as well as predicting optimal treatment response.

Genetics and Epigenetics

Genetics has played a seminal role in the development of personalized or precision medicine, especially in oncology, where detecting gene mutations has predicted both disease risk and treatment response. Genome-wide association studies (GWAS) in psychiatry (Kim et al. 2017) have detected genetic variants of disease, e.g., single nucleotide polymorphisms (SNPs) or copy number variations (CNVs), that contribute to disease vulnerability. Genetic linkage studies preceded GWAS and identified certain genetic markers in specific chromosomal regions associated with disease vulnerability. It was used to obtain information from large families with heritable illnesses, and samples are obtained from family members with and without the specified disease. These advances preceded GWAS and were somewhat informative in bipolar disorder,

major depression, and schizophrenia. GWAS, however, identified several gene variants, each of which exerts a small but significant effect on disease vulnerability but are far less clinically impactful as single-gene mutations in Mendelian inherited illnesses such as Huntington's disease and cystic fibrosis.

In a review of personalized medicine and mood disorders (Alhajji and Nemeroff 2015), we noted that the approximate lifetime prevalence of Major Depressive Disorder (MDD) in women is more than tripled in those who have a significant family history. Bipolar disorder is one of the most heritable psychiatric illnesses with a strong familial component that increases the risk up to 10 times. Indeed, two thirds of the risk of development of bipolar disorder is hereditary. Genetic polymorphisms in the serotonergic system, including serotonin transporter (5-HTT) gene and components of the HPA axis system such as the corticotropin-releasing hormone-binding protein (CRHBP) and FK506-binding protein (FKBP5) genes have been repeatedly implicated in the susceptibility to developing major depressive disorder. Although several commercial laboratories offer genetic testing to predict antidepressant response, our view is that these tests are not yet sufficiently validated for widespread use.

Epigenetics is likely the fastest growing field in all of biology, including neurobiology. It encompasses heritable genetic changes that are due to factors other than changes in the DNA sequence. This includes processes that regulate gene transcription, such as DNA methylation and histone modification. FKBP5 is a co-chaperone of the heat shock protein-90 (HSP90) in the mature glucocorticoid receptor complex. It codes for a protein that causes glucocorticoid receptor subsensitivity (Binder et al. 2004). Depressed patients who are homozygous carriers for the rs1360780 SNP of FKBP5 respond more rapidly to SSRIs, TCAs, and mirtazapine, compared to non-carriers (Binder et al. 2004). Our group illustrated that the risk allele of the FKBP5 gene, which is regulated by epigenetic processes, determined the likelihood of developing PTSD in adults with a history of child abuse (Klengel et al. 2013), and this effect is mediated by epigenetic changes in the risk allele. Epigenetic alterations as a consequence of child abuse and neglect and their role in mood disorder vulnerability and in particular the risk for suicide is an active avenue of investigation.

Neuropsychological Testing

Neuropsychology is a subdiscipline of psychology that specializes in identifying brain-behavior relationships by assessing cognitive and emotional brain functions and their role in a person's behavioral manifestations and daily functioning. Neuropsychological assessment involves administering a battery of tests that serve to identify areas that may be dysfunctional and may be associated with a particular neurological or psychiatric disorder. The results of most of these assessments use normative data to determine a person's strengths and weaknesses. In order for a provider to administer and interpret neuropsychological testing, and be able to provide a therapeutic discussion with a patient, one must be knowledgeable of the underlying neurobiology.

Indeed, neuropsychological testing is particularly useful in identifying patients with cognitive impairments, where specific tests can be used to assess attention, orientation, executive function, verbal memory, spatial memory, language, and motor/sensory functions. The Trail Making Test (TMT) is valuable in providing information regarding visual scanning, simple visual span of attention, speed of processing, mental flexibility, and executive functioning. It consists of two parts, TMT-A which involves having the subject connect lines in a sequential matter between 25 encircled number, whereas in TMT-B the subject must alternate connecting lines between numbers and letters. As with any neuropsychological test, TMT results may be affected by age, education level, and intelligence. The Wisconsin Card Sorting Test is a commonly used instrument to detect executive dysfunction such as the difficulty with problem solving and mental flexibility that occur in schizophrenia. Tests such as Block Design Test and Clock Drawing Test may detect visuoconstructional abilities and apraxia in patients with Alzheimer's Dementia and Frontotemporal Dementia.

Children and adults with Attention Deficit Hyperactivity Disorder (ADHD) not only present with problems with attention, hyperactivity, and impulsivity but also may display a combination of developmental deficits in learning, language, visuomotor processing, or auditory processing domains. With ADHD implicating different domains, there are many objective tests that can be used with varying degrees of sensitivity and specificity. Behavioral symptoms can be assessed by using the Behavior Rating Inventory of Executive Function (BRIEF), attention can be tested by using the Continuous Performance Test or Go/No Go Test, planning and organizational thinking using the Tower of London Test, while intelligence and abstract reasoning can be evaluated using the Wechsler Adult Intelligence Scales. Used in combination with parent and teacher as well as self-rating scales, ADHD can be reliably diagnosed with sensitivity and specificity far better than unstructured clinical evaluations.

Teaching Strategies

Due to the wide range of mandatory topics lined out by the ACGME, it may be relatively difficult to fit neuroscience topics into the didactics curriculum. It is vital that the neuroscientific material that is taught to residents in class is applied to clinical settings, because not doing so would enforce the message that neuroscience is not important in patient care (Hafler et al. 2011). Our aim is to integrate neuroscience into engaging and clinically relevant teaching strategies and educational modalities, as it has been shown that traditional lectures are only 5% effective in conveying information to adult learners (Stahl and Davis 2009).

Neuroscience Rotation

As mentioned earlier in this chapter, during the neurology rotation of psychiatry residency training, psychiatry residents work as neurology residents for

a period of 2 months and take part in the other department's clinical and academic activities. Often a link between both specialties is not stressed during the rotation, and the goal of integrating neuroscience into psychiatry is not entirely met.

For this reason, some programs have proposed creating a specific neurobiology rotation that integrates neurobiological aspects of psychiatry into a neurology experience. This proposal would include a specific academic curriculum in which topics related to the interface of psychiatry and neurology would be incorporated. We are enthusiastic about this approach, but it might be difficult to accomplish at some sites. The programs that do this successfully will have a cohort of neurobiologically well-educated psychiatrists compared to other programs.

A tailored clinical experience, either on an inpatient unit or in the outpatient setting, where the patient population is comprised of those with neurological illnesses that may manifest with psychiatric symptoms, is another possible approach of integrating both specialties in a worthwhile experience. This would require joint efforts from both departments and would positively enhance opportunities of learning among residents in both specialties. A multidisciplinary team with the participation of an attending faculty neurologist and psychiatrist familiar with the neurobiological aspects of psychiatric illnesses would be ideal.

Among the benefits of this type of rotation, residents would be able to learn how to explain to patients the underlying neuropathogenesis of their diseases. Neurology, neuroimaging, neuropathology, and new research findings would be included in their day to day practice, providing an opportunity to integrate neurobiological theories into clinical activities. It is not surprising that many of our most successful psychiatric investigators are dual boarded in psychiatry and neurology.

Classes

For many decades, education has been delivered through lectures, which until recent times have been considered the standard form of teaching. In this modality of information delivery, speakers normally tend to provide as much information as they can in a limited time, making sure everything that the student needs to know is covered in their lecture. We all have taken part in these types of classes in one way or another, either by teaching them or, most probably, during our days in elementary school, high school, and college.

This type of approach to teaching might not be the optimal method for adults to learn new information, as it has been shown that adult learners may pay attention to a lecture for only 15–20 min at a time, specifically at the beginning of the presentation (Stahl and Davis 2009). After this time, attention span dwindles, making it less probable that learning will occur. Strategies aimed at constantly changing the pace of a presentation in order to keep audiences attentive have been shown to improve retention of the newly learned information. This includes, but is not limited

to, the use of clinical cases related to the topic being taught, encouraging those participating to think about different ways to use the information provided in a practical way.

The use of traditional lectures is being revisited in most academic institutions. Many medical schools have done away with those types of presentations in which the audience has little to no participation and have replaced them with more interactive ones where different mechanisms provide a means to engage the student and help enhance the learning process.

Advanced technology has enhanced the way feedback is obtained from audiences in a classroom in a dramatic way. Rather than a traditional show of hands, when asking a question that involves multiple possible answers during a lecture, it is now easy to use audience response systems on phone applications connected to a presentation to obtain a real live recount of the audience responses. After a few seconds, the answers appear on screen and may even be displayed in a graph. Nowadays, all residents own a smartphone or a tablet, making it possible for the faculty member lecturing to have the residents connect their devices to the presentation. This offers the opportunity of obtaining immediate answers to the questions being made, providing residents immediate feedback. This will help the lecturer decide if he or she needs to move on with the class if the topic is understood by the majority of the group, or if more time should be spent on the subject if the opposite is true.

When teaching medical content, especially neurobiology in psychiatry, it is important to consider several elements and ask ourselves questions such as: Which is the target audience? How much information is being provided in a single presentation? Is it too much content for one class? Are clear and relevant graphical displays being used? Is the audience being stimulated appropriately? All of the answers to these questions will provide clues as to how to deliver effectively the required information residents need to learn during their training, making it an experience worthy of their time. Effective classes will not only provide the needed information but will hopefully instill in the resident interest in knowing more about the topics being taught.

When referring to clear and relevant graphical displays while giving a lecture, Stahl and Davis (2009) recommend using enhanced contiguity and providing a stepwise appearance of labels when teaching about anatomical structures, specifically when their function is being explained. Adults learn concepts better when corresponding words and images are presented in close proximity instead of far from each other on the screen. As Figs. 3 and 4 show, when describing the function and location of the different structures of the brain, having all the information placed on a single slide will not help those attending the class learn the information. If a stepwise appearance of words describing the name of the structure and its function occurs simultaneously and these words are in close proximity to the structure being described, learning will be enhanced.

Overall, teachers need to understand that the focus of medical education is the person learning, not the teacher. Attention should be given to faculty involved in residency teaching, giving them the opportunity to develop strategies to develop presentations that include components more in line with adult learning theories.

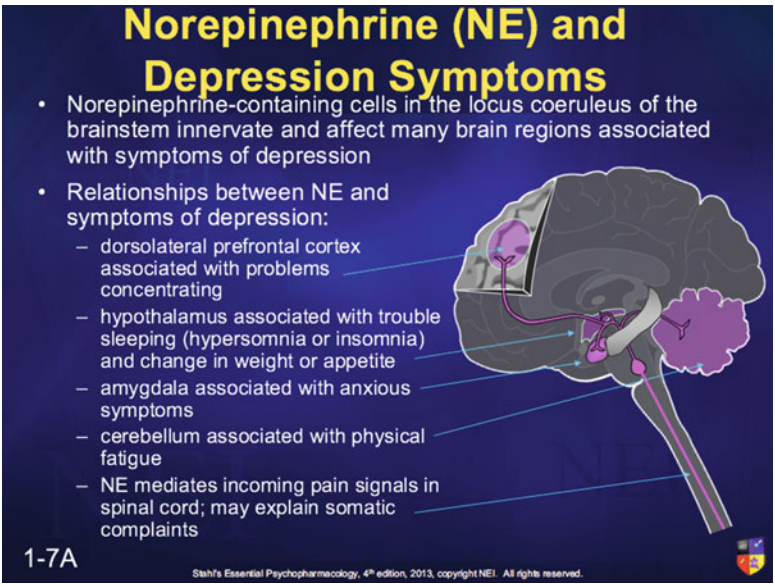

Fig. 3 Displaying abundant information on a single slide is not helpful in learning new information. (From Stephen M. Stahl (2013). Reprinted by permission from Stephen M. Stahl, copyright Neuroscience Education Institute)

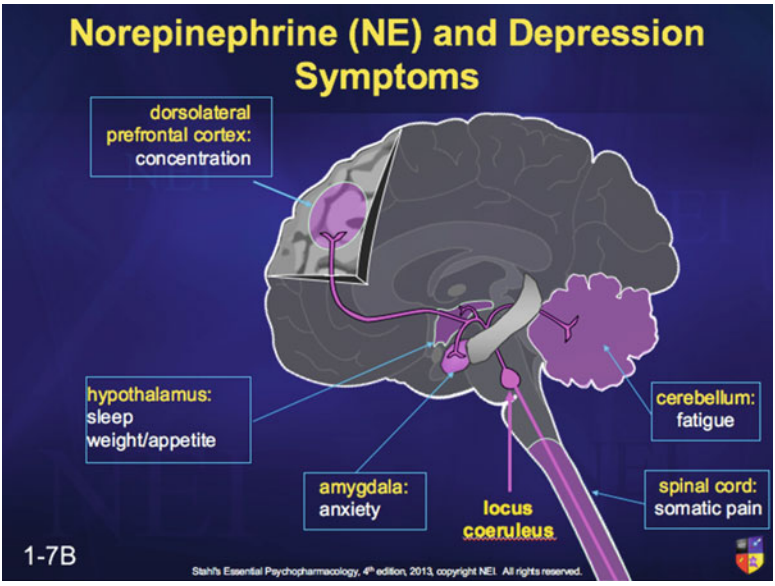

Fig. 4 A stepwise appearance of the name and function of a structure with keywords being in close proximity to each other enhances learning. (From Stephen M. Stahl (2013). Reprinted by permission from Stephen M. Stahl, copyright Neuroscience Education Institute)

This will help teachers offer an adequate experience to residents, making it valuable for them, and providing them with information that is relevant, useful, and applicable to their practices.

Journal Clubs

Training programs across all medical specialties include in their curriculum weekly or monthly journal clubs, where an article of relevance is discussed among faculty and residents. This academic activity meets several goals important for the trainees' learning. Among these goals, teaching residents appraisal skills aimed at analyzing a scientific paper is a very important one. As mentioned earlier, residents are constantly bombarded with the influx of new information on a multitude of topics currently being studied, and it is not an easy task to decide which will be relevant. It is key for them to critically read these papers and discern between studies performed in an appropriate manner and those that are not. Residents are guided on how to develop their own critical thinking of the literature.

Another goal in discussing and analyzing scientific papers is for this exercise to impact on their clinical practice. Indeed, this must entail the use of evidence-based medicine derived from controlled studies. Discussing landmark papers that have transformed psychiatric practice in journal club highlights the optimal treatments for their patients. It will also further help them understand from a neurobiological perspective the nature of their patients' illnesses, and translate this knowledge into terms patients will be able to understand.

Having a dedicated journal club activity also aids in keeping residents and faculty up to date with the current literature. Due to the plethora of new neuroscience information developing every day in our field, it is difficult for many to keep up to date on all the new advances. One might even establish a neurobiology journal club, per se.

Taking all these points into consideration, the psychiatry residency program at the University of Miami has been using a model that consists of a longitudinal journal club series where a compendium of landmark papers are prepared by two or three residents and are guided by an experienced faculty member. The selected paper is then presented to the rest of the trainees and faculty members. The specific papers to be discussed have been previously selected by a committee comprised of faculty involved in the yearlong journal club series as mentors and are chosen based on the relevance of the paper to a psychiatrist's clinical practice and the potential for neurobiological discussion. These landmark studies are presented during the first half of the series and revisited every 2 years to make sure all residents are exposed to them. Later on in the year, selected papers with identified flaws are prepared by a group of psychiatry trainees and a mentor, with the goal of learning how to identify potential issues in the development and analysis of scientific research. Residents are expected to read the articles and be able to point out the errors in the paper. Additionally, recently published papers with relevant neurobiological content are presented during this activity, giving the

residents the opportunity to learn about newer advances in the field while critically appraising a scientific publication.

Grand Rounds

Across the various residency programs in the United States, grand round activities are held in diverse fashions and different schedules. Some are more neurobiologically inclined than others, but all have the goal of bringing faculty and residents of the department together in a stimulating academic setting. At the University of Miami Miller School of Medicine, grand rounds are managed in a state-of-the-art fashion, with an ongoing series of scholarly lectures given by world-renowned experts in the field. The speakers are departmental chairpersons of prestigious universities, eminent scholars, and distinguished professors from the most renowned medical schools and research institutions in the United States. They address during their presentations issues aligned with the most recent developments in basic neuroscience and in the diagnosis and treatment of psychiatric disorders, emphasizing the neurobiological aspect of their work, presenting their latest research results and the most up-to-date advances in patient treatment modalities. This activity is extremely interactive and intellectually stimulating for our residents, as they not only get the opportunity of participating during their presentation but also have a time reserved to share lunch with the speaker in a more relaxed setting. Residents are provided with the unique opportunity of having a one to one, more informal interaction with the presenter, where possibilities for clarification of concepts, development of research questions, future collaborations, and lifelong friendships take place.

Case Formulations, Vignettes, and Discussions

Assessing patient cases from an integrative neurobiological, psychological, and social perspective increases the understanding of the patient's complex psychopathology and renders learning neuroscience clinically relevant for residents. It also allows for clinical applications in a multitude of patient settings, including inpatient, outpatient, and residential.

As noted previously, a group at Stanford University assessed the attitudes of chairs of psychiatry departments, psychiatrists, and psychiatry trainees' attitudes towards neuroscience education (Fung et al. 2014). In that study, psychiatry trainees found case conferences and clinical-based teaching significantly helpful. In a progressive 4-year long neuroscience curriculum developed for psychiatry residents at Yale University (Ross and Rohrbaugh 2014), a "multi-perspective case conference series" was developed for postgraduate year (PGY) 2 residents. In this series, a wide variety of psychopathologies written and verbal case formulations were presented from a neurobiological, psychological, and social approaches. The residents interacted with expert faculty members and received peer supervision, with the

goal of writing up at least one patient during the course, and then presenting their case to a diverse panel that includes a neuroscientist, a psychotherapist, and a social psychiatrist for comment and feedback.

The US National Institute of Mental Health (NIMH) has created free online neuroscience modules (NIMH 2012a, b) that link core educational information to a clinical case and provide clinical formulation and problem solving.

Neuroanatomy Modules

The National Neuroscience Curriculum Initiative (NNCI 2013) is an organization that was initially formed by psychiatry residency training directors from Columbia, Brown, Pittsburgh, and Yale that is funded by the US National Institute of Health (NIH) to create collaboration between educators and neuroscientists. Their aim is to supply and create clinically applicable resources that help train psychiatry residents in neuroscience. This includes a collection of interactive learning modules that trainees could use to supplement their learning in the classroom, in clinical settings, and in self-directed studying. This curriculum is updated and adapted from curricula that are already implemented in psychiatry residency training programs nationally and internationally.

Their first initiative, The Play-Doh brain (Ross et al. 2016), is a tactile-based learning exercise that introduces learners to the neuroanatomy of the brain. In this activity, learners recreate the gross anatomy of the brain using Play-Doh material and in the process learn the basic function of each structure. With the prolific and wide use of smartphones, a variety of interactive applications have also been developed to teach neuroanatomy, such as 3D Brain ©, Brain Tutor ©, and Draw:Know ©.

Cold Spring Harbor Laboratory has developed a website called Genes to Cognition (2017) which includes the 3D Brain program, along with other interactive learning and teaching modules. The 3D brain encompasses an interactive three-dimensional model of the brain, subdividing it into clickable brightly colored lobes, brainstem, and cerebellum. Within each brain structure is a further colorfully divided subsections, such as Broca's area, prefrontal cortex, premotor cortex, and primary motor cortex under the frontal lobe. When clicking at the brain as a whole, or at each section, a concise but well-rounded write-up pops up and provides information of the following: an overview, case studies, associated functions, associated cognitive disorders, associated with damage, substructures, research review, and links relevant to the particular structure.

Neuroscience in the Media

Under one of The National Neuroscience Curriculum Initiative's (NNCI) classroom, modules, titled "Fundamentals of Neuroscience", is a subsection called Neuroscience in the Media. This aims to teach residents to explore the interface between

psychiatry and the media, and to learn how to translate findings from clinical research to a lay audience. In these sessions, each begins by reviewing a media piece relating to psychiatry and neuroscience or the residents can be given the freedom to pick their own item of media coverage. The sessions are then structured to provide criticism of the piece, discussing related clinical research, and role-playing discussing this topic to a lay audience while eliminating the use of excessive medical jargon. Amongst many of their suggested topics are the following: "Are Probiotics the New Drug Choice for Mental Illness?", "Effects of Marijuana on the Developing Brain", "How Social Media Changes Your Brain," and "The Effects of Emotions on Memory Accuracy."

The Yale psychiatry residency training program (Ross and Rohrbaugh 2014) has also integrated a neuroscience literacy component to their neuroscience curriculum titled "NY Times Psychiatry." This 6-week long course for PGY-4 residents allows them to research and select relevant articles in the media for critical appraisal and for understanding how to transmit clinical findings to lay audiences. Other options would include watching movies or reading fictional books and discussing their medical accuracy and societal portrayal.

At the University of Miami Miller School of Medicine, faculty, residents, and medical students participate in movie screening nights through the psychiatry special interest group, a medical student organization aimed at sparking interest in psychiatry among the medical students. Watching and discussing movies with psychiatric content among peers at different levels of training fulfills various purposes. From the academic point of view, topics such as diagnosis, neurobiology of the illness, and possible management strategies are discussed, making this a learning and fun experience for students and residents which is distinct from their regular undertakings. This activity also contributes to helping our trainees understand the different ways psychiatry is being portrayed on screen, and how the lay audience perceives and may interpret these illnesses.

Conclusion

Because neuroscience is the basic science of psychiatry, it must be an integrated component in the training and teaching of psychiatry residents. This can be accomplished through department chairs and academic leaders who are involved in large-scale committees in charge of creating the ACGME educational requirements, milestones, the US Psychiatry Resident-In-Training Examination (PRITE) exams, psychiatry board certification, or smaller departmental committees such as journal clubs, case conferences, grand rounds, or classes. The approach of integration has to be transdiagnostic, clinically relevant, and applicable to both trainees and psychiatry educators.

As previously noted, psychiatrists across all levels of training are enthusiastic about learning more neuroscience. To further encourage and motivate residents who

are interested in neuroscience, special recognition should be provided to residents who contribute to neuroscience research or education.

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Stephen M. Stahl, M.D., Ph.D.

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Education About Mental Health and Illness: Innovative Approach for the Kenyan Context

10

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Contents

Abstract

Over the years, there has been growing evidence on the disheartening impact of mental health in developed and developing countries. However, ongoing efforts towards improving current systems, practices, and structures towards addressing

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this impasse are not sufficient to effectively address the ever growing mental health treatment gap.

Continued lack of adequate budgetary support for mental health, instability in mental health governance, dismal interest in psychiatry as a career amongst students and emerging health workers, limited efforts in capacity building the existing mental health workforce, continuous lack of priority for mental health among development partners and anthropological dissonance about the role of informal and formal mental health systems especially in developing countries have derailed any push towards adequate delivery of universal mental health.

Recent advancement towards integration of mental health services with existing primary health care models has had significant impact in addressing the mental health treatment gap, especially in developing countries, which consequently illuminated the huge influence of informal mental health service providers and indirect users of psychiatry on mental health service delivery; actors who had carved out a niche in addressing the treatment gap prior to this integration.

Therefore, there is need to focus on enhancing mental health literacy for all stakeholders in mental health for effective service provision. This chapter delves into the importance and subsequent impact of education on mental health and illness for all actors on mental health and illness including consumers of mental health services, the family unit, and formal and informal mental health care systems.

Keywords

Mental health · Education · Consumers of mental health · Family unit · Formal systems · Informal systems · Stakeholders

List of Abbreviations

GBD	Global burden of disease
GDP	Gross domestic product
LMIC's	Low and middle income countries
MDG	Millennium development goals
MNS	Mental, neurological, and substance use disorders
MOH	Ministry of Health
NCD	Noncommunicable diseases
NGO's	Nongovernmental organizations
PTSD	Post traumatic stress disorder
WHO	World Health Organization

Introduction

According to a recent study on the global burden of disease, the leading cause of death and disability over the last two decades has changed from communicable diseases in children to noncommunicable diseases in adults (IHME Seattle 2013).

Mental health disorders such as depression, anxiety, and substance abuse are the global primary drivers of disability accounting for approximately 40 million years of disability amongst youth.

According to the World Health Organization, as at 2015, Kenya had a population of approximately 46.05 million people (WHO 2016), total health expenditure as a percentage of gross domestic product (GDP) was 5.7, and approximately 100 trained psychiatrists as at 2016. The World Health Organization estimates that non-communicable diseases will be responsible for 73% of deaths and 60% of the burden of disease globally by 2020 (WHO 2014). Furthermore, according to the Kenya National Strategy for the Prevention and Control of Non Communicable Diseases, despite the strong connection between mental health diseases and other non-communicable diseases, consumers of psychiatry do not receive the medical attention they deserve.

Global Perspective on Mental Health

Mental, neurological, and substance use disorders (MNS) account for a substantive proportion of global health problems (Murray et al. 2013) with MNS accounting for 13% of the global burden of disease (Mathers et al. 2008).

Previous studies have shown that MNS disorders have earlier ages-of-onset than most physical disorders (Kessler et al. 2007) and rarely occur in isolation (Whiteford et al. 2013) with up to 80% of deaths of people living with these disorders occuring as a result of other coexisting physical illnesses (Crump et al. 2013). In 2010, mental and substance use disorders were the leading cause of the number of years people lived with disabilities.

Despite these statistics and the pressure on global health systems to address the gaps in mental healthcare, there are a number of challenges inhibiting the effective implementation of mental health illness management systems globally. For instance, the earliest manifestations of poor mental health often occur at youth or adolescent years, though in most instances, even in high income countries, this treatment is often administered many years after the onset of the disorder (Wang et al. 2007). Furthermore, these symptoms can be attributed to other health and environmental concerns including poverty, substance abuse, and violence. (Patel et al. 2007a).

The absence of mental health in the Millennium Development Goals (MDG's) widely contributed to reduced national focus on mental health in low and middle income countries (Patel et al. 2007b) with some LMIC's recording up to 90% mental health treatment gap.

Kenyan Perspective of Mental Health and Illness

Factors such as lack of proper information on mental health across formal and informal sectors, sociocultural misconceptions towards the cause, nature and treatment of mental health have contributed significantly towards the mental health

treatment gap in rural Kenya. Trained psychiatry practitioners often turn to private practice within the nations' capital, leading to shortage of public health care workers trained in psychiatry thus makes it even harder to provide quality mental health care within the rural regions of Kenya. In addition, there are very few specialists to supervise and train those healthcare providers at the community level (Ndetei et al. 2007)

The cost of accessing treatment and management of mental health care in Kenya continues to cause a huge burden on people seeking these services. The out-of-pocket expense borne by patients and family members seeking mental health services in public hospitals in Kenya was $51 USD per admission (Kirigia and Sambo 2003). High costs of medication, frequent unavailability of subsidized medication at public hospital pharmacies and patients, especially in rural areas, having to travel long distances to access this care takes a huge toll on people living with mental illness and their families, especially in sub-Saharan countries.

Associated self and social stigma on mental health issues in Kenya further complicates the matter. There is a prevalent belief that mental health conditions can only be treated by witchdoctors, traditional healers, or faith healers and that treatment of these disorders is beyond the formal mental health care system. This misinformation coupled with the desire to hide the occurrence of mental illness from the community for fear of condemnation, decreases the possibility of an individual receiving care at the onset of the illness, and reduces any chance of early management (Ndetei et al. 2016).

This belief system provides insight as to why a large number of the rural population in Kenya seek mental health treatment and management services from informal health workers (Musyimi et al. 2016) despite their lack of professional training. These include: traditional healers, faith based healers, community health workers, expert patient (expert patients are patients who have received medical services for a long period of time and can share experiences with other patients), local self-help groups, community-based organizations, families and community opinion leaders. This creates a worrying scenario for quality mental healthcare delivery in Kenya.

Scarcity of mental health human resources is also a well-established barrier towards mental health service provision. Poor working conditions, lack of recognition of mental health care workers, insufficient and non-practical formal mental health training, and lack of public health skills amongst mental health policy makers contribute to this barrier (Saraceno et al. 2007). The study goes on to state that redefining the role of mental health specialists from clinical practice to learning and community supervision is key in addressing this gap.

Mental Health Literacy in Kenya

The Canadian Alliance on Mental Illness and Mental Health defines mental health literacy as "the knowledge, beliefs and abilities that can enable the recognition, management or prevention of mental health problems." According to Reavley et al.

(2012), mental health literacy focuses on knowledge of early detection, prevention, service providers, available treatment, self-help strategies, and basic skills to improve service delivery of mental health disorders.

Numerous studies have shown that members of the public are not able to recognize symptoms of mental health and illness, diverse information regarding causes of mental illness, and self-help strategies. This in turn impacts attitudes and beliefs towards seeking help and treatment for various mental health issues.

Education is considered an essential component in promotion of health and disease prevention globally. Formal systems have relied on education through formal school curriculums, training programs, and practical approaches. Social online campaigns and the use of information, education, and communication materials and events have also played a huge role in education through awareness creation and capacity building in rural communities (Nutbeam 2000). Although little has been done to diversify the promotion of mental health literacy, recent efforts towards the promotion of school-based mental health programs and capacity building for informal health workers (e.g., community health workers) have been documented.

Psychiatry training in Kenya is very much a reflection of the British School of Psychiatry for various reasons:

1. Kenya inherited directly the British school of psychiatry system including Mental health Acts which were lifted from British mental health acts prevailing at the time of independence and nearly all the pre-independence psychiatrists in Kenya were British
2. The post colonization Kenyan psychiatrists were all trained in UK by the British government and upon return they took both administrative and academic leadership replicating what they had learnt in UK. The approach was also adopted by those who went into private practice.

However, the current practice in Kenya is not an exact replica of the current system of training in UK. Current training has been influenced by the DSM III, IV, and V, where one of the authors of this chapter, Prof. David Ndetei, was involved in the revision of the cultural aspects of the DSM V. Other LMIC countries may adopt systems as guided by their predominant schools of thought.

Kenyan psychiatrists do realize that there are fundamental differences as far as cultural aspects are concerned. In the training of psychiatrists and medical students, it becomes necessary to expose the trainees to these differences, e.g., the presentation of depression is modified by cultural explanation of those conditions and less emphasis on psychological explanation which they may not quite understand; depression may be explained by Kenyan patients in the form of physical illness which they understand. Many people with depression may present with psychosomatic symptoms or even attribute depression to chronic malaria. The presentation of psychotic symptoms such as hallucinations may not be easily conceptualized as medical or psychological problems but attributed to external supernatural causes. How can anybody hear voices of people which other people cannot hear?

As a science, the model is very much a mix of American approach as well, because of the overwhelming influence of DSM III and V which are the handbooks for students. These are also supplemented by textbooks written and used for teaching in the USA, as well as the UK, e.g., the textbook of psychiatry published in UK. The sample questions that are used for testing students are adopted and adapted from those of the Royal College of Psychiatrists in UK and the American Board of Psychiatry and Neurology.

The Nursing Council of Kenya, in partnership with the Kenya Medical Training College introduced a diploma course in mental health nursing in 2012, and the "Kenyan Mental Health Policy 2015–2030" was recently launched. This policy is cognizant of the fact that mental health interventions are not only broad in nature but cut across different sectors, thus there is a need to utilize multidisciplinary and inter-sectoral platforms to adequately address mental health needs with an aim of attaining the highest standards of mental health in Kenya (Kenyan Mental Health Policy 2015–2030).

Despite all this, general knowledge and attitudes regarding mental disorders is very low amongst many members of the public. This knowledge includes information related to the types, risk factors, causes, psychiatric terminologies, and available interventions (both institutional and self-care based). This chapter is therefore dedicated to highlighting the need for education on mental health within the Kenyan context, in order to ensure that mental health is viewed as part and parcel of overall health, from the basic family unit to the national level.

This chapter will also focus on addressing access to mental health and institutional collaboration building on mental health literacy across the following community units: consumers of mental health services, the family unit, formal healthcare system, and informal health care systems.

Attributes of Mental Health Education in Low and Middle Income Countries

Given the diverse and mostly unmonitored number of models in mental health service delivery, there is need to educate consumers' mental health service providers and their support systems to promote overall mental health literacy in the community. In most instances, models used in LMIC settings often originate from developed countries and are adapted to suit local settings.

Various models of mental health education and literacy in various low and middle income countries have been documented and this section seeks to highlight key attributes of such models:

(a) **Affordable** – A recent study on the growth, inequality, and poverty in sub-Saharan Africa revealed that Kenya, Burundi, Madagascar have shown minimal improvement since the 1990s (Fosu 2015). Therefore, education models designed for such contexts need to be affordable to the majority of the population in order for the community to even be able to consider it. The Kenyan government has conducted several public campaigns to encourage adoption of the

national insurance fund which offers subsidized medical services at affordable monthly premiums, which can be used by patients seeking mental health services in public hospitals.

(b) **Promotion of Mental Health Services Scale-Up** – LMIC's are characterized by very low psychiatrist to population ratios. In Nigeria, for example, there are only 200 psychiatrists catering to a population of 200 Million people (Gureje et al. 2015). In order to address this huge treatment gap, the integration of mental health services in primary health care models is often the preferred system. This system has its challenges including reluctance by mental health professionals due to vested interests; however, it is one of the most widely accepted avenues for provision of mental health care for a huge population of people seeking mental health services (Group, L. G. M. H 2007).

(c) **Cultural Adaptation** – Methodologies and measures used to provide services as well as conduct research on the contribution of various models towards mental health promotion need to be contextualized and culturally adapted to suit local needs. Cultural adaptation can be achieved through several means including providing services in clients' native language and translating assessment and/or data collection tools.

(d) **Needs Driven** – Psychiatry often adopts a purely medical approach to the treatment of mental health issues and rarely takes into consideration social effects that dictate changes within the individuals' environment (Jenkins et al. 2010a). Different communities exist in different environments which influence their way of life and general perception of standards of living. It is therefore pertinent to adapt mental health education models to satisfy the needs arising from an individual's natural environment.

In 2005, the Kenya Ministry of Health (MOH) in partnership with the World Health Organization Collaborating Center, the Kenya Medical Training College, and the Kenya Psychiatric Association embarked on a project to increase the mental health literacy of mental health professionals by providing a cost-effective, five day interactive course in mental health, which adopted an intersectoral and health systems approach. As of 2010, 1673 professionals had been trained and the study showed a 35% mean score in improvement of knowledge within the first 1000 trainees. In addition, the study also showed an increase in networking with informal mental health service providers including faith-based healers, community chiefs, etc., in health facilities where trainees worked (Jenkins et al. 2010b). This education model was also adopted in Nigeria (Gureje et al. 2015), where mental health faculty were trained on various approaches towards community mental health using a similar curriculum.

Similarly, a study conducted on the role of traditional healers in the provision of mental health services in an urban, informal setting in Kenya revealed the need for increased training on the recognition and understanding of mental illness and the need for effective collaboration with formal mental health service providers. Furthermore there is a need to have the preferred treatment methods of traditional healers such as herbalists, tested by certified agencies to ensure they are fit for human consumption (Mbwayo et al. 2013).

Within the Kenyan context, there is growing interest in partnerships with government to incorporate locally generated evidence for promotion of mental health integration in primary health care and networking of formal and informal health care workers. In a recent study in Makueni County (rural Kenya), the county government supported an initiative to engage formal health care workers from 20 health facilities, community health workers, traditional and faith-based healers to build their capacity through training on screening of mental illness using the WHO's Mental Health Gap Action Programme (MhGAP) intervention guide. This was done in order to develop a sustainable referral channel between formal and informal systems for patients diagnosed with mental health symptoms. Furthermore, this training promoted increased mental health awareness, while maintaining community support and respect for each service providers' unique role.

The use of online-based platforms to promote education on mental health is also increasing in popularity. Online-based tutorials and courses have been used to provide mental health training from Western universities to local mental health care professionals. Webinars have also been used to increase supervision time between specialists and mental health care faculty and service providers across various settings.

Consumers of Mental Health Services

The Oxford Dictionary defines a consumer as "someone who purchases goods and/or services for personal use." A consumer of mental health services is an individual who seeks/pays for mental health services for their personal well-being. In Kenya, we have five main categories of mental disorders (i) common mental disorders such as depression, anxiety, etc.; (ii) severe mental disorders such as psychosis, schizophrenia, bipolar disorders, etc.; (iii) neurological disorders such as epilepsy, dementia, etc.; (iv) childhood disorders such as autism, attention deficit/hyperactivity disorder, etc.; and (v) alcohol and substance use disorders. Although age, gender, ethnicity, race, and other sociodemographic factors do not influence nature and occurrence of mental health illness in individuals, the severity of these conditions may be affected by various sociocultural factors in an individual's environment (Evans 2003).

Psychoeducation can be defined as a form of education therapy geared towards increasing knowledge on mental health illness to an individual receiving mental health care and in some instances, their family members, caregivers, or friends (Tol et al. 2011). According to research, consumers of mental health services who have received adequate psychoeducation on their nature, symptoms, treatment, and management of their illness tend to improve faster than those who are not as informed (Sörensen et al. 2006). In addition, majority of individuals who seek these services in the Kenyan system are often not aware of the condition they have the ways to effectively manage their manifestations aside from medication.

Moreover, there is little research on the quality or effectiveness of psychoeducation in Kenya. The common methods of psychoeducation for consumers of mental health services include (AIPC 2014):

(a) **Individual psychoeducation**: Focus on content and information related to an individual's specific needs. Mostly used when an individual requires/prefers confidentiality, initial interaction/exposure to formal psychiatry treatment, an individual is not comfortable sharing in the presence of many people, etc.
(b) **Group psycho-education**: Focus on educating clients on various aspects of their illness in a group format. This mostly involves only people with similar health issues and can relate with each other's experiences. This is not ideal when dealing with complex individual issues or instances requiring confidentiality.
(c) **Group psychoeducation in presence of family and/or caregivers:** This is mostly administered with only one consumer of mental health services accompanied by caregivers/family or friends. In some instances, multiple patients can be accompanied by their family/caregivers to one group session and focus on general issues.

There are several factors that influence the uptake of education on mental health issues amongst consumers; these include:

(a) Lack of individual awareness on presence of mental health issues as a general health illness: Most people living in low and middle income countries such as Kenya believe that symptoms related to mental health conditions are not a result of an actual illness but either personal lifestyle choices (e.g., substance abuse) or cultural beliefs (e.g., witchcraft) or social/communal beliefs (e.g., symptoms mostly related to a particular season) (Muga and Jenkins 2008). Therefore, elimination of these mental illness manifestations can be brought about by changes in lifestyle by the individual, removal of the ill-omen causing the symptoms through exorcism or prayer and withstanding the environmental conditions accompanying a particular season with the hope that it will get better at the onset of the next season.
(b) Lack of information regarding availability of mental health services: Given the fact that Kenya faces a huge scarcity when it comes to mental health service provision or focus on national government on mental health advocacy, a majority of Kenyans, regardless of their personal encounter with mental health illness, are not aware that mental health illnesses are indeed treatable (Eaton et al. 2011). Furthermore, most people are not aware that there are other institutions, other than the national teaching and referral hospital for psychiatric conditions, Mathari hospital, providing mental health services, have the capacity and/or personnel to adequately deal with these illnesses.
(c) Burden of mental health care workers: Due to the scarcity of trained mental health care workers throughout the country, one psychiatrist or psychiatry nurse can tend to clients coming from several counties in the country. For instance, Machakos County hospital has one psychiatrist who also serves clients from neighboring Makueni, Kajiado, Kitui, and at times Nairobi counties, i.e., approximately 3 million people. Therefore, given this huge volume of people seeking such services, it is almost impossible to give each client enough time to ensure that they not only understand their condition but gradually learn how to effectively manage it; most health workers often resolve to administer treatment and schedule follow up appointments.

As a result, effects of lack of psychoeducation among the consumers of mental health services can result to: lack of adherence to prescribed treatment methods (medication and counseling) when symptoms reduce, difficulty in identification of triggers and personal support systems thus not able to manage subsequent relapses, self-stigma arising from personal and communal ridicule and rejection, lack of trust in the available mental health care services due to the apparent failure of their treatment schedule to completely rid them of their condition, as is the case with most health-related issues, and result to seeking alternative sources of treatment.

To address this gap, various private stakeholders have joined hands with national government to introduce or complement existing platforms on pyschoeducation for consumers of mental health services. For example;

(a) Users and Survivors of Psychiatry in Kenya, an organization whose membership is comprised of people who were previously or currently receiving treatment for various mental health issues across several counties in Kenya, conduct regular group sessions among their members to promote an environment to share personal experiences and management techniques regarding mental health services and illness management.
(b) One outcome of the Community Recovery Achieved Through Entrepreneurism, a pilot project conducted in Machakos County by Western University (Canada), in partnership with Queens University and Africa Mental Health Foundation focusing on recovery of people living with serious mental illness through employment and psychoeducation, is the development of a low-cost, contextualized toolkit of psychosocial rehabilitation that focuses on educating individuals on their illness and providing them with skills towards management of their illness through various techniques such as identifying triggers, support system, workplace wellness, and dealing with social and self-stigma.
(c) In a similar initiative carried out in Kibera urban informal settlement in Nairobi County, Kenya, women diagnosed with Post Traumatic Stress Disorder (PTSD) receive regular group counseling through Group Support Psychotherapy Manual in the presence of mental health clinicians, social workers, and community health workers.

Mental Health and Illness Education Within the Family

The World Health Organization (WHO) defines health determinants as "the range of personal, social, economic and environmental factors which determine the health status of individuals or population." General health and well-being of an individual is often influenced by the stability of the surrounding social, political, and cultural environment. A family is the primary source of learning and development for an individual from birth and continues to act as a pillar of support throughout the individuals' lifetime. Therefore, a family is a critical determinant to the overall health of an individual, including mental health and wellness.

As the popular saying goes, "it takes a village to raise a child" goes to show that the responsibility to create and nurture a positive environment for growth and overall well-being of an individual belongs to the entire community/clan/village. In a traditional African set-up, the concept of an orphan is almost nonexistent owing to the fact that the family unit was not bound by blood ties only but extended to clan and community ties. This goes to show that even in adversity, an individual will always have a support system to turn to. However, the African community is highly reverent on issues touching on religion/cultural belief norms (Ngui et al. 2010). Mental health unfortunately has from time immemorial been regarded as a taboo issue, symbolic to curses or misfortunes, and as usual in such cases, communal support is replaced by communal discrimination. Most people suffering from mental health issues are often alienated from society and those with mild manifestations of the illness do their best to suppress these symptoms for fear of rejection.

Although modernity continues to erode these communal family ties especially in urban settings, the burden of mental illness on a family still remains a taboo issue and with it, a great deal of stigmatization on the patient and family members. Coupled with the cost of accessing treatment to mental health issues as well as the other numerous issues families living in low and middle income countries face, mental health is often viewed as an immense burden to the family.

Research for a long time has indicated that social support is one of the strongest drivers of mental health recovery (Ganster and Victor 1988). Family support has one of the highest impacts towards this social support. The family is often the initial indicator of how a person suffering with mental illness will manage their illness. With good family support, mentally ill patients are able to be more at ease with their condition, able to manage their symptoms, identify their triggers, and clearly identify other supports within their environment with the help of their families. In contrast, people from families who stigmatize and apprehend their illness often struggle with illness management and adherence to treatment.

From our experience, there is an increase in involvement of family in mental health–related initiatives (Topor et al. 2006). It is also quite common, given the resources, to find nurses involving family in counseling sessions or regular clinical follow up or community health workers attached to mental health services in the community conducting home visits to assess progress in individuals' management of the illness and adherence to treatment, especially from the family's perspective. In as much as family members may do little to change the course of their loved one's illness, their contribution towards improving their overall quality of life is essential.

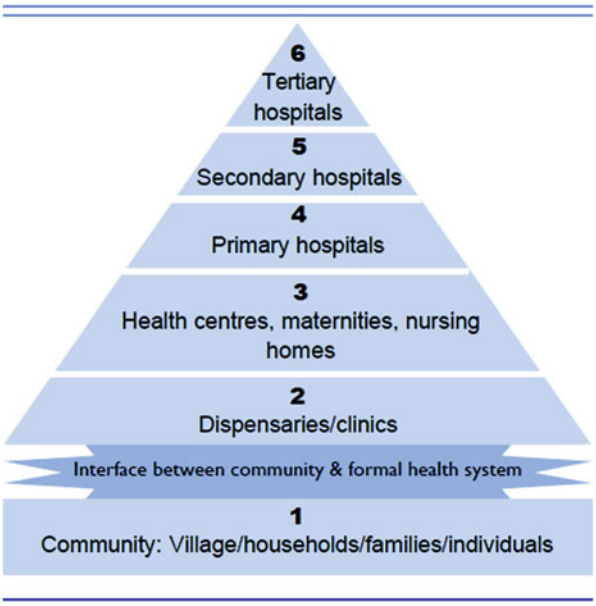
Through psychoeducation, family members are able to understand the nature and associated triggers of their loved ones' illness. In addition, it increases their capability to better communicate to their family member, improves how they cope with the financial and social burden associated with caring for and interacting with a person living with mental illness on a daily basis with the general aim to help the individual to be comfortable with the support she or he receives from the family, increases their ability to share on what they feel, and increases possibility to reduce occurrence of relapses (Ohaeri 2003).

Education on Mental Health Within Formal Health Systems

Over the past decades, there has been gradual progress in development of formal mental health services in low and middle income countries. Existing literature attributes this slow progress to various factors including resistance to decentralization of mental health services, little priority awarded to mental health in public health agendas, and scarcity of mental health human resources.

According to the Human Resources Strategy 2014–2018 of the Ministry of health In Kenya, there are 7795 health facilities in Kenya of which 3956 are government facilities, 2652 private facilities, 881 faith-based facilities, and 306 NGO run facilities (Republic of Kenya Ministry of Health 2014). The new constitution further classifies national government health system in six main levels:

1. National Referral Hospital (or Tertiary Hospitals)
2. County referral hospital (or Secondary Hospitals)
3. Sub-county hospital (or Primary Hospitals)
4. Health center
5. Dispensary
6. Community health worker (Meyer and Ndetei 2016)



Source: KHSSP 2005–2010

In Kenya, the psychiatrist to population ratio is approximately 1: 500,000. Furthermore, on average, 42% are based in a public health facility, 24% teach in learning institutions, and 34% in private practice. Furthermore, only 20% of the government facilities and 11% of the private practices with psychiatrists are based in rural areas

(Ndetei et al. 2007). It is also quite common to find majority of those based in public facilities run private practices concurrently thus further decreasing the focus and overall quality of service provided at the public institution.

As at 2010, Kenya had only 500 trained psychiatry nurses of whom less than 50% are practicing psychiatry in public health facilities while the others branched off to other disciplines or in NGO's. As a result, in the current situation, majority of the trained mental health professionals are only found at the National Referral, County Referral Hospitals, and a few Sub-County Hospitals (Jenkins et al. 2010a). Unfortunately, most often this is not the case. Majority of the mental health workers especially in the sub-county hospitals have not undergone complete training in psychiatry.

In a study targeting final year medical students across 20 countries, only 4.5% were definitely interested in pursuing psychiatry as a career (Farooq et al. 2014). There exists very limited opportunities for training and development of health workers in Kenya as a form of motivation by the government (Mathauer and Imhoff 2006), especially with regards to mental health therefore making it difficult for the service providers to remain up to date with the relevant trends and methods to effectively treat mental health–related illnesses. This therefore provides deep insight into the plight of mental health service distribution and access in Kenya, which resonates with the global disease burden and human resources gap in mental health.

In our experience, due to poverty, poor transport and communication networks, lack of adequate and timely provision of medicines by the government, and numerous sociocultural factors, mental health care workers in rural Kenya often bear the brunt of this burden as compared to their counterparts in urban areas (Brownie and Oywer 2016). This coupled with the shortage of trained staff in these rural facilities often forces clinicians from other disciplines to double up as mental health service providers thus reducing the accuracy and quality of intervention provided at these facilities. This exacerbates the gap in mental health knowledge amongst mental health providers in Kenya.

In accordance to the new constitution guideline towards devolution, health services management and operations was devolved from the national level to county level. This in turn provides opportunity for private sector stakeholders to gain direct access or audience with decision makers within the health system in a bid to promote initiatives surrounding advocacy, capacity building, and policy formation within mental health.

A similar initiative in Machakos and Makueni County provided online training for formal and informal health workers on the identification and treatment of substance use disorders (Mendenhall et al. 2016). As a result, mental health workers are in a better position to access knowledge and information geared towards an increase in quality of service provision, employee motivation, and job satisfaction generated from positive treatment outcomes.

Education on Mental Health Within Informal Mental Health System

Informal health systems in this case refer to systems where provision of healthcare or health-related services are done by people with no formal training in healthcare. These care providers significantly contribute to the overall health system, not only

mental health, in developing countries as it provides for the bulk of health services consumers, especially the poor. (Sudhinaraset et al. 2013)

There exists no concise definition relating to the nature and structure of informal health systems; they are made up of heterogeneous components guided by different frameworks relating to areas of focus, treatment methods, provision and payment of services, operational environments, etc.

Research on informal health systems in the developed countries commonly relates to family members, care givers, laypeople, and expert users of healthcare. In developing countries, this list goes on to include traditional healers, faith-based healers, herbalists, and community health workers. Traditional medicine is one of the oldest forms of health service provision in most communities.

A study that focused on uptake of informal mental health services in an informal settlement in Kenya pointed out that out of the total patients that visit traditional healers, 95% of them are often satisfied with the services (Mbwayo et al. 2013). A qualitative study conducted in South Africa found that community members choose traditional healers because they do not improve after visiting health facilities, doctors do not explicitly explain the cause of their ailments like the healers and the healers are readily available with shorter waiting lines. As a matter of fact, 70% believed that traditional healers are more holistic in their approach to health (Mathibela et al. 2015).

Informal mental health care services are often frowned upon by practitioners in the formal system because of:

(a) Unwarranted harmful treatment strategies – It is common to find that most traditional or faith-based healers attribute mental illness to witchcraft or curses thus resulting in unconventional methods to rid the individual of these "evil spirits." These exorcism rituals often cause physical and physiological harm to these individuals as the root cause of the illness is not adequately addressed. (Keikelame and Swartz 2015)
(b) Mental health care knowledge and practices – Despite the fact that informal mental health care workers have no formal training, most are capable of clearly identifying mental health–related symptoms and able to classify depression, schizophrenia, bipolar disorder, and drug addiction as mental condition. However, they usually provide alternative forms of treatments, e.g., herbs, prayers, rituals as solutions to these disorders which then lead to delayed proper treatment of these illnesses. Most of the times, people with mental health conditions in rural areas often visit the formal mental health systems when everything else has failed and/or one has lost the ability to manage his/her symptoms (Mbwayo et al. 2013).

As highlighted earlier, there exists a huge gap in treatment, availability of service and human resources. Given the preference and demand for informal mental health care service providers, especially in rural settings where there is little access to such services, there exists an opportunity to improve the mental health treatment gap in integrating both formal and informal mental health systems through training and development.

Several mental health programs and initiatives in Kenya and across Africa have made positive strides towards integration of informal and formal mental health systems through capacity building efforts aimed at increasing knowledge on mental health conditions focused on debunking associated communal myths on mental health, sensitization on mental illness as a treatable and manageable condition, encourage re-integration of people living with mental illness within the community, and general information about local health institutions offering basic mental health services.

Subsequently, these initiatives have in turn shown positive uptake from traditional healers especially in acknowledging the need for formal treatment, timely referral to hospital systems, and their unique role in positively influencing community perception and general atmosphere towards mental health (Musyimi et al. 2016; Bruni 2014).

Conclusion

Although there have been extensive studies on the mental health treatment gap in low and middle income countries and the focus on integration of mental health service provision in primary health care as a possible solution in bridging this gap, there is little evidence to show the efficacy and the various implementation strategies of this proposed model.

Traditionally, mental health education has been associated with formal systems of delivery and practice, i.e., institutions of learning or health service providers. With the recent shift to integration of mental health service provision, the role of the consumers, support systems/family, and informal health service providers cannot be ignored. Existing literature supports utilization of available human resources in the communities who have had prior exposure to addressing mental health issues as they represent a resourceful pool that would provide complementary services hence strengthening the mainstream health care system in resource-limited settings. This includes expert patients or patients who have received psychiatry services for a long period of time. They understand several issues associated with mental health treatment and have developed mechanisms to cope with the long-term management of mental health conditions. Through peer to peer interaction, people who have recently been diagnosed with mental health issues are able to relate and find comfort in the company of the expert patients with the proper education on mental health systems. These consumers could be a vital source of information to others thus contributing to creation of awareness on mental health systems.

Family members are usually the most prominent support source for people living with mental illness and more often than not, due to the stigma associated with mental health, family members are at times the only company a person living with mental health issues would want to interact with. The pressure on family members to adapt to the new situation brought about by a loved one's illness may be at times too much to bear. Family members ought to be educated on mental health issues and how best to support their loved ones in their long-term journey to recovery thus improving

overall communication and coping skills which provide an enabling support environment for the patient.

There is need for continued efforts on improving the national focus on mental health care service provision through research and critiques on existing policies. This can only be achieved by developing cost-effective, innovative measures to support the improvement of mental health service delivery. These measures will be efficiently adopted when all direct and indirect mental health stakeholders can understand the basics of mental health, access and effectively utilize the existing mental health services. Educating all stakeholders on mental health and illness is therefore one of the existing platforms to achieve this. Finally, future efforts towards research on the effectiveness and applicability of the existing mental health and illness education models would be recommended as the evidence generated will contribute towards defining innovative and cost-effective models of increasing mental health literacy and overall reduction in the mental health treatment gap.

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Forensic Psychiatry

11

Kris Goethals

Contents

Abstract

In this chapter, the literature on teaching, training, and research in forensic psychiatry in Europe and the United States will be reviewed. In general, there is a small body of literature available about this topic. Next, key themes in education and training in forensic psychiatry will be discussed, namely, the interface between forensic psychiatry and the law and mental health legislation; risk assessment and risk management, professional attitude, and ethics; and clinical expert/witness training. Due to the interface between teaching, training, and research, some issues

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about research will be mentioned. Consequently, the Ghent group will be discussed with special attention to topics that this group considers. Also the summer seminar in forensic psychiatry and psychology in Europe will be introduced. And finally, there will be special attention to future prospects and to the new special professional qualification in forensic psychiatry in Belgium.

Keywords
Education · Training · Forensic psychiatry · Ghent group meeting · Summer seminar · Belgian professional qualification

Introduction

In the Netherlands, the first professor in forensic psychiatry had its chair in a medical faculty since 2003. All other chairs are based in a faculty of laws. Above that forensic psychiatry is not a subspecialty in many European countries, among the Netherlands, nor is it a mandatory part of the curriculum of residents in psychiatry or medical students. Residents in psychiatry can choose a course in forensic psychiatry, but only three afternoons are dedicated to forensic psychiatry as an essential part of the training in psychiatry. A psychiatrist trained in the Netherlands can work in forensic psychiatry without any apprenticeship in forensic psychiatry or experience in the field. For experts, there is a well-organized course in forensic psychiatric reporting organized by the Dutch institute of forensic psychiatry and psychology (NIFP). The majority of research in offenders with a psychiatric disorder is conducted by research psychologists. It can be emphasized that a lot of these offenders have a disorder with an important biological etiology, e.g., schizophrenia spectrum disorders (Lanzenberg and Kasper 2005), or a personality disorder (Popma and Raine 2006; Yang et al. 2008; Paris 2007; Van Haren et al. 2008). In several European countries, there is a lack of education, training and research in forensic psychiatry.

In this chapter, the literature on training and research in forensic psychiatry in Europe and in the United States will be reviewed. Next the Ghent group will be discussed with special attention to the topics that this group considers. Also the summer seminar in forensic psychiatry in Europe will be introduced. And finally, there will be special attention to the new special professional qualification in forensic psychiatry in Belgium.

Education and Training

In their review paper, Folino and Pezzotti (2008) reported that there are only a few publications with regard to training in forensic psychiatry. According to them, formal training and research experience are the best manner to develop expertise in the field of forensic psychiatry. They stated a plea for an academic support of forensic psychiatry

and for practical guidelines for experts who have to witness in court. Several authors concluded that there are some European countries with a well-organized curriculum (e.g., Germany) or with a subspecialty in forensic psychiatry (e.g., United Kingdom, Ireland, and Sweden). However training requirements and training standards varied among countries (Layde 2004a; Gunn and Nedopil 2005; Scott 2005). Taylor and colleagues (2009) highlighted the difficulties and some solutions with regard to learning research skills in forensic psychiatry. Above that some authors agree that a basic training in forensic psychiatry should be mandatory for all residents in psychiatry but also for medical students (Lewis 2004; Pinals 2005; Rotter and Preven 2005; Reiss and Chamberlain 2001). British research showed that residents in psychiatry were not introduced in penitentiary psychiatry in an early state of their apprenticeship (Reiss and Famoroti 2004). Since that time there is little change in this situation, although it is vital to attract future psychiatrists in the field of forensic psychiatry.

Cultural aspects such as sensitivity for the mother's tongue of the patient, religion, and country of origin are important in the broad field of psychiatry and especially in forensic psychiatry. This cultural sensitivity is extremely important in expert reporting. Knowledge of culturally different expressions of some perceptual disorders in particular and of psychiatric disorders in general are essential in order to give evidence to the accountability of a suspect (Layde 2004b). In some European countries, psychiatrists are asked to answer this question in court. For example, in the Netherlands, the expert psychiatrist has to advice the judge about the degree of accountability of the suspect. There is a gradual scale of accountability, namely, five degrees, so there is more room for gradations of diminished responsibility. Therefore it is necessary that they know transcultural aspects in suspects with a psychiatric disorder.

Wettstein (2005) stressed the importance of accreditation for experts with a mandatory training, tests, and preferably recertification. In general, we can say that there is a lack of literature in the field of training in forensic psychiatry in several European countries. For the Belgian and the Dutch situation, we could not find any paper about this topic.

Key Themes in Education and Training in Forensic Psychiatry

The following key themes will be considered here: the interface between forensic psychiatry and the law and mental health legislation; risk assessment and risk management, professional attitude, and ethics; and clinical expert/witness training (Howitt and Thomson 2015).

The Interface Between Forensic Psychiatry and the Law and Mental Health Legislation

Mental health legislation, which includes a wide variety of legal topics and pertain to people with a diagnosis or possible diagnosis of a mental health condition and to

those involved in managing or treating such people, varies across Europe. A well-trained forensic psychiatrist must have a good understanding relevant to their role of the laws in their jurisdiction. This is important both for daily forensic psychiatric practice and for undertaking medicolegal work. In order to gain the required knowledge and experience in this area, trainees need specialist teaching and supervision. Firstly they must develop an awareness of the relevant legislation. Once a theoretical knowledge of relevant legislation has been acquired, the trainee must undertake medicolegal work under supervision. Ideally this should involve consultation prior to the patient being assessed, supervision of assessment and review, and discussion of draft reports. Only by undertaking such work the trainee will develop an understanding of the legal tests and become familiar with the correct terminology. The supervision of such work also provides the trainer with an opportunity to assess progress and provide feedback.

Risk Assessment and Risk Management

For those working within forensic psychiatry, risk assessment is paramount to identify and manage risk of harm both to patients and to others. But risk management should always be the second step. There are a variety of tools in which clinicians can undertake training and can utilize to recognize and classify risk including actuarial tools like the STATIC-99/STATIC-2002 (Hanson and Thornton 1999, 2002) for sex offenders and Structured Professional Judgment (SPJ) tools like the HCR-20-V3 (Douglas et al. 2013) for general violent offending. The 2007 Briefing Document "Giving up the Culture of Blame. Risk Assessment and risk management in psychiatric practice" (Morgan 2007) concluded that interventions may decrease risk in one area only to increase in another and that risk cannot be eliminated. For example, an offender with a schizophrenic disorder and a comorbid personality disorder can become less psychotic by taking antipsychotics but can then get more pronounced personality traits, such as hostility or callousness. They also concluded that a perfect risk management system would have only a modest impact on rates of homicide by mentally disordered offenders and may influence debate from a position where the greatest good may be done to the greatest number of people. For this reason, residents in forensic psychiatry (and preferably also residents in general psychiatry) must have guidance and teaching not only in identifying risk but in conceptualizing it and being able to manage personal and professional anxiety associated with informed risk management. Therefore supervision is mandatory for residents and young psychiatrists in order to cope with feelings of anxiety.

Professional Attitude and Ethics

For psychiatrists working within the field of forensic psychiatry, the four principles of biomedical ethics must be considered (Beachamp and Childress 2001). These principles are:

- Respect for autonomy – respecting the patient's right to make decisions around their own health care
- Beneficence – acting in the patient's best interest
- Non-maleficence – doing no harm
- Justice – fairness concerning the distribution of resources and who gets what treatment

For trainees in forensic psychiatry and forensic psychiatrists, the pursuit of these ethical standards is complicated by not only having to consider both the general public and the individual but also in some countries by the dual roles of providing care and treatment while providing expert opinion and evaluation to the court, often via third parties (e.g., probation officers). While most experience in this field will be acquired through practice under supervision during training, formal teaching may be of benefit. The Madrid Declaration on Ethical Standards for Psychiatric Practice, most recently updated in 2011, sets out an internationally applicable ethical code on which to base practice and teaching. This declaration devised by the World Psychiatric Association (WPA) also provides guidance concerning 16 specific situations. Three of them are of relevance for trainees in forensic psychiatry and forensic psychiatrists: torture, death penalty, and dual responsibilities of psychiatrists.

Working with mentally disordered offenders can evoke strong feelings within the professional team providing their care. This is something for which general training can leave trainees poorly prepared to manage their own feelings and complex team dynamics, especially when an offender had a serious and terrible index offense, such as murder of a child or sexual abuse of a child. Attending a case-based Balint style discussion group may be helpful in understanding and managing some of the complex emotions generated as may considering the countertransference evoked (Riordan 2008; Reeder and Schatte 2011). In a Balint group, participants meet regularly with a leader and discuss a clinical case brought by one of the participants. Discussion focuses on the patient-doctor relationship and is useful for discussing cases when strong feelings have been evoked in the trainee or psychiatrist. For cases in which sexual boundaries are exceeded, the work of Tschan (2014) is a useful tool.

Clinical Expert/Witness training

In most European countries, one role of forensic psychiatrists is to provide an expert opinion on a patient's mental health to courts or other legal bodies. This evidence can be written or verbal. Giving verbal evidence in court can be an anxiety provoking experience for which trainees should receive guidance, training, and support. This will reduce anxiety and improve the impact of evidence delivered. Key components are training on the content of the written report which forms the basis for any examination, knowledge of court proceedings and etiquette, advice regarding delivery of evidence, and practice in undergoing cross examination. Such teaching can be delivered on an informal basis, such as during a supervision session, or in a more formal environment. Some bodies and agencies provide specialist training in this

field, such as the Dutch Ministry of Justice or the Swiss Society of Forensic Psychiatry. These trainings involve role-playing techniques, video recordings, and watching experienced colleagues in practice, among others.

Research

Due to the fact that research is intertwined with training, we have to consider some research issues in this chapter. In the United Kingdom, Taylor and colleagues (2009) have expressed their concerns about the lack of resources for academic forensic psychiatry and about the decline of the number of trainees in forensic psychiatry between 2001 and 2004. Academic forensic psychiatrists have to divide their time between clinical practice, policy duties, giving lectures, and research. In Germany, there are full-time chairs in forensic psychiatry at ten universities, but finding resources for research is also a problem.

Several authors have highlighted the problem of tremendous savings and as a result a lack of well-trained professionals. In this situation, professionals from other countries with a poor developed training and education fill this gap. Other authors emphasized the importance of the participation in research and in writing papers for trainees in psychiatry (Bloom 2007; Simon 2007). The development of research skills and writing scientific papers can avoid stereotypes about forensic psychiatry, for example, the myth of untreatable patients or the myth of being an unscientific discipline. And by doing these tasks, younger forensic psychiatrists can be assisted by experienced colleagues and academic forensic psychiatrists in developing new treatment models (Goethals and Van Lier 2009).

Future Prospects

First of all, a well-defined educational program in forensic psychiatry should be developed for residents in psychiatry. We can refer here to the WPA Section of Forensic Psychiatry that has its documents available online. Recently, the EPA Section of Forensic Psychiatry completed a guidance paper on forensic psychiatry in order to support evidence-based assessment and treatment of mentally disordered offenders. These young doctors can learn to cope with judicial measures and to get skills in order to switch between several roles they have to take in the interface with criminal law. More education can also result in a better understanding of and more enthusiasm for the field of forensic psychiatry. More (future) psychiatrists can hereby be attracted to take a position in forensic psychiatry. The earlier mentioned mandatory module about expert reporting could be an excellent starting point.

What can be said about the lack of training for “forensic” psychiatrists in several European countries? Let us consider the Belgian or the Dutch situation. The fact that there is only one professor in adult forensic psychiatry at a medical faculty is just a symptom of a larger problem. In some countries around Europe, there exists an excellent training in forensic psychiatry (Gunn and Nedopil 2005). Countries with a

poor or nonexisting curriculum could profit from this knowledge and experience. Preferably there should be a special professional qualification or a subspecialty in forensic psychiatry. In the next heading, we will elaborate the special professional qualification in Belgium.

A recognition of forensic psychiatry as a special professional qualification or a subspecialty can promote research in this field by forensic psychiatrists. This latter is an important pain point. Most research in forensic mental health is done by psychologists. In many European countries, there is a lack of forensic psychiatrists, so their core business is taking care of patients, and not doing research. If research skills should be learned and if trainees and forensic psychiatrist should have co-authorship of at least one paper, then the downward spiral of recruiting good doctors could be stopped. All clinicians – and not only those with academic qualifications – could then become better teachers, trainers, and supervisors. This goal is crucial since there is more and more emphasis on evidence-based practice in every field of medicine (Khan and Coomarasamy 2006; Van Tilburg 2008). Present forensic psychiatry leans too much to general evidenced-based psychiatry. We should all be aware of the fact that our forensic psychiatric patients differ from general psychiatric patients with regard to the complexity and comorbidity of their psychiatric disorders but also due to their problematic history and several circumstantial conditions that are often risk factors (Goethals 2008; Van Marle 2000).

In many countries, funding is the largest obstacle for other tasks of psychiatrists, such as education, training, and research. Due to financial motives, psychiatrists with less clinical tasks are less attractive to hospitals, health insurances, and even pharmaceutical firms. More training and more research incentives could result into better trained psychiatrists and more evidence-based clinical practice. A serious decrease in costs in forensic psychiatric care could also be an outcome. Besides these advantages, psychiatrists should also take a more proactive attitude in the field of forensic psychiatry, have more attention to the medical roots of their discipline, and take a stand in order to improve forensic psychiatric services (Goethals and Van Lier 2009). Service development is the laboratory of forensic psychiatry. We ought to improve treatment conditions and in- and outpatient facilities for forensic psychiatric patients. And we ought to communicate this mission to our colleagues and to the broader world.

In the following headings, we will outline two important initiatives of European collaboration with regard to training and teaching in forensic psychiatry, next to official bodies such as the Forensic Psychiatry Section of the European Psychiatric Association (EPA) (website: http://www.europsy.net/sections/?id=7).

The Ghent Group Meetings

The Ghent group is an important European network for forensic psychiatrists (Nedopil et al. 2012). The group focuses on training but also delivers specialized education in forensic psychiatry in several European countries, mostly in the European Union, but also in countries such as Norway and Switzerland. Its name

derives from the first meeting in Ghent, Belgium, in 2004 (Gunn and Nedopil 2005). The aim of this group is not to harmonize justice or clinical practice in various countries around Europe but rather to learn from European colleagues how to deal with medical and judicial questions and how to communicate differences in clinical practice to a learning audience.

Soon it became obvious that the vision on and the used methods in forensic psychiatry are strongly influenced by the historical background of judicial systems in different countries but also by the way whether or not criminal law wants the involvement of the psychiatric discipline. A black page in history is the role of (forensic) psychiatry in Germany during the Second World War. Psychiatrists were abused by the political regime and the economic situation, whereby they contributed actively to eugenics and euthanasia of vulnerable people. But also in other countries outside Germany, psychiatry and forensic psychiatry were abused for political reasons. This led to the fact that the reputation of the medical discipline was severely hurt. By studying historical backgrounds in other countries, we can prevent making the same mistakes of their past by taking the wrong decisions in our own country (Strous 2007).

The members of the Ghent group agreed very quickly about a common definition of forensic psychiatry, namely, "a medical specialty based on detailed knowledge of relevant judicial determinants, civil law and criminal law systems, mental health and the association between psychiatric disorders, antisocial behaviour and delinquency. Her aim is the evaluation, the care and the treatment of psychiatric disordered offenders and of others who need equivalent care. Risk assessment, risk management and the prevention of further victimization are key concepts." As a group, we are also convinced that ethical guidelines of general psychiatry are applicable to forensic psychiatry.

One of the recurrent themes is the practice of teaching and training in forensic psychiatry. From the knowledge that the evaluation and treatment of psychiatrically disordered offenders are multidisciplinary tasks, the group could explore the possibilities for multidisciplinary and interdisciplinary teaching and training. In several countries, there is a multidisciplinary training staff (psychiatrists, psychologists, and lawyers, among others) to teach and train forensic psychiatrists.

Finally it is important for the Ghent group that residents in forensic psychiatry and young forensic psychiatrists can participate and be involved in the organization of these meetings. It is the mix of experienced psychiatrists and newcomers in the field that makes these meeting very fruitful. But financial limitations can prevent residents in forensic psychiatry to participate. By a continuous lack of support from European training organizations, the initiative from forensic psychiatrists of the Ghent group grew to develop a summer seminar.

An extraordinary example of multidisciplinary teaching and training is "The School of Forensic Mental Health" in Scotland that was founded in 2007 (website: http://www.forensicnetwork.scot.nhs.uk/school-of-forensic-mental-health/).

In that time, there were important changes in laws, new services, and new initiatives in Scotland. The School of Forensic Mental Health was developed to meet these needs and is a virtual school with an administrative center but delivering

training usually on a multidisciplinary basis across Scotland using a variety of teaching methods. The school organizes a range of training events, clinical forums, and special interest groups, coordinating research and teaching across the country.

There is a short program course, postgraduate qualifications such as a Master of Science degree in Forensic Mental Health delivered electronically which has four online modules:

- Mental disorders and the law; treatment and interventions for mentally disordered offenders
- Problem behaviors
- Risk assessment and risk management
- Evaluating evidence to develop research and inform practice.

One teaching resource developed by the School of Forensic Mental Health is the "New to Forensics" teaching program (see website: http://www.forensicnetwork.scot.nhs.uk/school-of-forensic-mental-health/new-to-forensic-suite-of-programmes/).

"New to Forensics" is a learning tool developed between National Education for Scotland and the Forensic Network. It is applicable for clinical and nonclinical staff and is multidisciplinary in approach. A mentor, who is an experienced forensic mental health worker, supports a student. It includes patient case scenarios from high secure psychiatric care to community care. This Scottish school is a model to which other countries can mirror.

Summer Seminars in Forensic Psychiatry in Europe

In 2010, the first seminar was held in the monastery of Irsee (Bavaria, Germany). Since then, it is an annually recurring training. The trainers are based in several European countries, and among them there is a professor of international criminal law who is responsible for the theoretical underpinnings of the judicial lectures and discussions.

The format of the seminar exists of a combination of lectures and group work with case vignettes (Nedopil et al. 2015). The aim of the seminar is to make young European forensic psychiatrists and psychologists aware of common aspects and differences in forensic psychiatry in various European countries. Another aim is to learn from each other and from renowned trainers how to improve their own skills and at the same time improve forensic psychiatric services in their own country or region. Participants follow the pathway of offenders through the system of different European countries and thus learn about the principles that govern the methods and the practice of their work and especially the treatment of mentally ill offenders at the interface of law and psychiatry in different parts of Europe (Nedopil et al. 2012). Some of these pathways are already published in a paper (Hillier et al. 2012).

By using this method, participants do not only learn about systems in other countries, but they can also better understand their own judicial system. The task is to explain these issues to colleagues without or only a little experience means that

no one can hide behind some knowledge assumptions. By role-playing, participants can take away certain prejudices and evoked emotions and disappointments with stakeholders involved in criminal proceedings, such as the judiciary or the court. By this intense training, participants can contribute to a better understanding of each one's own systems. This summer seminar can be considered as an example of multidisciplinary and contemporary way of teaching and training in forensic psychiatry.

Special Professional Qualification in Forensic Psychiatry in Belgium

Since 1998, Belgium has been repeatedly condemned by the European Court of Human Rights for the detention of internees in inappropriate facilities. These detentions needed structural solutions, especially with the building of two high-security hospitals for internees in Ghent and Antwerp. In 2014, the Royal Academy of Medicine of Belgium formulated an advice with the following statements:

1. There is a need for the recognition of a special professional qualification in forensic psychiatry, for which a proper interuniversity training program should be worked out.
2. In the context of the enhanced scientification of psychiatry in general, special attention should be given to research in forensic psychiatry.
3. General health care and psychiatric care in prisons should no longer be a responsibility of the Ministry of Justice but that of Public Health. In this respect, important accompanying measures should be taken, such as funding through social insurance. These measures are urgent in connection with the arrival of the two high-security hospitals in Flanders.

The training requirements leading to the special qualification in forensic psychiatry consist of three parts:

– A theoretical training (interuniversity organized seminars over a period of 2 years) with a final exam. An accreditation committee decides which educations are suitable for this.
– A period of apprenticeship related to the primary working field (treatment or expert reporting). The candidate has to submit a training plan which the accreditation committee has to approve.
– A continued theoretical training.

With regard to the theoretical training: at the start, a master degree is necessary, allowing access to courses such as the interuniversity academic education "Forensic Psychiatry and Psychology," organized by four Flemish universities. During this education, sufficient attention should be given to the development of multidisciplinary

collaboration among psychiatrists, forensic psychologists, social workers, nurses, criminologists, and other disciplines.

Mandatory modules are:

introduction to criminal and procedural law; introduction to youth and family law, including the relinquishment; and an overview of forensic psychiatric services, multidisciplinary work,

forensic psychopathology, risk assessment, treatment inside and outside prisons, pharmacotherapy in a forensic psychiatric context, brain imaging, ethics and deontology,

expert reporting on victims, and capita selecta.

Pending the organization of an appropriate accreditation system at a European level, the Belgian accreditation committee should evaluate other trainings and foreign trainings with regard to the content and the usability in a Belgian context.

With regard to the apprenticeship: depending on the primary work field (treatment or expert reporting), there are two orientations:

1. Treatment: an internship under the supervision of an approved training supervisor, in an inpatient forensic psychiatric service, penitentiary or extra-penitentiary (800 h in a period of maximum 3 years). A part of the internship can take place in an outpatient forensic psychiatric service. This internship can start in the second year of the theoretical training.
2. Expert reporting: an internship under the supervision of an approved training supervisor (a forensic psychiatric expert) (also 800 h in a period of maximum 3 years). The expert reports have to be done on behalf of the judiciary. An average of 40 expert reports should be completed during the internship. Here again, the internship can start in the second year of the theoretical training. The fee of every expert report is paid by the Ministry of Justice.

The approved training supervisors are – after a transition – psychiatrists with this special professional qualification with at least 8 years of experience.

With regard to the continued theoretical training: this training is mandatory for maintaining the accreditation.

Next to these three training conditions, a minimum professional activity is required:

1. Or at least an average of 10 h a week dedicated to forensic psychiatric treatment activities, measured over a period of 5 years
2. Or at least an average of ten expert reports per year, measured over a period of 5 years.

Finally, it is recommended that the competent authority would establish a mandatory format for reporting criminal expert reports. In designing this model, the Section of Forensic Psychiatry of the Flemish Psychiatric Association and the Flemish Ministry of Public Health's Accreditation Committee should be involved in the developing of the model.

Conclusion

In several European countries, there is insufficient attention to teaching, training, and research in forensic psychiatry, especially from the medical-psychiatric discipline. Notwithstanding this very difficult context, there are excellent examples of teaching and training across Europe. Countries with a nonexisting or poorly developed program could profit from these experiences. Also in the Netherlands, there is still a long road ahead (Taylor et al. 2012).

In this chapter, we attempted to uncover some pain points but also to apply some possible avenues of improvement. Initiatives such as the Ghent group meeting and the summer seminars can contribute to a lively and dynamic teaching and training environment in a European context but also to implement in their own country. The new special professional qualification in forensic psychiatry is a promising milestone for the Belgian situation. In particular we need young psychiatrists to continue our job.

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Education in Geriatric Psychiatry

12

Ipsit V. Vahia and Paul D. Kirwin

Contents

Abstract

The rapidly expanding population of elderly, many of whom will experience a form of mental illness, argues for more providers with geriatric psychiatry expertise. Fellowship training in geriatric psychiatry provides a comprehensive experience in the diagnosis and management of psychiatric illness in late life. Few psychiatry trainees are choosing this critical subspecialty, despite alarming public health needs. Multifaceted policy efforts are needed to increase the geriatric

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psychiatry workforce. Mentorship, in medical school and residency, are key components in the development of a career interest in geriatric psychiatry. Strategies to increase recruitment into the field include structural changes to training programs and financial incentives such as loan repayment. Despite an evolving economic landscape, the decision to enter geriatric psychiatry remains a decision of the heart: a calling to take care of our most vulnerable citizens.

Keywords
Geriatric psychiatry · Mental health · Elderly · Psychiatry training · Mental illness · Geriatric workforce · Fellowship

Introduction

Providing expert clinical care to older adults is important to the overall public health of any society. Training and education in geriatric psychiatry is particularly important in the context of a rapidly aging population. Training specialists in geriatric psychiatry is a critical component to multifaceted efforts to provide clinical care for older adults suffering from complex neuropsychiatric illnesses. In this chapter, we first define the global imperative for focusing on the care of older adults with mental illness, including implications for global economies. Next, we detail how cognitive aging impacts societies, and how the geriatric mental health workforce shortage affects care for this population. Subsequently, using the example of the United States, we describe the trends in training and workforce development. Next, we present an outline for potential models of training for geriatric mental health providers. Finally, we focus on specific applications of geriatric psychiatry education for three groups – medical students, nonpsychiatric providers, and the nonmedical general public. We also discuss research training in geriatrics and the impact of these programs.

Aging: A Global Challenge

Increased life expectancy is contributing to a significant increase in the older adult population worldwide. This increased aging demographic has placed substantial economic burdens on local and national governments ill prepared to take care of the complex medical and social needs of an older person.

According to the United Nation's 2002 Madrid International Action Plan on Ageing (United Nations 2002), addressing the complex and expensive needs of older persons requires governmental attention in several areas. The report delineates several foci: promoting health and well-being across the lifespan; adequate access to health-care services; developing a cohort of well-trained care providers and health professionals; addressing mental health in this population, including those with disabilities or with HIV/AIDS; providing, being cognizant of caregiver needs and addressing elder abuse. The plan also emphasizes the importance of "ageing in

place," reaffirming that health care needs are best addressed within the context of local and national cultural and economic priorities. The 2015 WHO World Report reiterates the 2012 Madrid proposal on Ageing and Health (World Health Organization 2015). In this chapter, we focus on the issues and recommendations highlighted in this report, which provides the most uniform global assessment and set of directions on issues related to aging globally and specifically geriatric mental health. We outline several broad approaches that can be tailored to meet geriatric mental health needs in a local context. We cite the 2015 United Nations World Population Ageing Report to estimate the needs of the global population of older adults.

Demographic Trends

According to the WHO, Japan is the only nation in the world where the population aged 60 or older constitute greater than 30% of the population. About 25–29% of Scandinavia and much of Western Europe is above 60 years old. In Eastern Europe, Russia, USA, Canada, and Australia, this percentage ranges between 20% and 24%. In China, Central Asia, Turkey, and much of South America, the percentage ranges between 10% and 19%. Less than 10% of the populations of Central America, the entire African continent, the Middle East (including the entire Arabian Peninsula, Iran, Iraq, and Afghanistan) are over 60 years old. After the year 2050, predictions become more dire, where older adults comprise over 30% of the population in Japan, China, Iran, Russia, Thailand, Chile, Canada, and most of Europe (World Health Organization 2015). Though absolute percentages of elderly in Africa and India are low, the absolute number of older adults in these population-dense regions is high, and often exceeds northern Europe.

The 2015 United Nations World Population Ageing Report (United Nations 2015) predicts that between now and the year 2030, the over-60 world population is expected to grow by approximately 56%, reaching around 1.4 billion by 2030 and 2.1 billion by 2050. The segment above-80 years of age is expected to grow most rapidly. Latin America, Africa, and parts of Asia will represent the largest areas of growth, paired with the least capacity for specialized geriatric care.

This increase in longevity reflects a triumph or public health policies, and a deeper understanding of biopsychosocial factors may impact aging. Factors include fewer deaths from communicable diseases and greater survival into old age, likely due to a combination of better healthcare and preventative interventions. Lower fertility rates worldwide contribute to the greater proportion of elderly in the population. The absolute number of elderly differs by country and region, but the trend is for proportionally greater numbers of elderly worldwide.

Implications for Population Mental Health

According to the WHO (World Health Organization 2015), the largest contributor to disability among older women is unipolar depression, resulting in 1465 Years Lost due to Disability (YLDs) worldwide. The WHO also estimates that Alzheimer's

disease and other dementias are the 4th largest cause of disability (1295 YLDs), after hearing loss and back/neck pain. Among men, depression and dementias are the 7th and 8th highest causes of disability, with depression causing 883 YLDs and dementias causing 850 YLDs. The RAND Corporation (https://www.rand.org/) (Hurd et al. 2013) estimates that managing dementia costs as much as $215 billion/year, including care giver burden. Behavioral symptoms of dementia, such as agitation, psychosis, or depression contribute to the care burden of this complex illness.

Globally, depression and dementia pose a severe economic and human burden in late life requiring specialized care focused on minimizing morbidity and disability and providing preventative care. Access to any kind of psychiatric care in many parts of the world is problematic, with access to specialty geriatric care even more unlikely. Substantial increases in geriatric training worldwide are warranted, with the hope that this expert training will positively impact geriatric rates of disability. Clearly the geriatric workforce is inadequate to meet the complex needs of an aging global population (Bartels and Naslund 2013). This discrepancy between the complex medical needs of an aging population and the availability of care needs further formal study. Collaborative mental health and primary is one promising approach. The Improving Mood: Promoting Access to Collaborative Treatment (IMPACT) study is a model of collaborative care that has received both intensive study and global attention and acclaim (Unutzer et al. 2002). The model focuses on providing mental health care for older adults within a primary care setting. The model provides evidence for effective clinical care and education of trainees within a collaborative care setting with the promise of adapting this approach within different cultural contexts.

Cognitive Aging: The Global Opportunity

In 2015, The Institute of Medicine of the U.S. National Academies of Science (now the National Academy of Medicine) released a report titled "Cognitive Aging: Progress in Understanding and Opportunities for Action." This report focused on the aging process and changes in cognition, rather than the impact of neurodegenerative diseases such as Alzheimer's disease. The report asserts that "gradual, ongoing, highly variable changes in cognitive function that occur with getting older" (Blazer et al. 2015). Increasing age confers changes in cognitive flexibility and memory, with these changes occurring as part of the normal aging process, rather than pathological phenomenon such as the dementias (Jeste et al. 2010). Our overview of cognitive aging can serve as a novel paradigm to aid with the conceptualizing mental health outcomes for older adults. This approach may affect training, as it conceives of the mental health of an older individual in the context of function, rather than through the lens of psychopathology. The Institute of Medicine (IOM) report makes several recommendations related to assessment, study, and implications of cognitive aging. These include (a) increased research and development of standardized measures of cognitive aging, (b) developing population-based data on cognitive aging, (c) developing interventions to enhance cognitive aging,

(d) increased research on factors that affect cognitive aging and on efficacy of interventions to promote healthy cognitive aging, (e) regulating products marketed as aids for cognitive aging, (f) development of curricula and core competencies for training in cognitive aging, (g) promoting cognitive aging during medical visits, (h) developing a consumer feedback gateway for persons to provide feedback related to cognitive aging, (i) expansion of services to meet cognitive aging needs, and (j) public education related to cognitive aging. Provider approaches to cognitive decline are directly influenced by the provider views on the successful treatment of dementia, i.e., if they believe that preventative measures make a difference in the incidence and course of dementia, based on existing scientific evidence. This highlights the importance of emphasizing the need for education on Geriatric neuropsychiatric syndromes, such as dementia. Several Continuing Medical Education (CME) programs and online educations programs, such as the Portal of Geriatrics Online Education (https://www.pogoe.org), exist to educate physicians on Geriatric topics. Little literature exists on core competencies for training in cognitive aging and strategies to help prevent cognitive loss, but several professional organizations including the American Geriatrics Society, American Psychological Association, and the American Occupational Therapy Association mention potential strategies to either ameliorate the symptoms of dementia or add strategies to help in their practice guidelines. The American Psychiatric Association, under the umbrella of "Positive Psychiatry," has attempted to develop education and clinical awareness of these issues. In addition, The Medicare Annual Wellness visit affords clinicians the opportunity to implement interventions related to cognitive aging within the context of a clinical visit.

Geriatric Psychiatry Education Trends: The US Experience

The IOM asserts that 14–20% of those over age 65 are afflicted with some form of mental illness or substance abuse disorder (Institute of Medicine 2012; Office of the Surgeon General 1999). In the United States (US), numbers of people over the age of 65 are expected to double from approximately 35 million to 74 million by 2030, almost 21% of the US population (Federal Interagency Forum on Aging-Related Statistics 2016). The group of Americans over age 85 is growing rapidly and projected by the U.S. Census Bureau to grow from 6 million in 2014 to an estimated 21 million by 2060 (Federal Interagency Forum on Aging-Related Statistics 2016). After 2030, this "oldest-old" population is expected to grow substantially as the "Baby Boomers" age into this cohort (Office of the Surgeon General 1999).

The US healthcare system is ill equipped to take care of a substantial increase in the number of older persons. The workforce of geriatric psychiatrists trained to care for complex neuropsychiatric disorders in late life is anemic, and shrinking. The 2012 IOM report, "*The Mental Health and Substance Use Workforce for Older Adults: In Whose Hands*?" predicts dire shortages of geriatric psychiatrists for the foreseeable future (Institute of Medicine 2012). Supporting the IOM study, the American Psychiatric Association predicts that the ratio of geriatric psychiatrist

per older Americans will fall from "1 for every 23,000 older Americans" to "to 1 geriatric psychiatrist for every 27,000 individuals 65 and older by 2030" (2012). In 2013–2014, there were 1,629 geriatric psychiatrists in the US, down from 2,600 geriatric psychiatrists in 2001 (American Board of Medical Specialties 2015; Association of Directors of Geriatric Academic Programs 2016). Many physicians failed to recertify during this period and recruitment into the field is tepid at best. Less than half of geriatric psychiatry fellowship positions filled since 2006 (Scheinthal et al. 2015). In the 2015–2016 Academic year, 58 Fellows trained in 56 ACGME-approved programs (Geriatric Workforce Policy Studies Center 2010). By 2030, accounting for attrition, we are projected to have approximately 1,659 geriatric psychiatrists, or 1 geriatric psychiatrist per 20,195 older Americans (Accreditation Council for Graduate Medical Education 2016). The field of geriatric medicine faces equally dire workforce shortages with a 25% drop in geriatricians in the last 5 years. Over the next 20 years, this disproportion is expected to worsen: from 1 geriatrician per 2,456 elderly currently to 1 per 4,254 older Americans by 2030. In 2016, the Association of Directors of Geriatric Academic Programs (ADGAP) reports that the nation has 7,428 board certified geriatricians (2016). By 2030, the Alliance for Aging Research predicts that the country will need approximately 36,000 geriatricians to meet the needs of an aging population, with projections that less than one-third of the required geriatricians will be available for older Americans (2007). Clearly there is a vital need to train more experts in geriatric psychiatry and medicine. We need to restructure residency training in both general psychiatry and medicine residency programs to adequately prepare a workforce ready to care for the expanding US elder population (Federal Interagency Forum on Aging-Related Statistics 2016; Institute of Medicine Committee on the Future Health Care Workforce for Older Americans 2008).

Expert workforce shortages extend to other specialists in mental health and aging. In social work, only about 1,115 (3.6%) of Masters level social work students specialize in aging and only about 5% of practitioners identify aging as their primary area of practice. Contrast this to projections by the National Institute on Aging that by 2020, 60,000–70,000 gerontological social workers will be needed. Among psychologists, approximately 3% have geriatrics as their primary practice focus and only 28% of all graduate psychologists have some graduate training in geriatrics (Rosen 2005).

Residency training in general psychiatry and then in the subspecialty of geriatric psychiatry is a 5-year process. The Accreditation Council for Graduate Medical Education (ACGME) in conjunction with the American Board of Psychiatry and Neurology stipulate that one must complete 4 years of postmedical school graduate training in general psychiatry before becoming eligible to enter advanced training in geriatric psychiatry. One full-time month of general psychiatry residency is dedicated to training in geriatric psychiatry. The quality of this monthlong experience – the richness of the clinical experience of taking care of older patients, the career mentoring, and modeling that occurs during this month – is correlated with choosing further Fellowship training in Geriatric Psychiatry (Lieff et al. 2003). If a trainee chooses a Geriatric Psychiatry Fellowship, the ACGME requires a 1-year training

program, following completion of the general psychiatry residency. This 1 year of ACGME-sponsored clinical training is required to sit for the subspecialty boards in Geriatric Psychiatry. An additional research program is offered by some institutions, usually from 1 to 2 years in length. These research opportunities are potent pipelines for initiating academic careers.

Several programmatic and structural ideas on how to incentivize training in geriatric psychiatry, and other subspecialties in psychiatry, are considered at national levels as dire workforce needs persist. Kirwin et al. (2016) proposed streamlining general residency training in psychiatry to structurally incentivize subspecialty training in geriatric psychiatry, and other psychiatry subspecialties: forensics, psychosomatics, and addictions. Child psychiatry already has a streamlined, so called fast track option.

The model proposed by Kirwin et al. (2016) would reduce general training in psychiatry by 1 year for residents interested in subspecialties. This approach would allow trainees to complete their general psychiatry training in 3 years, while meeting required ACGME "milestones," and then utilize the 4th year of training to gain expertise in geriatrics, substance abuse, forensics, or psychosomatics. General psychiatry residents could then qualify for psychiatry subspecialty certification and general psychiatry certification at the end of 4 years. Residents could opt for the current training model by completing a 4th year of general psychiatry training and then have the opportunity to complete a 5th year subspecialty fellowship. This flexible model of training is congruent with the long-standing opportunity available to trainees subspecializing in child and adolescent psychiatry. Others have proposed strengthening subspecialty training within the context of 4 years of general training (Juul and Scheiber 2003). This model faces inherent content validity issues, as the ACGME general residency requirements are dense, with several content areas vying for time in the 4-year training period. Increasing subspecialty expertise reimbursement (American Association for Geriatric Psychiatry 2012) and fellowship loan forgiveness through the National Health Corps Service Loan Repayment Program (American Association for Geriatric Psychiatry 2011) are also discussed as ways to draw talented trainees toward subspecialty training in geriatric psychiatry.

The ACGME provides program requirements that specify the scope and content of training in general psychiatry and all psychiatry sub-specialties. The ACGME evaluation system has changed from a maximum 5-year accreditation cycle to relying on annual real-time data about program/fellow performance, with periodic site visits and "Self-Study" reviews submitted to the ACGME. Each accredited ACGME program is required to submit several yearly program evaluations: "Annual Updates" on program/faculty/trainee particulars, a yearly resident's survey querying trainee's experience in their particular program. The graduate medical education office of each institution requires a yearly "Annual Program Evaluation (APE)." In addition, each institution must appoint a "clinical competency committee" to document that trainees have met "milestones." Programs are also required to submit quarterly evaluations on trainees, sites, and faculty with biannual committee meetings of core faculty and fellows to evaluate progress in the program. The twenty-five-page ACGME Geriatric Psychiatry Program Requirements necessitate that

training experiences are rooted in six core competencies. The program must demonstrate that fellows have met core "Milestones" in knowledge, skills, behaviors, and attitudes in six domains: Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, and Systems-Based Practice. The ACGME six core competencies are adapted to fit breadth of training for a fellowship in geriatric psychiatry (Accreditation Council for Graduate Medical Education 2016; Lieff et al. 2005).

Training in geriatric psychiatry offers a diverse array of experiences designed to expose psychiatrists to a range of experiences to develop and foster a trainee's expertise in the diagnosis and treatment of psychiatric and neuropsychiatric disorders in late life. Fellowship training should promote scholarship, foster critical education skills, and stimulate interest in research. Fellowship training programs are a potent "pipeline" for junior faculty who will assist in training the next generation of psychiatrists and specialists in geriatric psychiatry. A training program should also expose trainees to the sociocultural, ethical, legal, and financial issues associated with the care of older adults. Training under expert supervision should occur in a broad array of settings, including outpatient and inpatient environments, nursing home and long-term-care settings, and include cross-disciplinary collaborations. The training opportunities should mirror the settings where geriatric psychiatrists practice, and encourage scholarly activities designed to foster the trainee's interests.

Mentorship is critical to a successful training program. In Geriatric Psychiatry Fellowships, fellows often work side by side with their program directors and other attending physicians. Day-to-day collegial supervision is fundamental to a fellow's professional and personal development. Attending to a fellow's interests, encouraging their abilities while paying attention to their limitations, and imparting enthusiasm for the field of Geriatric Psychiatry are essential for a fellow's growth. This mentorship should include helping fellows secure meaningful employment subsequent to Fellowship training. Successful mentorship relationships often last far beyond training and become an essential resource during the ongoing development of a career. Mentors serve as powerful role models for career development and model how to mentor the next generation of physicians and other trainees. Mentorship is a deeply satisfying process, part of the life blood for mentor and mentee, and vital to the overall success of a training program and the field.

The IOM definitively addressed the emerging geriatric psychiatry workforce crisis, first in 2008, then in 2012. In 2008, the IOM published *Re-tooling for an Aging America: Building the Health Care Workforce* calling for immediate investments in preparing our health care system to care for older Americans and their families (Institute of Medicine Committee on the Future Health Care Workforce for Older Americans 2008). The report, however, precluded in-depth consideration of the workforce needed for treating old age mental illness. The American Association for Geriatric Psychiatry (AAGP) persistently advocated for a companion study to investigate issues germane to the geriatric mental health workforce. The AAGP testified before Congress asserting that "virtually all healthcare providers need to be fully prepared to manage the common medical and mental health problems of old age. In addition, the number of geriatric health specialists, including mental health providers, needs to be increased both to provide care for those older adults with the

most complex issues and to train the rest of the workforce in the common medical and mental health problems of old age. The small numbers of specialists in geriatric mental health, combined with increases in life expectancy and the growing population of the nation's elderly, foretell a crisis in health care that will impact older adults and their families nationwide. Unless changes are made now, older Americans will face long waits, decreased choice, and suboptimal care" (Kirwin 2009). Congress funded a companion IOM study, published in 2012, *The Mental Health and Substance Use Workforce for Older Adults: In Whose Hands?* (2012), which clearly delineated the complex geriatric mental health needs for the US, and recommended several specific government and private initiatives to begin to address dire workforce shortages in geriatric mental health.

Multipronged approaches are necessary to incentivize training in geriatric mental health. Fellows in geriatric medicine and psychiatry need access to the National Health Corps Loan Repayment Program, which could encourage geriatric-focused health professionals to work in underserved areas, such as nursing homes, to qualify for professional school loan repayment. Some have advocated that restructuring psychiatry general residency training incentivize residents to complete both psychiatry and subspecialty psychiatry and become ABPN board eligible in both general and subspecialty psychiatry at the end of 4 years (Kirwin et al. 2016). Others advocate creating special tracks within traditional general psychiatry training to encourage subspecialty expertise. This approach, however, faces major limitations given that 4-year general psychiatry training is already packed with ACGME requirements. Other approaches include earlier and broader experiences with geriatric psychiatrist educators during training in residencies and professional schools. The AAGP also supports a training model to promote research training in geriatric mental health during the fourth and fifth years of residency training to encourage academic research careers.

Geriatric Psychiatry Education Worldwide

We conducted a review of the English-speaking literature to identify published material about geriatric psychiatry education around the world. The search revealed articles primarily from more economically developed nations. We found no articles from Latin America, the Middle East, China, or India, all with significant populations and variably successful economies. These nations and regions are absent in scholarly discussion of education models for geriatric psychiatry, and possibly nascent in their efforts in this domain. Of the articles we identified, the majority focusses on training and curriculum development at the residency and medical school levels.

Fostering Interest in the Field

A Canadian survey of psychiatry residents focused on identifying factors that impact medical students to consider geriatric psychiatry (Rej et al. 2015).

The 207 respondents identified four primary factors – (a) completing geriatric psychiatry rotations prior to the third year of residency; (b) comfort working with geriatric patients and their families; (c) positive experiences working with older adults prior to medical school; and (d) presence of annual conferences. This study delineates four potential factors that may impact on subspecialty interest in geriatric psychiatry, with potential cross-cultural implications. A French study noted that "Old Age Psychiatry" was offered as a training module in 96% of French residency programs, but with wide variation in the depth and quality of the training programs. Scholars in the US have proposed core competencies and curricula to standardize training in Geriatric Psychiatry across regions (Lieff et al. 2005). A similar approach may provide a more standard quality of education in other regions as well.

Old-age psychiatry as an independent discipline is not recognized by the European Union, therefore stunting development of this field in Europe (Toot et al. 2012). A survey of 30 European countries conducted in 2012 indicated that only 11 nations identified dedicated geriatric psychiatry training programs (Toot et al. 2012) though 10 additional nations indicated dedicated continued education programs in geriatric medicine. Some countries even offered dedicated Masters programs in geriatric psychiatry. Twenty-five percent of European countries did not have a professional association dedicated to geriatric psychiatry, reflecting a lack of emphasis at a national level. This specific study also made recommendations on ways to standardize geriatric psychiatry education across Europe, including suggesting the provision of CME in geriatric psychiatry for existing practitioners. The study highlighted some common approaches across countries such as week-long intensive training courses or online modules for up to 50 h of specialty training, but also differences in some countries as some relied more on such as peer group supervision and case-consultation models as their educational approaches. This study highlights the need for pan-European and global education standards in geriatric psychiatry. It also underscores the imperative to address deficits in mental health care and access for older adults worldwide.

The Geriatric Psychiatry Workforce

A comprehensive approach, including training physicians, allied health professionals (is this the pc term?), and care givers is necessary to meet the significant mental health care needs of a rapidly aging population worldwide. The workforce of providers with subspecialty expertise in treating older adults is diminishing; at the same time, the population of older adults is growing exponentially (Institute of Medicine 2012). The imperative to increase the geriatric psychiatry workforce capacity is immediate. Despite an evolving economic landscape, a decision to enter the field of geriatric psychiatry is a decision of the heart, not the pocketbook. The field attracts those who love to hear stories from those who have lived the longest and acquired wisdom borne of life-long experiences. For most elderly, the onset of mental illness is a new and horrifying experience. Their distress is profound, as is their gratitude for skilled intervention. Making a difference in the life of an older

person, and to effect change with a patient's family is a deeply satisfying experience. Working with the elderly attracts those with a sense of mission, a calling to take care of our most vulnerable citizens – those who face the double prejudice of old age and mental illness.

Training Medical Students

The number of geriatric psychiatrists in the US is anticipated to decrease in the coming decades, even as the population of elderly skyrockets. It is also anticipated that nonpsychiatrists, by necessity, will step into the void and provide most of the care for older adults. Therefore, it is critical that medical student training have curricula focused on geriatric care. Lehmann and colleagues (Lehmann et al. 2015) surveyed several medical schools to assess their approaches to geriatric curricula. Their study noted limited standardized guidance from national level bodies in the US on core geriatrics curricula. Our own review of the literature revealed the same lack of guidance in other parts of the world, though we did find several articles focused on geriatrics in general. Lehmann and colleagues identified some curricula, with varied content and implementation strategies across US medical schools, with most developed by the Association of Directors of Medical Education in Psychiatry (http://www.admsep.org/) (ADMSEP). The group then conducted a survey of ADMSEP members, and noted that 21% of medical schools had no geriatric psychiatry didactic or clinical clerkship components (Curran et al. 2015). Of the 62 programs that responded, they found that the presence of a geriatric psychiatrist on education or curriculum committees increase the likelihood of dedicated geriatrics-focused didactic activities or clerkships. The study emphasized the importance of having core topics in geriatric psychiatry, such as dementia, delirium, and late life depression, imbedded in medical school curricula, to ensure some exposure to illnesses that most practicing physicians will encounter. Medical students and residents, in the main, do not choose geriatric psychiatry as a professional direction. Stable and predictable reimbursement models, mentorship, residency restructuring, incentivized research efforts, and curricula development are all important elements of an overall recruitment strategy. In an effort to further understand the barriers of choosing geriatric psychiatry, one study queried 27 medical students who had completed a US National Institutes of Health (NIH)-sponsored training program (Curran et al. 2015). The study focused on students with a demonstrated interest in geriatric psychiatry. The study found that 60% of students surveyed intended to pursue a research career in geriatric psychiatry, and 44% confirmed an ongoing interest in the field. Concerns of this cohort of medical students included the following: lack of exposure to geriatrics, paucity of understanding about a career in academics, complexity of working with older adults, and uncertainty of earnings potential in academic and clinical endeavors. Several medical students raised issues about academic research careers citing concerns about the uncertain and demanding life of raising one's own salary through the extremely competitive grant writing process. The students in the study also reported several positives about the

NIH-sponsored program career in geriatric psychiatry, including: early exposure to the field of geriatric psychiatry, career mentorship, positive role models in geriatric psychiatry attendings, and recognition of the opportunities for a career in geriatric psychiatry, underpinned by the growing needs of a burgeoning geriatric population worldwide and a paucity of geriatric providers. These findings point to the importance of early exposure to community dwelling older adults in medical school education to provide students with positive views of aging to counterbalance the realities of inpatient services often taking care of the sickest of the elderly population.

Research Training: Research training in geriatric psychiatry remains critical if we are to advance our margins of knowledge and attract bright talent to our field. This critical line of endeavor must span from basic "lab bench" efforts to clinical research. Understanding the basic mechanisms of disease must translate into effective clinical interventions. Geriatric Psychiatry in the US has several successful examples of such efforts. Existing or previously NIH-funded centers of excellence on aging are sprinkled among the nation's most prestigious research institutions (including Cornell University, Duke University, the University of Pittsburgh, and the University of California, San Diego). These centers of excellence play a critical role in advancing the mission of geriatric mental health research.

At the medical student level, the National Institutes of Mental Health and the National Institute on Aging developed funded research opportunities for students. Since 2005, the Medical Student Training in Aging Research (MSTAR) (American Federation for Aging Research 2018) program, sponsored by the National Institutes on Aging, is running at the University of California, San Diego, and provides 2–3 months of research training during the summer under the mentorship of a UC San Diego faculty member (Jeste et al. 2007). The program facilitates presentations of MSTAR research findings at the annual meeting of the American Geriatrics Society. The University also offers a program called Sustained Training in Aging and HIV Research designed to support postdoctoral Fellows or Junior Faculty with interest in research on HIV and Aging. In addition, the Stein Institute for Research on Aging at UC San Diego offers a program called the High School Sumer Training in Aging Research (HS STAR) (University of California San Diego 2018) which provides 5 weeks of mentored training to high school students interested in aging research.

Until recently the National Institute of Mental Health supported a program called the Summer Research Institute (Halpain et al. 1997; Jeste et al. 2007), a week-long intensive research mentorship program designed to foster novel ideas for research on aging for junior faculty. This program helped develop the careers of an entire generation of young researchers focused on aging, with long-term impact on research and clinical care of older Americans. Collectively, these programs serve as aging research development pipeline models that federal and private sectors might use to foster long-term efforts to promote basic and clinical research on aging. Successful funding mechanisms draw exceptional talent into the field of Geriatric Psychiatry and eventually impact the provision of evidence-based clinical care.

Training Nonmedical Specialties

The 2012 IOM report "*The Mental Health and Substance Use Workforce for Older Adults: In Whose Hands?*" determined that mental health workforce development is hampered by incohesive federal policies, strewn across multiple federal agencies, designed to address the mental health needs of older adults. The report also asserts that the mental health needs of a rapidly aging US population dwarfs the capacity of the small field of geriatric psychiatry. Expert help from other areas is needed, including primary care, geriatric medicine, and educated care givers. The seminal report calls for better coordination between governmental agencies to ensure a broad reaching, comprehensive federal approach to an aging population. The field of geriatric psychiatry serves as an important anchor to these broad efforts. The report calls for expert training of nonpsychiatric providers in the recognition, treatment, and management of common mental health problems that present in late life. The Improving Mood – Promoting Access to Collaborative Treatment (IMPACT) study shows that collaborative care can vastly improve outcomes for conditions like depression in older persons. While not specifically studied, "core mental health competencies" for nonpsychiatric providers could have an overall positive impact on care of the elderly. Different components are required to implement such an approach, such as, including standardized in service trainings, ongoing CME, modular training in cultural competency, and interprofessional trainings to facilitate a care team approach. The Partnership for Health in Aging coalition (Partnership for Health in Aging 2010) recommended six competencies for geriatric psychiatry: health promotion and safety, evaluation and assessment, care planning and coordination across the care spectrum (including end-of life care), interdisciplinary and team care, caregiver support, and health care system and benefits (Partnership for Health in Aging 2010). The coalition recommend these competencies for a range of health professionals including physicians, dentists, nurses, occupational therapists, pharmacists, physical therapists, physician assistants, psychologists, and social workers. Lieff and colleagues described core competencies for Fellowship training in geriatric psychiatry, adaptable to other health professionals (Lieff et al. 2005). The American Geriatrics Society (AGS) and the American Association for Geriatric Psychiatry (AAGP) developed materials designed to help members maintain CME credits and Board certification. These too are adaptable for other health care professions and aid it maintaining geriatric psychiatry core competencies and enhance clinical expertise. The IOM report on geriatric psychiatry workforce (Institute of Medicine 2012) cites the Training in the Assessment of Depression (TRIAD) study, developed at Cornell (Bruce et al. 2007). The program focusses on providing home health nurses education in detection and management of depression in community settings. Participants reported increased referral rates for psychiatric care but no corresponding increase in false-positive reports (United Nations 2002). Patients managed by TRIAD-trained staff had better depression outcomes. The AAGP and other similar organizations worldwide have a duty to their members generate training materials for Board examinations, but also help ensure that core competencies in geriatric psychiatry are established and

disseminated broadly. Heretofore, no global effort in this regard exists. Specialty organizations need to develop web- and classroom-based trainings, CME courses, to promote access to education in geriatric psychiatry. Globally, international organizations like the International Psychogeriatric Association and the World Psychiatric Association need to promote needs assessments that are national and cultural specific. Using the US model as a blueprint may help global organizations tailor education in geriatric psychiatry to align with diverse cultural needs and values.

Public Education

Late-life mental health is a critical component to overall public health. Those dealing with aging parents or relatives know from personal experience the level of suffering and expense that occurs due to mental illness in late life, and that awareness is often way ahead of the knowledge or experience of policy makers. A well-educated general population is a powerful advocate for policy change. Patient and provider education is an important component to this thrust.

Caring for older individuals requires a broad approach and expertise borne of experience and knowledge. One approach, developed and championed by the U.-S. Veterans Administration (VA) involves developing peer support programs for older adults with mental illness or substance abuse (Institute of Medicine 2012). In the private sector, a stellar example of peer support is represented by Alcoholics Anonymous (AA). Other private sector organizations such as the National Alliance for Mental Illness (https://www.nami.org) (NAMI) and the Alzheimer's Association offer support groups for caregivers and families. McFarlane and colleagues demonstrated that family psychoeducation serves to reduce caregiver burden (McFarlane et al. 2003). Most evidence-based research in this area comes from the US and UK – though such approaches exist globally with culturally specific and economically driven factors built in. In India, a nation comprised of 1.2 billion individuals, only one respite facility exists. Advancing public education and public policy initiatives directed at the complex economic, medical, and sociologic issue inherent in aging will only strengthen societies and promote compassionate care of their most vulnerable citizens. Professional medical societies, like the American Psychiatric Association, the American Association for Geriatric Psychiatry, and, in India, the Indian Association for Geriatric Mental Health must lead the way in these education and policy efforts. Each nation must find its own path to care for their increasingly aged and frail population, all rooted in individual culture and values, underpinned by economic reality. Ageism and ignorance continue to play roles in western and developing nations, influencing approaches to the inevitable social and economic realities of an aging population. Each nation must acknowledge their own social contract with their aged population, and in recognizing their unique needs and station in life strengthen the fabric of their own cultures.

Conclusion

With a major growth in the global population of older adults, prevalence rates of psychiatric diagnoses (including depression and dementia) are poised to skyrocket. To be able to effectively address this, there is critical impetus to develop programs for education around geriatric mental health worldwide. For the past 25 years, there has been systematic implementation of standardized training approaches in the US and parts of Europe. However, in major global population centers in Asia and Africa, the issue of developing a workforce with the skills to manage geriatric mental health remains unaddressed. Lessons learned from countries like the US and the UK urgently need to be adapted in these underserved regions, and educational program should be developed not just for psychiatrists, but also at the medical school curriculum level, training of ancillary providers, and educating the general public.

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Educating on Health Care in People with Intellectual Disability

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Ken Courtenay and Claire Smith

Contents

Abstract

People with intellectual disability form a significant proportion of communities across the globe and have greater health care needs than the general population. Their needs can be ignored by clinicians because of difficulties in interpreting signs of behavior and distress in people who might struggle with communication difficulties or multimorbidity. Education and training in the health care needs of people with intellectual disability and the presentation of mental and physical

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disorders is essential to ensure the provision of good-quality care. The delivery of effective training is feasible and applicable to the generalist practitioner as much as to the specialist working in intellectual disability. The key components of training are knowledge, skills, and attitudes that can be taught and assessed. Educational institutions and regulators play important roles in ensuring that professional clinicians achieve the desired competencies laid out in curricula. International bodies can contribute to education through raising awareness on the needs of people with intellectual disabilities and help to facilitate and disseminate learning even in countries where teaching resources are limited.

Keywords
Intellectual disability · Education · Training · Curriculum development

Introduction

The prevalence of intellectual disability (ID) globally is estimated at approximately 2.5% of the world's population (Maulik et al. 2011). The proportion of people with ID is low, but the need for care and support among them is disproportionately higher because their physical and mental health outcomes are worse than those of the general population (Emerson and Baines 2011). Life expectancy is lower with men dying 13 years and women dying 20 years younger than their peers in the general population (Heslop et al. 2013).

There are many etiological causes for ID, but in most people no cause is identified. The international classification systems of ICD 10 and DSM 5 categorize levels of ID in relation to intelligence quotient (IQ) ranging from mild to profound (WHO 1992; American Psychiatric Association 2013). The majority of people with ID lie in the mild range since those with more severe levels are less likely to survive early childhood because of poor physical health as children and the prevalence of inherited and de novo genetic disorders in this group. In practice, functional ability is often combined with IQ or used as a proxy for ID, since not every person with an ID will have a subjective assessment of cognitive ability using a structured assessment tool.

The use of the nomenclature to describe people with intellectual disability has moved from mental retardation usage in the twentieth century to the current international usage of intellectual disability (Carulla et al. 2011).

The prevalence of physical and mental disorders in the population of people with ID is greater than in the general population . More people with severe and profound levels often experience multimorbidity of coexisting physical disorders affecting various physiological systems (Emerson and Baines 2011). Mental disorders in particular are higher in people with ID (Cooper et al. 2007) not just because of the presence of neurological disorders such as epilepsy, but because of the added stigma of being a person with ID in society (Ali et al. 2012). People with ID experience greater adverse events in their lives that have an impact on their mental health and well-being resulting in more people experiencing mental disorders from mild adjustment reactions to psychotic disorders.

Given this context, it is likely that health practitioners of all professional backgrounds and unqualified direct care staff will have contact with people with ID throughout their careers. For this reason, a clinician's training and education on common health problems in people with ID is essential if they are to receive high-quality health care on a par with the general population. Investment in training in ID has benefits for people with ID in terms of their longevity and potentially their quality of life. The challenge to achieve better outcomes is not only related to accurate diagnosis and treatment of illness but also to the attitudes of clinicians to people who are impaired or not as "perfect" as others. Accurate assessment and treatment in a non-judgmental approach is important for the person with ID and their families and carers who too often experience the stigma directed at the person they care for.

The Purpose of Training

The purpose of training is ultimately to ensure high-quality health care as delivered to people with ID leading to better health outcomes for them. The route to achieving this is training people on how to work with people with ID and to understand the level of morbidity and its impact on the quality of their lives.

The core elements of training are knowledge, skills, and attitudes. The acquisition of knowledge is perhaps the easiest of the three competencies to acquire since students and clinicians are used to learning from resource materials. In working with people with ID, it is as important as gaining attitudes and skills since knowledge can influence the outcome for the person with ID.

Werner and Stawski (2012) in a systematic review of knowledge, attitudes, and training in ID by psychiatrists and other professionals argue that knowledge is key to improving training that in turn leads to changes in attitudes. In contrast, Piachaud (2002) suggests that changes in attitudes are of primary importance and that this will lead to enhanced skills and knowledge base. It could be assumed that where training programs pay attention to these three elements in training, they should achieve success in breaking what Werner and Stawski (2012) describe as "*a self-perpetuating cycle of poor training leading to poor treatment of people with ID*."

Skills can be taught and knowledge can be imparted, but the essential element that can lead to the greatest changes is attitude. The attitudes of clinicians towards people with ID can have the greatest impact on health outcomes. The evidence in support of the impact of training on attitudes is supported by Hall and Hollins (1996) where attitudes among medical undergraduates towards people with ID before and after training were assessed. Students had more positive attitudes towards people with ID once they had the opportunities to meet and interact with them to learn more about their lives. In contrast, Lewis and Stenfert-Kroese (2010) identified how negative attitudes of hospital nurses were related to the absence of training on the health needs of people with ID.

The content and format of training programs has an impact on the development of attitudes. Sinai et al. (2013) examined the attitudes of medical students towards

people with ID before and after training that combined didactic teaching with meeting people with ID. The shift in attitudes was evident but not to a significant extent, suggesting that to achieve a greater change in attitude, more opportunities to interact with people with ID and to learn about their lives could be effective in attaining this outcome. A qualitative study of attitudes among medical students by Ryan and Scior (2015) revealed both positive and negative attitudes to people with ID that emphasize the importance of continuing to challenge existing attitudes that could be a barrier to providing good quality healthcare. Simulation training where actors with ID take part in the role play of clinical scenarios helps to enhance communication skills and to allay anxiety among students (Thomas et al. 2014).

Slevin and Sines (1996) advocated establishing teaching on intellectual disability in the nursing curriculum of general nurses based on the findings of their survey of attitudes where contact with people with ID had a positive effect on the attitudes of preregistration nurses. The attitudes of graduate nurses were more positive because of their professional contact with people with ID, indicating that personal contact challenges perceptions and attitudes held towards people.

The difficulties faced by nurses in practice when working with people with ID include limited communication skills when gaining informed consent to treatment in Emergency Departments (Sowney and Barr 2007). Awareness of the support available to hospital staff from specialists when working with a person with ID can alter the course of treatment for the person and avoid delay in reaching an accurate diagnosis and a better outcome for the person (Walder et al. 2014). Rose et al. (2012) suggest that training in ID is part of organizational mandatory training programs in organizations and that regular training updates are part of Continuing Professional Development programs to ensure the needs of people with ID remain to the fore in professional practice regardless of the discipline.

The mental health needs of people with ID also need to be incorporated into the training of mental health nurses to ensure awareness and understanding of presentations specific to people with ID in order to avoid misdiagnosis or erroneous treatment (Clark 2007). This is supported by Adshead et al. (2015) in a systematic review of training of mental health nurses on mental health in ID recommending that it be part of student nurse curricula and training of graduate nurses in practice.

The function of training is the acquisition of skills in a clinical area leading to competence. For students and clinicians to become skilled in a clinical area requires practice and repetition to gain mastery. Communication skills are essential in all areas of healthcare and for all clinicians. In intellectual disabilities, the important skill is communication with the person with ID. Skills in communication were highlighted by registrars in general practice in Australia as a deficit in their training (Cook and Lennox 2000). Difficulties in communication can lead to what Reiss and Szyszko (1983) described as "*diagnostic overshadowing*." The cause of health problems is then too easily attributed directly to the intellectual disability that potentially leads to missing the true cause of the problem and thus denying effective treatment. Gaining skills in communicating with people with ID can enhance communication with other people for whom communication might be difficult, for

example, the elderly, or people who may not share their first language with the clinician.

When working with people with ID the following tips are useful in enhancing communication with the person:

- Use simple sentences avoiding long phrases
- Avoid using professional language or "jargon" and metaphor
- Combine verbal modality with visual material for example, pictures or pictograms
- Give the person time to respond to a question allowing 6 seconds to respond before repeating the question
- Talk directly to the person even when tempted to speak directly to the carer
- Ensure eye contact with the person except where it is culturally inappropriate or when talking with people with Autism
- Be precise in questions to avoid asking superfluous or unnecessary ones

Generalist and Specialist Practice

In order to broaden the appeal of working with people with ID, it is best to be aware of the specific practice needs of the clinicians and to equip them with skills that would be most useful in their practice. Since not all clinicians will be specialists or experts in ID, equipping them with relevant skills is likely to provide them with the working tools to meet clinical needs while achieving better health outcomes. Minihan et al. (2011) highlight the educational outcomes for generalists working with people with disabilities and working on the skills and competencies required. Gibbs and Priest (1999) describe a training program of 30 hours in total delivered to non-specialists on dual diagnosis, that is, mental disorders in people with intellectual disabilities. The training was grounded in the students' practice whereby they used personal and professional experience as case studies in which to explore issues for people with ID. Of the sample of 30 students, the learning outcomes for the students were positive in developing knowledge, skills, and attitudes. Allowing time to reflect and share experiences was valued by the participants.

The concept of core and specialist knowledge is developed further by Hemm et al. (2015) suggesting the development of a broad training package relevant to a cross-section of professions or bespoke packages for professional groups. The training of staff from different disciplines and agencies together has benefits through sharing information, perspectives, and experience. Mohr et al. (2002) described interagency training in Dual Disability in Australia that led to greater confidence in staff from both mental health services and intellectual disabilities services in working with people with ID who had mental disorders. Using this approach to training, participants gain insight into the subject and the contributions of other disciplines in healthcare by sharing clinical experience. It serves to potentially enhance the clinical and working relationships between both agencies based on a better understanding of the contributions of others to the care of the person.

It is not only professional staff who require education and training, but also direct care staff benefit from training on specific topics to enhance the care they provide. Carers employed to care for people with ID are expected to support people with physical or mental health difficulties, but they may not have the skills to recognize morbidity and to effectively manage the challenges of their clients. Costello et al. (2007) found that the lack of knowledge about mental health in ID and the pathways to care was significant among care staff and a cause for concern since people could be suffering unnecessarily. Ensuring a level of awareness about mental health difficulties in people with ID among care staff can contribute to the care that professionals provide. Donley et al. (2011) identified specific knowledge gaps among direct care staff on medication that they administer and often used as a "chemical restraint." Information on the indications for medication and their side effects was lacking among staff. Next to that, they were not aware of alternative non-pharmacological approaches to managing behavior. Informing direct care staff on the benefits of medication and the associated adverse effects raises their awareness of the appropriate use of medication. They are best placed to detect adverse effects and act promptly to inform prescribers of their concerns. Knowledgeable care workers can effectively assist in monitoring clinical responses to medication.

Developing Training Programs in Intellectual Disability

In creating a training program in ID, it is essential to decide on the clinical expectations of the role of the clinician. The training requirements will be dictated by the clinical role and will differ between professional groups, for example, specialist nurses in ID compared with non-specialist nurses. Across disciplines the training requirements will differ where mental health practitioners will require in-depth knowledge of mental health presentations in people with ID compared with clinicians managing physical health problems in ID. The needs of specialist versus generalists differ and educators need to take these factors in to account when designing training programs. Jess et al. (2008) highlighted the difference between clinicians in specialist ID services in the UK compared with clinicians in general mental health services working with people with ID in Australia. The generalists desired more training in working with people with ID whilst the specialists felt more positive about their work. For the specialists, they consider their work important because of the complexity of presentations that require experience in assessment and management that would be difficult for generalists to acquire.

Not all health care systems make the distinction between generalist and specialists in ID, and therefore, training programs are designed according to the need of clinicians and the people with ID in the context in which they live. In most healthcare systems globally, specialist services in ID do not exist. Therefore, education seeks to raise the overall level of awareness and skill among all clinical practitioners that should lead to greater gains in the quality of care that people with ID receive from clinicians in generic services. For this reason, tailoring training programs to the needs of the clinicians is essential to achieve the best outcomes in training.

The distinction between knowledge and skills guides learning and assists in the assessment of students. Training programs in ID should cover subject areas on the acquisition of knowledge, experiential learning, and development of skills. Training institutions can set out the training requirements for students that may need to adhere to national guidance from a professional body or regulator, for example, the Nursing and Midwifery Council in the UK and the General Medical Council (2016). The level of knowledge and skills required varies depending on the stage of training, the clinical discipline, and the level of specialization in ID.

Skills-based learning is often assessed as the acquisition of competencies to undertake certain tasks. In intellectual disabilities, competencies include communicating with a person with limited language or the assessment of physical health in a person with ID. The desired competencies will reflect the skills required for common tasks practiced by the clinician that should be described by the professional regulatory bodies or professional associations. Haut et al. (2000) describe a program to enhance the knowledge of nurses in ID on mental health in ID. They illustrate the difficulties in delivering a program that did not have universal engagement with the students. They question whether the training was pitched at the right level for the students. This exemplifies the importance of tailoring competencies to the required level of the clinician and what is expected of them by their professional body.

Curriculum Development

The key to educating undergraduates and postgraduates in any subject is the development of the course curriculum that will guide teaching in the topic. The curriculum informs the learning objectives for each course of instruction. Time spent on developing a curriculum will be rewarded by clear and focused learning outcomes. The teaching institution will have authority over developing its curriculum in ID but may have guidance issued from a regulator, for example, the General Medical Council in the UK and its influence on subjects taught in University courses in Medicine. Professional bodies such as the Royal College of Psychiatrists (UK) and the College of Psychiatrists of Ireland have developed curricula for their postgraduate training programs that include intellectual disability. The range of topics follows the biological-psychological-social model describing the knowledge required of students in the assessment and management of mental health disorders in people with ID. The content of a curriculum is guided by the context in which the training is required in order to match the training to the health need of the specific population. Other factors that have an impact on curriculum development are the level of knowledge and skill required to deliver the health intervention either by specialist or generalist clinicians.

Curriculum development is a dynamic process that changes with the needs of the service in meeting the health outcomes of the target population. Therefore, regular review of the curriculum is necessary to ensure that training programs are valid and relevant to the needs of both the students and those receiving care. It is the function of professional regulatory bodies to assess the training curricula delivered by training institutions and to set overarching guidance to them on what is expected to be delivered.

The content of a curriculum is determined by the requirements of the course and the teaching institution and should include topics on physical health and mental health because of their higher prevalence among people with ID, for example, epilepsy (McGrother et al. 2006). In addition, information on the social context of disease and the origins of health inequalities is crucial for students to gain a fuller understanding of the health and social needs of people with ID. Such assumptions on the content of any training program in ID can be applied globally and to any course because of the widespread global prevalence of health inequalities across healthcare systems and societies.

The prevalence of neurodevelopmental disorders, for example, autism and attention deficit hyperactivity disorder, is higher in people with ID (Emerson and Baines 2010). Therefore, training curricula need to include reference to the presentation of certain disorders and how they might interact with illness and affect clinical outcomes because illness in people with additional communication or behavioral difficulties can be more difficult to recognize.

The content of the curriculum needs to be relevant to the clinician or care worker and should include information on:

- Presentation of mental illness in ID
- Physical health in ID
- Communication in ID
- Current legislation governing practice
- Professional responsibilities to include a "*duty of care*" to the person

The content will be guided by the social context and legislative framework that exists in the practitioner's country.

The Practice of Training

The process of imparting knowledge to students is the challenge to educators with the aim of making a lasting impression on them and influencing practice positively. Understanding learning styles and motivation to learn is important to the success of teaching. Utilizing a range of teaching methods and styles in delivering tuition helps to achieve the outcome of enhancing knowledge, skills, and behavior and forming attitudes towards people with ID. For many students, the healthcare of people with ID will be a novel one and will require the tutor to engage effectively with participants especially where enduring and stigmatizing attitudes exist among students towards people with ID. Creative approaches are valuable in engaging students while recognizing their learning styles. A mixture of teaching methods will enhance engagement as in Table 1.

The challenge to educators is to ensure that teaching is effective and its impact is long-lasting. To achieve such effects, teaching styles need to be creative and innovative to ensure their impacts endure especially in anticipating an underlying resistance to learning among students that can be based on attitudes already formed. Barriball and Clark (2005) advocate such approaches among undergraduate nurse

Table 1 Teaching styles and outcomes

Method	Competence
Didactic teaching	Knowledge
Case-based discussion	Knowledge and attitudes
Small-group teaching	Knowledge and attitudes
Supervised learning event	Skills
Digital recording	Skills and attitudes

training courses for the non-specialist students whose clinical interest is not intellectual disability. The task of the teacher is to highlight the relevance of the students' chosen practice in the lives of people with ID by improving attitudinal behavior and to potentially broaden access to healthcare for people with ID. While and Clark (2014) describe the development of a competency tool for general nurses who have contact with people with ID. Such devices are practical and helpful in identifying gaps in knowledge and skills among generalists. They positively support staff to gain skills in ID as part of their Continuing Professional Development.

Walsh et al. (2014) advocate an opportunistic and creative approach to training in the general hospital where specialist nurses in intellectual disability were "embedded" in the hospital working alongside general nurses. Opportunities were available in the day-to-day clinical work to impart skills and knowledge to colleagues while modeling attitudes. Other opportunities included presenting challenging cases and dilemmas at academic clinical fora as part of the educational program of the staff.

Harwood and Hassiotis (2014) describe educational theory that compares "*adoptive learners*" with "*adaptive learners*" where the latter develops a greater sense of meaning from the material learnt by reflecting on the content of the material and their personal reactions to it that shaped their attitude. Adoptive learners can acquire the skills required to pass examinations but do not necessarily integrate the experiential opportunities with learning. In their model, Harwood and Hassiotis combine direct contact with people with ID with robust assessment and innovative Internet-based training modules. The modules effectively introduce students to the knowledge of the subject expanding on skills to be gained and influencing attitudes towards intellectual disability.

As an example of adaptive learning, Campbell (2014) provides an account of their apprehension and ambivalence towards spending time with people with ID as part of the training course and who, by reflecting on their experiences, were able to integrate the complex interplay between factors in people's health and the context in which they exist. The experience of contact with a family caused the author to be more self-directed in their learning by pursuing other relevant resources to expand their knowledge on what they had learned from the family.

People with Intellectual Disability as Educators

Innovation in educational methods used by educators can lead to novel approaches being developed in teaching programs. The role of people with ID and their families and carers in education is essential for students to gain a holistic appreciation of health and the context in which health problems arise and are maintained. Including

them in teaching students provides invaluable insights into the life experience of people that formal teaching may overlook. Tracy and Iacono (2008) give an account of involving people with intellectual disability in training medical students in a 3 hour teaching session that combined direct teaching with development of communication skills taught by directly interacting with people with ID. As a consequence, the attitudes of students towards people with ID were positively enhanced. Training students using simulation of clinical scenarios could be an effective training method where resources are limited involving people with ID as actors who deliver training (Thomas et al. 2014).

For many students pursuing professional courses, the impact of learning is often related to the weight of assessment in the course whether it is achieved through written examinations or assessment by observation of clinical skills. In most medical courses, the Objective Structured Clinical Examination (OSCE) is used where a candidate is observed by an examiner undertaking a clinical interview of a patient. Typically, actors play the role of the patient or carer. An innovative approach is to provide the opportunity for adults with ID to play the part of a patient with ID. Soni et al. (2014) describe people with ID taking part in the examination of undergraduates in Medicine. The role players with ID adapted well to the demands of the tasks asked of them. Feedback from candidates and examiners on assessment directly involving people with ID was positive. For the actors, they achieved a sense of being valued through their contribution to the process.

The aim of involving people with ID in teaching is growing in professional courses, and Bollard et al. (2012) describe efforts to achieve this in nurse education where direct contact with patients aids learning. There are resource implications on educational courses affecting staff time in making the role of educator more accessible to people who might not be familiar with methods in education and who require extra assistance to gain skills as educators based on their lived experience.

Overall, in designing training courses for professionals, involving people with ID enhances the quality of the training experience and the potential for an enduring impact on the learner of their contact with the person. While there are difficulties in achieving it, models have successfully integrated involving people with ID in the teaching and assessment stages of learning.

Extended Learning

Extra-curricular activities can broaden experience and deepen understanding of a subject. Additional opportunities to learn about people with ID and their lives can be achieved by connecting with people in their social environments. For the specialist and generalist alike, there is much to be gained from the experience of learning about people away from the clinical environment of health care and where it is delivered. Informal interactions can provide greater insights in to the lives of others. It is worthwhile interacting with people with ID to witness their contribution to society, evident in such activities as theatre groups for people with ID, the Special

Olympics (2016) where sport includes all ability, or volunteering with people with ID. Hall and Hollins (1996) reported on the impact of a theatre group of people with ID in the training program of undergraduate medical students. The findings demonstrated the positive impact of people with ID as trainers on the development of attitudes among the students. Volunteering for the Special Olympics provides a unique opportunity to appreciate people with ID in pursuing their sporting aims regardless of their perceived deficits or weaknesses.

Using Social Media in Teaching

Creativity and innovation in teaching can enhance the learning experience and engage the learner. Social media and access to resources available on the Internet can engage learners because of familiarity and accessibility. Web-based knowledge resources are accessible and very useful especially where training materials are limited (University of Hertfordshire 2016). It is helpful where learning resources are few and yet can provide material required for teaching curricula. YouTube, for example, provides appropriate information demonstrating the lives of people with ID (Kohfield-Galeano 2015).

Quality of Training

The elements of education and training can be developed and delivered but being clear on the outcome of training is essential. Training curricula can state the clinical competencies that students must achieve and can be set by the institution or the health regulator. In more informal settings of training generalist clinicians or direct care staff, the trainer can also develop desired competencies that need to be gained. In intellectual disability training the outcomes include the core elements of knowledge, skills, and attitudes that reflect the quality of training programs.

Assessment of students can take a variety of forms through formal methods such as written examinations and observation of skills to the more subtle assessment of attitudes. Subjecting attitudes to formal assessment is possible using Likert scales but runs the risk of candidates supplying the desired responses rather than revealing what their attitudes are. Interestingly, Cox et al. (2015) in their review considered the link between training in challenging behavior of care staff and the impact of it on challenging behavior among their service-users. As yet, there is little robust evidence to support a positive association between the two. For this reason, subjecting training programs to critical scrutiny is essential in progressing to high-quality training.

The regulators of educational institutions have formal infrastructural processes in place to assess the quality of training programs, but an important contribution to measuring quality is to receive feedback from students and from those involved in delivering the training that should include people with intellectual disability.

International Perspective

Training in intellectual disabilities is relevant to all healthcare systems across the world. The evidence on training programs highlights that while people with ID present a greater burden of care and have great health care needs, the training of professional staff internationally in Europe on their needs varies (Salvador-Carulla et al. 2015). There are some notable exceptions where dedicated programs for generalists and specialists have been developed in UK and Ireland. The World Psychiatric Association has included training in ID as part of the Core Training in Psychiatry in undergraduate curricula (WPA 2002). In Australia, an audit of training programs on intellectual disabilities in undergraduate medical courses by Trollor et al. (2016) revealed variability of content in ID in the curricula across the 20 university courses. Such a disparity in teaching on ID is an example of how medical schools in one country can differ in their emphasis on one clinical topic that could have an impact on the clinical knowledge and attitudes of their graduates especially where they travel across health systems. The role of regulatory bodies is to ensure greater standardization in the curricula delivered by training institutions, and because of the flux of professional practitioners between health care systems, it is important that regulators attempt to standardize their training criteria to ensure they are applicable in whichever systems a clinician chooses to practice. The function of the Union Européenne des Médecins Spécialistes (UEMS) in setting standards in medical education in European countries is vital in achieving working towards ensuring good-quality care healthcare.

International organizations provide opportunities for the sharing of practice and learning in ID by professionals and non-professionals alike. The Section of Mental Health in ID of the European Psychiatric Association (2016) is an example of how awareness of ID can be disseminated in a broad, non-specialist professional organization through the presentation of research work and discussion fora. Efforts are being made by international and over-arching bodies such as the UEMS (2017) to deal with the training gap in Europe identified by Salvador-Carulla et al. (2015). The UEMS promotes training in ID in undergraduate and postgraduate curricula of courses in Medicine and its sub-disciplines in Europe, but other professional groups also need to incorporate training into their educational programs.

Dedicated specialist ID training programs exist in some European countries in mental health and in physical health (Royal College of Psychiatrists 2010; Evenhuis and Penning 2009; College of Psychiatrists of Ireland 2017), but the development of training in some psychiatry, nursing, and psychology curricula varies from country to country. In some, specialist clinicians are recognized and in others the specialty of ID does not exist. It is understandable that some psychiatrists, nurses, and psychologists receive dedicated training in ID since they are likely to have professional contact with people with ID, but other professions need to incorporate intellectual disabilities in to their training programs since the lives and health and social care needs of people with ID are broader than what specific professions can offer. In the training of professionals, a variety of methods can be used, for example, dedicated modules.

Developing a curriculum is key in establishing a training program for the generalist or the specialist. There are good examples of curricula in mental health in intellectual disability detailing the learning outcomes expected. In the UK, the intended learning outcomes described in training psychiatrists are matched to the requirements of the regulatory body with clear guidance on attaining knowledge, skills, and behaviors appropriate to working with people with ID (Royal College of Psychiatrists 2010). In developing a curriculum for a generalist in health care, it is possible to insert specific and relevant learning outcomes into a curriculum that the practitioner intends to deliver to people with ID.

A potential limitation to the development of training programs is the availability of human resources and materials in healthcare systems where there are few or limited resources. Creative thinking can lead to the development of innovative methods in teaching as suggested by McConkey et al. (2014) in developing in-service training on ID for local nurses working with families with developmental disabilities. The use of low-cost training methods can be effective where resources are limited. Narayan and Reddy (2008) evaluated a three-day "*Training of Trainers*" program for direct care staff in India on enhancing skills in people with ID. The authors used a pretest and post-test methodology in the evaluation that reported the enduring impact of training after 3 months.

Conclusion

The prevalence of physical and mental disorders is greater in people with intellectual disabilities than in the general population. Recognizing disorders can be difficult for clinicians, whether generalists or specialists, to detect because of inherent difficulties for the person with ID such as communication or multimorbidity. Attributing clinical presentations to intellectual disability poses the risk of failing to diagnose and deny the person treatment that could be beneficial. Informing and educating clinicians on the impact of intellectual disabilities on people's lives and the interplay between the ID and health problems in their presentation is vital in ensuring good-quality care is provided. Generalist clinicians across various health care systems acknowledge the deficits in their knowledge, skills, and attitudes when working with people with ID. The task of educators in ID is to assess the deficits and to facilitate learning in a positive way. Training also needs to be extended towards unqualified or direct care staff where the impact of disorder and its treatment are felt directly.

Training institutions and regulators have important roles in ensuring the health needs of people with ID are given the importance they deserve. This can be achieved through standardizing training programs and the content of the curricula. Professional regulatory bodies of all health disciplines play an important part in laying out the clinical competencies required for professional practice as are detailed, for example, in "Standards for Education" of the Nursing and Midwives Council in the UK (Nursing and Midwifery Council 2010).

The delivery of education to professional staff and direct care staff has an impact on the outcomes. Therefore, innovative and creative methods are advised to capture

the interest of staff and ensure embedding knowledge, skills, and attitudes in practice that can be achieved even in low-resource teaching conditions. The ultimate aim of such endeavours is to raise standards in practice and to enhance the quality of health care that people with intellectual disability receive.

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Developing Leadership Skills in Professional Psychiatric Practice

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Antonio Ventriglio, Alex Till, and Dinesh Bhugra

Contents

Abstract

Medical leadership is essential in planning, delivering, and evaluating the outcomes of services no matter where in the world psychiatrists practise. Leadership skills are both innate and learnt. Clinicians need to develop these skills depending upon where they work. Clinical leadership and medical leadership differ because clinical leadership is about clinical decision making in teams, whereas medical leadership takes on a broader overview. Medical leadership consists of certain competencies which can focus on understanding group dynamics and working in teams. Cultures of organizations influence leadership skills and styles and in turn,

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are affected by leaders. Organizations also influence the way people think and function affecting a leader's ability to be effective. Good leaders must be authentic. They must have the skills and the capacity to stand by their principles, share their values and beliefs, and deliver on their promises. They must share their vision and create a common understanding to work through teams and people who are willing to follow them. While some conflict can be healthy, it must be carefully managed, and the differing views of leaders and followers must be resolved.

Keywords
Leadership · Clinical leadership · Medical leadership · Leadership skills · Competencies

Introduction

In medicine and psychiatry, change is constant in terms of scientific development as well as policy changes, patient demands and expectations, and changes in society. From the development of new treatments and therapies to changes in service planning and delivery, clinicians are faced regularly with change. Clinicians have enough challenges in keeping up to date and managing clinical problems, so why should they be interested in leadership? However, these leadership skills are not very different from the various clinical skills they possess, as described later on in this chapter.

Clinical leadership generally deals with leadership in clinical matters generally in teams, whereas medical leadership by virtue of training and experience in broader medicine provides an overlap of overall picture of planning delivering and evaluating services irrespective of type of healthcare.

Leadership is a trait, a responsibility, a skill, and an act which allows individuals to take others with them and enables them to manage change – it is not given simply because of status, it must be earned (Bhugra and Ventriglio 2016).

Clinicians aim to providing good quality services in the face of rising demands and increasing pressures on limited resources. Just distribution of resources is therefore an important responsibility, and leaders and clinicians alike need to bear these values in mind. Clinicians bring with them certain competencies and skills which may stand them in good stead were they to take on leadership roles. For psychiatrists, in our training, we are taught about group dynamics, team working and advocating for our patients, their families, and carers. However, it is also recognized that in many countries and many settings, clinicians often shy away from leadership roles because they feel that they will be moving away from their training and core clinical skills, they fear losing a sense of their identity.

Leadership works at many levels. In medicine and psychiatry, the role of the leader can be at the team level, organizational level, or system level with any mix of local, regional, national, or even international responsibilities. Psychiatrists, as leaders, need to be experts in not only the delivery of clinical care but also in the

planning of services as well as the evaluation of services irrespective of the setting they work in. Helpfully, clinical skills make it easier to understand the journey and pathway a patient takes and thus clinicians are well placed in working out healthcare needs and planning as well as the delivery of services (Bhugra and Ventriglio 2016).

First and foremost, psychiatrists are doctors and as such have a clear responsibility to professionalism. Professionalism includes certain attitudes, behaviors and values which guide the clinician in the way that they deal with patients, their carers, and families on the one hand and society including policymakers and stakeholders on the other. Priester (1992) suggests that influential values in professionalism include professional autonomy, self-regulation, patient autonomy, patient advocacy, access to care, and assurance of quality of care. Clinicians must also hold personal responsibility, social advocacy, and social solidarity in delivering health care. Easy access to help seeking and services, efficiency, respect for patients, and the notion of doing no harm are critical aspects of professionalism.

Professionalism historically dates back to Hippocratic times. It is important to understand the relevance of the social contract between medicine and psychiatry on one side and society on the other, before understanding what professionalism means and what attributes psychiatrists require in professionalism. The social contract between what was guilds and the society reflects the contract between the king and the public.

Psychiatry's Social Contract and Leadership

Human beings are social people and interact with each other and social levels. These are particularly important factors in the practice of psychiatry. Gough (1978) gives a historical account of the meaning of social contract between the King and the subjects which subsequently transformed into contract between medicine and society. Just as professionalism did, the concept of social contract also started in ancient times, but it hit the peak between the seventeenth and eighteenth centuries. In these times, the Monarchs were meant to have the absolute right to rule which was seen as their divine right, and in many cultures, they were seen as reincarnation of related to gods. The social contract covered the social contract proper (a group of individuals living together agreed to form a society) and the contract of government or submission (contract between the King, his government, and the people). The contract of governance technically defined and determined the population's relations with the King through governance which was supposed to be benign. Population or subjects promised to obey and follow the rules and laws set by the King through his government and in return they were protected and looked after (Gough 1978). Thus, social contract determined what was needed and expected from either side. Although "contract" is seen and used as a legal term and is legally binding across countries, the contract between medicine as a profession and its practitioners on the one hand and society as represented by the government and its representatives and policymakers on the other hand is an implicit one, though measures of explicitness can be seen. Social contract has inbuilt obligations between both sides that is of

medicine and society. In addition, each side carries with it certain expectations which have to be met in order for the contract to be fulfilled. Cruess and Cruess (2008) explain the social contract between medicine and society which with a few amendments, can be easily applied to psychiatry. Society expects services of a trained, up-to-date healer who can look after ill members of the society. In return, the doctors will get recognized, have a status, and be rewarded financially. They expect clinical autonomy and offer probity, integrity, and high moral standards. Over the centuries this contract has changed in response to medical scandals and there have been major pressures on autonomy. Health has increasingly become a commodity to be bought and sold, and as a result, healthcare has become a major industry with different imperatives. It is also likely that as the contract is unwritten and implicit, changed circumstances on either side can lead to developments without either side realizing the impact of change and the need for response. Professionalism is part of this contract and interestingly professionalism is explicit.

Leadership and Organizations

There is no doubt that leaders have a responsibility and role in not only providing a vision for the organization they lead but more importantly their role in seeing the vision develop and deliver according to the mission of the organization. The mission statement of any organization provides clear objectives of what the organization is meant to deliver. The leader also has responsibility to ensure that the organization is successful and parameters for success have to be defined and agreed. Kouzes and Posner (2012) propose that the five key components of exemplary leadership are: modeling, inspiring a shared vision, challenging the process, enabling others to act, and lastly, by encouraging the heart. In medical leadership these are particularly helpful, especially in modeling as was the case with apprenticeships: until recently and delete in more recent view. That modeling is about leading by example, inspiring others and through this, creating the next generation of leaders; this is a primary function of a good leader. The leadership required in medical and psychiatric team settings is to convince the team to not only agree on a shared vision and shared purpose but on the means and method of delivering the vision. Challenging the standard practices and processes may mean that the leader has to think outside the box and find ways of delivering the vision. Leaders may be experimental in their thinking, but they must convince their team to follow them and manage change as result. Enabling and empowering others in the team is a key task and responsibility for the leader through a clear understanding of the culture of the organization they are leading. They must also enable, develop, and mould the culture of the team and of the organization in a strategic and fully functional way.

Kouzes and Posner (2012, p. 25) observe that workplace engagement and commitment are significantly explained by how the leader behaves which makes a lot of sense. In order to generate enthusiasm, loyalty, and commitment, leaders need to understand how to motivate and help empower the team so that workplace

engagement can improve, which in turn, contributes to higher levels of patient satisfaction (Kouzes and Posner 2012, p. 27).

The best type of relationship between leaders and their followers has to be that of mutual respect and understanding. Followers need to be convinced and have to buy into the leader's aims and motivation, and the good leaders must convince their followers to work with them and follow their agenda. A leader can do only a few things by themselves, and a vast majority of effort has to be on motivating others to deliver on a shared vision. The relationship between leaders and their followers has to be of a quality which allows such an engagement to deliver the mission of the organization.

There is little doubt that although often the achievements of the leaders are attributed to them, the fully functional team and teamwork behind the leader is responsible for the actual delivery of tasks. Good leaders will not only enable and empower their followers and teams, but more importantly they give credit where credit is due to acknowledge the contributions made by the team and others who may have been brought in to deliver on specific tasks. Such an acknowledgment makes the team members feel valued and appreciated. In team meetings in clinical settings where different disciplines get together to discuss patients, the consultant psychiatrist as a leader has a key responsibility to ensure that all their team members are active in expressing their opinions. Therefore, the task of the clinical leader is to synthesize and collate all the information in order to reach an informed clinical decision in planning and delivering a treatment plan.

On asking a number of individuals about their personal expectations from the 20 qualities expected in their leaders, Kouzes and Posner (2012, p. 37) found that four qualities of leaders received four-fifths or more votes. These are being honest, forward looking, competent, and inspiring. In medicine in general but psychiatry in particular, clinical leaders have to be clinically and technically competent. We all recognize good doctors and bad doctors. The technical competence is about being aware of recent clinical developments and their applications into service planning, development, and delivery. Being honest and trustworthy in medicine is one of the key aspects of professionalism. Kouzes and Posner (2012, pp. 36–37) propose that three of these four characteristics make up "source credibility," which is clearly linked with perceived trustworthiness, expertise, and dynamism which are clearly important in medicine.

In order to sustain a two-way relationship, followers have to be willing to believe in the leader. It is then, and only then, that they will listen to and commit to what the leader is planning. On the other hand, the leader has to have the skills and the capacity to stand by their principles and deliver on their promises and the vision. If for whatever reason that is not possible, then the leaders have a moral duty and responsibility to explain clearly and openly why they are unable to deliver. In many situations, leaders will be expected to speak for their teams or their followers. If there is any conflict between the views of the leaders and that of the followers, then this needs to be clearly resolved so that the message to others is clear and consensual.

Leaders must be willing to share their values and beliefs so that a common understanding between the leaders and their teams can be developed. An individual's values are their enduring beliefs which are organized into means and ends (Rokeach 1973).

Values deal with what makes a person tick and think, i.e., their world view. They enable individuals to prioritize, set goals, and guide them on how decisions are made.

Communication by leaders is critical in the way ideas are conveyed and decisions shared thus making communication skills a key part of leadership. The culture of the leader and the culture of organization have to be understood clearly. There is a theoretical possibility that intercultural conflicts may occur. An important task for the leader is thus to understand the cultural dimensions within the organization and try to place their own values and culture in that context so that they can take their team with them. Kouzes and Posner (2012, p. 57) remind us that shared values are foundations for building productive and genuine working relationships. Good leaders can enable their team to work through their differences and build upon common values. It is obvious that it is not always possible to get everyone to agree on everything, but if the leader is able to explain the rationale on which a decision has been made or is to be made and people feel listened to, the team can work together and move forward. Individual and team values can enable the leadership to help develop common shared values and personal loyalty and effective functioning. Building on these shared values can contribute to commitment, ethical behavior, and loyalty to the organization. As Kouzes and Posner (2012, p. 61) point out, shared values also encourage people to develop reasons to care for each other as well as for the organization. Thus, shared values contribute to the development of a common language and understanding that helps build common plans, targets, and delivery through empowering team members who feel free to contribute effectively to the team work.

Of course, a key leadership skill is about an awareness of one's own strengths, weaknesses, prejudices, values and foibles. The leaders must take time to foster their own well-being through self-reflection but also help build resilience of others around them. As mentioned above, a key leadership skill is to have a vision which can be shared and bought into. A good leader will carry with them the lessons from their own past and learnings. Charismatic leaders are those who are more animated and, through their energy and enthusiasm, inspire others. Leaders should be able to express their emotions as events which are emotionally significant and create longer lasting stronger memories (McGaugh 2003). Charisma can be understood as an elusive quality which is constituted of energy, enthusiasm, and expressiveness (Friedman et al. 1980; Goleman et al. 2002; Greer 2005). Good leaders support their team members but not blindly and help them develop through challenge, through providing freedom and through providing safe spaces for them to share their ideas, no matter how unconventional these ideas may be. Often leaders may be the only ones in a team who can experiment with ideas and have the power and responsibility to take risks.

Professionalism

Since fifth century BC medicine and its practice have been seen as an occupation and a profession governed by its own ethics and regulations. Its practitioners were expected to have mastery of a complex body of knowledge and skills which over the centuries have become even more complex. This combination of mastery and

skills has led to emphasizing professional commitments to practice of medicine for the betterment of those who need us. This can be seen as a moral contract between the profession and society. This is similar to the social contract which can be seen to rely on the profession being "a moral community whose defining purpose is to respond to and advance the welfare of those who are ill, in need of help, healing, or relief of suffering, pain or disability" with a doctor's knowledge, clinical skills, and judgment utilized to protect and restore human well-being (De Waal et al. 2010; Bhugra 2008, 2013). When guilds were established, there was no doubt that they controlled the intake of apprentices who could be rejected or thrown out but were also related to a covenant between society and the medical profession (Bhugra and Moran 2014). The guild controlled resources, training, and the output of trained individuals through specialized services. They were allowed to self-regulate and control means of output-in other words- evidence of monopoly. Society allowed the guilds to maintain autonomy and have fair livelihoods in return for the guilds meeting the needs of society (Bhugra and Moran 2014). Certainly in the UK and many other parts of the world, various medical professional bodies, for example, the Royal College of Physicians, emerged on the same principles by controlling training, regulating and licensing doctors in the practice of medicine through setting and maintaining professional standards (Bhugra 2008). Thus professionalism lay at the heart of being a good doctor and became "an ideal to be sustained" (Bhugra and Moran 2014). Professionalism is medicine's most precious commodity and can lead to a very self-defensive position. However, there is no doubt that as society changes so do its expectations of doctors leading to changes in practice and delivery of services. The definitions of professionalism may require redefinition and clarification.

The European Federation of Internal Medicine, the ACPASIM Foundation (American College of Physicians–American Society of Internal Medicine) and the ABIM Foundation (American Board of Internal Medicine) combined efforts to launch the Medical Professionalism Project (Gruen 2003). A number of designated members were invited to develop a charter which would include a set of principles to which all medical professionals could and should aspire to. The principle at the heart of the charter was that physicians and health care systems remain committed to patients' welfare and to the basic tenets of social justice.

Professionalism is the basis of medicine's contract with society. Patients' interests are to be placed above those of the physicians'. Setting up standards of competence and integrity and providing expert advice to society form other key parts of medical professionalism. These tenets of professionalism must be accepted by the profession and the society they serve. Essential to this social contract is trust in physicians. In the West, at least, doctors are held in higher esteem and deemed trustworthy way beyond the level of trust in journalists or in politicians.

Shock (1994) reminds us that the medical profession was shaped over a century ago through three factors: class structure, a society dominated by the activity of production, and the doctrines of liberalism as the guiding star in politics. Thus, medicine's contract with society has some imperatives. The fundamental principles of professionalism include primacy of patient's welfare, principle of patient's

autonomy, and principles of social justice. Embedded within this are a set of professional responsibilities which include commitment to professional competence, commitment to honesty with patients, commitment to patients' confidentiality, commitment to maintaining appropriate relationships with patients, commitment to improving quality of care as well as access to care, commitment to just distribution of finite resources, commitment to scientific knowledge, commitment to maintaining trust by managing conflicts of interest, and commitment to professional responsibilities (Medical Professionalism Project 2006).

Commitment to professional responsibilities includes working in teams to maximize patient care, respect for each other and participating in the processes of self-regulation. The profession must also take on the responsibility for defining and organizing the educational and standard-setting processes for current as well as future members. The Physicians' Charter goes on to suggest that physicians have both individual and collective responsibility and obligations to take part in these processes. These obligations therefore include internal assessment and external scrutiny. Shock (1994) suggests that research and training are the key to better medicine and therefore the profession needs to be more ambitious. This ambition can be delivered through good leadership.

Leaders therefore have a moral duty and indeed an ethical obligation to continue to provide a forward looking view that their followers can buy into. The ancient virtues need adapting for the twenty-first century, and leaders must therefore demonstrate their willingness to think ahead and make sure that the services the medical profession delivers are "fit for purpose" for the present and the future.

To this end The Royal College of Physicians has recently defined medical professionalism as "a set of values, behaviors, and relationships that underpin the trust the public has in doctors." Thus, it is clear that patients expect certain things from their doctors and doctors in return expect certain things from the society as it is the society that the patients belong to and live in. Doctors as professionals have to be committed to their patients, to the institutions they belong to and work in (Bhugra 2013). Part of the impact of training is to introduce the idea and help doctors cultivate various aspects of professional skills and competencies (Bhugra 2008; Bhugra and Moran 2014).

Another important document on medical professionalism was the Charter on Medical Professionalism published simultaneously in the USA and the UK. This Charter outlines the values, behaviors, and relationships embedded in professionalism along with a set of ten professional responsibilities or "commitments" that a doctor should uphold and principles needed for professionalism. As always "primacy of patient welfare" remains primary and paramount along with altruism, which may mean different things in different cultures, "patient autonomy" which again may vary across cultures along with "social justice" which focuses on fair distribution of finite resources in face of infinite demand for healthcare.

The ten commitments expected of a medical professional required by the Charter (2002) are as follows:

1. **Professional competence**: Ensuring that all members of the profession are professionally competent which means that in practice they are up-to-date with their knowledge and thus are committed to providing the best services through updated knowledge and lifelong learning.
2. **Honesty with patients**: Being honest with patients about their care and levels of need and sharing information with them about their illness and interventions, potential adverse events, and learning from these events to implement measures to prevent recurrence of these events.
3. **Patient confidentiality**: Ensuring the strictest of confidence is upheld regarding patient information, particularly with increasing computer-based systems, use of social media, and cultural variations. In some cultures, a patient will be accompanied by a number of friends and relatives; thus, confidentiality may mean different things and doctors must be aware of these.
4. **Maintaining appropriate relations with patients**: Ensuring that the doctor does not exploit the vulnerability of patients for personal gain whether it is financial or sexual.
5. **Improving quality of care**: No matter which part of the world a doctor practises in quality of care delivered is critical. Doctors as leaders have to be involved in setting standards of quality of care and involving teams and structures to deliver excellent quality of care but more importantly creating an environment within which quality improvement becomes a regular and ongoing process.
6. **Improving access to care**: Again no matter where clinicians are practising, they have a moral responsibility to ensure equitable access to services and services have to be both geographically and emotionally accessible. Clinicians as leaders have to be certain of delivering to minimum standards of care and also be involved in public mental health and prevention of mental illness and promotion of mental health.
7. **Just distribution of finite resources**: From high to low income countries, it is inevitable that the resources for healthcare will never be sufficient and therefore it is critical that clinicians as leaders ensure cost-effective allocation of resources and distribute resources in a just fashion.
8. **Scientific knowledge**: Keeping up-to-date with latest advances in psychiatry in particular and in medicine in general, the professional must ensure delivery of healthcare is evidence-based and being responsible for appropriate use of scientific evidence and technology and an active involvement in research and its application.
9. **Maintaining trust by managing conflicts of interest**: Maintaining trust is a crucial aspect of professionalism and clinicians as well as leaders must declare conflicts of interest and be transparent in their dealings. It is imperative that actions are not affected by personal gains.
10. **Professional responsibilities**: Professional responsibilities include self-regulation and collaboration across specialties and disciplines to maximize quality of patient care.

These recommendations are the bed rock of professionalism. In conjunction with local regulations, personal values, behaviors, and relationships have to reach certain "gold standard" in clinical practice.

Medical Expert (Bhanji et al. 2015):
- Demonstrate diagnostic and therapeutic skills for ethical and effective patient care: precise clinical history, physical exam, investigation
- Assess, critically evaluate, and apply relevant up to date knowledge, information, and therapeutic options to clinical practice
- Demonstrate medical expertise to situations other than in direct patient care
- Recognize personal limits of experience
- Demonstrate effective consultation skills with respect to patient care, education, and legal opinions: presenting well-documented patient assessments in a timely, legible, and comprehensive manner

Communicator:
- Establish therapeutic relationships with patients and their families: rapport; trust, empathic, and confidential
- Elicit and synthesize relevant information from patients, their families, and communities (beliefs, age, gender, culture)
- Listen effectively, foster understanding
- Discuss appropriate information with patients, their families, and communities and other healthcare professionals: inform and counsel patients, better understanding

Collaborator:
- Consult and liaise with other health professionals
- Recognize limits of personal competence
- Contribute effectively to multidisciplinary team activities and be available for consultation when required
- Be aware of roles and expertise of other disciplines
- Integrate opinions of patients in decision-making

Leader:
- Demonstrate leadership skills to manage change and contribute to healthcare improvements through a positive culture that facilitates learning
- Allocate finite healthcare and education resources effectively to deliver optimal patient care
- Embraces healthcare informatics and technological innovations
- Work efficiently and balance patient care, learning needs, outside activities, and personal life

Health Advocate:
- Help promote health and prevent disability
- Identify social/cultural factors of health
- Recognize and respond to settings related to advocacy: patients, populations at risk, policy awareness, development of policy

Scholar/Educator:
- Maintain lifelong learning with a personal continuing professional development strategy that identifies learning needs and methods
- Be a critical appraiser of sources of medical information
- Educator: help others to define learning needs and development, provide feedback, adult learning

Professional:
- Deliver highest quality care with integrity, honesty, compassion, and respect for privacy, dignity and diversity of racial, cultural, and societal issues
- Appropriate personal and interpersonal behaviors: self-awareness
- Accept responsibility, accountability, and maintain ethically and legally appropriate practice

Motivation in Professionalism

In any society and in any profession, professionalism has both individual and collective aspects. It is important to understand what the profession's contract is with the society they are serving. Individuals have to be prepared to maintain certain personal professional standards and follow certain behaviors and values. On the other hand, the collective aspects of professionalism are agreed at a larger group level in a collective style. Therefore, these values emerge from regulatory bodies and ethical frameworks.

It is imperative that types of professionalism, its values, and attached behaviors are part of training and curriculum from an early stage. Education about professionalism has to be at different levels at different stages of learning and training in the same way that training in leadership has to start early enough in medical school curriculum. We are not going to elaborate here on various techniques that should be used for teaching or learning professionalism and leadership, but it is crucial that different formats from didactic teaching to role-modeling to mentoring are used. Furthermore, the theory of professionalism and leadership along with practical skills should be taught. Various aspects from technical knowledge to theoretical background and underpinnings should be taught by experts who are committed to sharing the same professional values of the profession as well as that of the leadership skills and competencies. An often ignored aspect of both professionalism and leadership is an acknowledged commitment to the values of professionalism, which may require clear and detailed exposition. Professional competencies have to keep patient welfare at the core of professionalism and include honesty with patients in order to keep trustworthiness.

Aspiring to the highest standards of excellence and professionalism, with patients at the heart of care, has to be a common value throughout all healthcare organizations across the world. Unfortunately, however, within the United Kingdom, the ability of healthcare professionals to deliver these high standards and provide the quality of leadership within our healthcare organizations necessary to maintain these has been questioned following recent high profile reviews (Francis 2013; Keogh 2013).

Worryingly, anecdotal evidence suggests that the concerns highlighted following these reviews were not isolated and are instead, present to varying degrees across numerous different healthcare organizations. While these did not directly involve mental health services, as psychiatrists, we must learn from these incidents and share the lessons learned to prevent similar tragedies occurring within our own environment. Integral to achieving this will be the development of strong clinical leadership. A major challenge is that a lot of times, the resources in the National Health Service are inadequate and blame is placed by the media and sometimes by policy makers on the clinicians which puts additional pressures on them to take on the leadership roles and try and salvage services. Hence, one of the major challenges is for clinical leaders to speak up about poor funding and inadequate resources. However, there are major additional challenges in order to develop strong and effective leadership within our psychiatrists, how to drive an institutional culture whereby everyone, both directly and indirectly involved in care, puts patients first, and how patient safety is brought to the heart of mental healthcare delivery (Francis 2013; Keogh 2013). This applies in every healthcare system. To do this in a sustainable fashion, leadership development must be at the heart of service planning, development, and delivery. Harnessing these potentially powerful agents through training and leadership development should be essential no matter which healthcare system we look at in order to improve healthcare and standards of clinical services. To ignore them, we risk a real or perceived sense of feeling disempowered, which can contribute to low morale which in turn contributes to further disempowerment.

Leadership

Among key attitudes and behaviors for leadership are an understanding of self, and aptitude to take on the role and the responsibilities that go with it at a team, organizational, and system level, as reflected within the Faculty of Medical Leadership and Management's *Leadership and management standards for medical professionals* (2016).

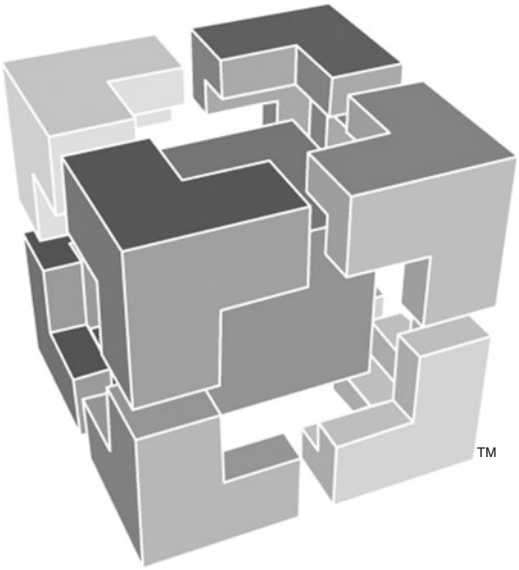
The *National Health Service Leadership Academy and Institute for Healthcare Improvement* have developed such frameworks through dimensions that they consider to be interdependent and essential (NHS 2013; Swensen et al. 2013).

NHS Leadership Academy – Healthcare Leadership Model: This model has nine dimensions which are self-explanatory. However, there are some issues these dimensions do not define. For example, leading with care, although an excellent idea, does not define what care means. We must look elsewhere for this and are increasingly adopting a compassionate approach (West et al. 2017) (Fig. 1).

Institute for Healthcare Improvement – High-Impact Leadership Framework: This model moves away from behaviors to focus on critical domains upon which the leadership ought to focus (Fig. 2).

Although it can be argued that both these models are dynamic, they may not always be applicable and leadership needs to be understood within the context of where the leader must operate. Hofstede (1980) described different dimensions of organizational culture. Of these three are particularly relevant in this context. These include

NHS Leadership Academy - Healthcare Leadership Model



The nine dimensions are:

1. Inspiring a shared purpose
2. Leading with care
3. Evaluating information
4. Connecting our service
5. Sharing the vision
6. Engaging the team
7. Holding to account
8. Developing capability
9. Influencing results

Fig. 1 The Healthcare Leadership Model and associated graphics are © NHS Leadership Academy, 2013. All rights reserved

Fig. 2 The High-Impact Leadership Framework. Reprinted from www.IHI.org with permission of the Institute for Healthcare Improvement (IHI), ©2018

masculine/feminine nature of culture, distance from power, and dealing with uncertainty. A good leader will bear all these in mind when working within the organization.

Leadership Styles

In any healthcare system, often there is a clear hierarchy in teams and in management structures. This "command and control" authoritarian or "autocratic" leadership results from a culture within which rising seniority allows a grab of "legitimate" power. This may promote an autocratic culture and a power-orientated approach causing demoralization among the staff who feel devalued and not able to make independent decisions. Such an approach can also contribute to an atmosphere of fear which stops people from whistle-blowing and reporting errors but also makes them less likely to admit to mistakes in an open manner (Edmondson 1996). Good leaders acknowledge mistakes and not only learn from them but also share their experiences while mentoring and supporting others. Senior clinicians have an obligation to encourage their trainees to speak up when they believe a lack of skills, knowledge, or resources are placing patients at risk of harm (Berwick 2013).

A transformational leadership style, comprising of four key domains, commonly known as the four I's (Table 1), is valued and considered to embody the essence of clinical leadership (NHS 1999; Bass 2008).

Transformational leaders enable their followers to share in and achieve the vision that they have set out. These four domains improve functioning and improve outcomes and the intrinsic drive within followers enabling them to develop their own leadership skills and making them feel more valued as well as empowered (Bass 2008; Allio 2013).

Leadership Development

In highly complex and unpredictable health systems, we must carefully consider how we develop clinical leaders capable of rising to this challenge (Till et al. 2016). A major part of such an endeavor depends upon selection of right type of leaders and

Table 1 Transformational Leadership – the four I's (Bass 2008)

Transformational leadership – the four I's	
Individualized consideration	Provision of personal attention, ideally through mentoring and coaching, to meet follower's needs
Intellectual stimulation	Active encouragement of innovation and improvement from followers
Inspirational motivation	Articulation of and motivation towards a clear vision which challenges and engages followers
Idealized influence	Role modeled due to the trust and respect established from followers

also right amount and type of training followed by sufficient support, mentoring, and coaching. Traditional "horizontal leadership development" opportunities, whereby individuals are removed from their working environment to attend a leadership course or program are insufficient in isolation (Petrie 2014, 2015). "Vertical leadership development" should be embraced where activities are embedded into an environment allowing trainees to not only work but learn. This is likely to have the greatest impact, both on the individual and the organization (McKimm and Swanwick 2011). Rather than occurring in isolation, leadership development must become a core and longitudinal component of training forming an integral part of a student's or trainee's education, delivering three core components: heat experiences, colliding perspectives, and elevated sense making (The Royal College of Psychiatrists 2012; Petrie 2014, 2015).

Heat experiences should stretch individuals and provide an opportunity for them to lead, this could commonly be through improvements that will positively impact on patient care and outcomes (Bagnall 2012). Implemented in the right way, such an approach can enable doctors to think of themselves as leaders because they can see where improvements are needed and work with others to do it (Turnbull 2011).

Providing colliding perspectives requires exposing clinicians to a diversity of views, backgrounds, and thinking. By listening to others, being challenged, and balancing contradictory views they learn to grow and manage themselves, their teams, organizations, and systems better.

Developing leaders should also finally have the opportunity and space to reflect, be coached, and mentored. It is important that they are encouraged to share their ideas without fear of criticism or opprobrium (West et al. 2017). Through this platform, they can reach a heightened state of "elevated sense making" to gain a deeper understanding of themselves, their personal strengths, weaknesses and prejudices, and their world around them.

All three of these components must be provided. Naturally occurring internal motivators including personality, ambition, altruism, etc., can be utilized accordingly to stimulate this development, but there is no doubt that external motivators should also be utilized. External regulation, recognition, and reward can act as powerful tools and should be utilized to raise the profile of achievements and counterbalance the frustration and disillusionment that often exists within the system.

What Next?

For better care of our patients, improved service planning, delivery, and the resources our system needs, it is important that clinicians take the lead. The earlier clinicians take on this role, the better our healthcare system will become. Training and engaging potential leaders of the future is crucial in ensuring that services are effective and efficacious. Traditional autocratic styles are still prevalent across countries, and many cultures and societies encourage such style, but this approach is problematic for a number of reasons. A transformational style of leadership that encourages development, improvement, and compassion should be adopted. By

focusing on integrating trainees into the wider quality improvement agenda and engaging them to do exactly that can contribute to personal and organizational improvement, increased personal satisfaction and growth with sustainable outcomes, and high-quality healthcare for patients.

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What Do Patients Expect from a Psychiatrist?

15

Paul Arteel

Contents

This article is based on two GAMIAN-Europe projects: the bipolar Companion and the Schizophrenia companion. A group composed of patients and health care professionals discussed their personal experiences during a period of 6 months (in 2010 for the bipolar companion and in 2016 for the schizophrenia companion). (Arteel, 2006 and 2011) The full text of both booklets is available on the GAMIAN-Europe website (www.gamian.eu).

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Abstract

Overview of the expectations of patients in their contact(s) with psychiatrist, based on experience of groups of patients and health care professionals organized by Gamian-Europe in 2006 and 2010.

Keywords

Patients · Treatment · Patients rights · Information · Patients associations

Introduction

There cannot be any doubt about the basic expectation of a person affected by a mental illness (we will call him or her "patient"): it is to obtain a good treatment leading to maximum recovery.

So it is necessary to define what "treatment" is and what "good" is.

We will try to do this in a chronological order starting with the development and the evolution of the relationship between the patient and the psychiatrist (or the health care team that is managed and assisted by the psychiatrists).

First Contact: Making the Patient Feel Welcome

The Psychiatrist Should Be Aware That There May Be a Reluctance to Seek Help

Many patients do not like going to doctors.

They don't want to be hospitalized.
They don't want to take any medication/ or more medication (they may feel they've failed).
They don't know or trust the psychiatrist/team.

Put Supports in place, e.g., family, peer support, someone they know and trust. Carers or family members can be helpful: Discussing the situation in advance, while

the person still feels well. Ask their advice on how to proceed should this situation arise.

Show empathy particularly to people with no support at initial stages. For example, provide simple examples like comparisons of physical health to mental health.

Provide information if introducing medication.

NORMALIZE.

- Asking advice from a carers' or family support group.
- Introducing the patient to someone who has already been diagnosed with a mental disorder. Simply talking to someone who has been through the process may help ease many fears.
- Arranging for a doctor to visit at home.

On the other hand, stigma on mental health may affect family and colleagues as well: some patients have to resist the reluctance of their entourage to visit a psychiatrist.

The Psychiatrist (the Hospital) Has to Make the Patient Feel Welcome: The Reception Desk

When a patient makes his first appointment with the psychiatrist, he should be greeted.

A patient is on a first visit and asks the reception desk where to find the doctor. The receptionist can answer in a number of ways:

- Bad practice: The receptionist can tell the following to the patient: "Dr X's office is in this direction; follow the corridor until the end, then turn left, take the second stairway and go to the right. Enter the third door on your right and follow the corridor, and then wait in the blue waiting room. . .."
- Good practice: The receptionist can give the patient a map and indicate the correct way with a marker
- Best practice: The receptionist can call an assistant to meet the patient and to accompany him or her to the waiting room.

Stigma/in service training for all members of the health care team is necessary.

The Psychiatrist Has to Listen to the Patient: The First Contacts Should Be Interactive

The first contact can be overwhelming for the patient, he or she might forget what to tell, what to ask.

Patient associations provide patients with list of things to tell/ask the psychiatrist. In their turn psychiatrist associations should provide their members with similar lists.

The Psychiatrist Should Guide the Patient in His or Her Search for Information

Advice on good websites for information.

The internet is a valuable source of information on mental disorder. It would be naive to think that a patient has not or will not search for information on the internet.

Advice not to google

Unfortunately, the internet is also the source of a considerable amount of unreliable or untrue information. Psychiatrists should be aware that patients will surf on the internet. To make sure that the patient identifies a good healthcare website, the psychiatrist should tell the patient to search for sites accredited by the Health on the Net Foundation (HON). HON is a nonprofit, nongovernmental organization designed to help members of the public find reliable and trustworthy medical websites.

When visiting the site at http://www.hon.ch/ you can use the HON search function to identify hundreds of HON-accredited websites with good quality information on mental disorders.

Make sure they are aware of the most common side effects and to come back if they are having any problems.

Most patient associations can provide trustworthy information. A patient should be informed on the existence of patient associations in the immediate surroundings (and obtaining the name of the contact person, the telephone and the email address + website).

Most patient associations offer leaflets with all this information; the psychiatrist should have these documents in his office and make them available to the patient.

On Diagnosis

Psychiatrists Assessment of Mental and Physical Health Before Deciding What to Do Next

Techniques they may use include:

Clear Diagnosis

- Explain to the patient about management of diagnosis: things they can do realistically.
- Psychiatrist also needs to be realistic in the information they provide.
- Reassuring, positive, supportive.
- Asking questions – using the information described above will help the patient answer the doctor's questions.
- Physical examination – checking weight, blood pressure, etc.

- Blood tests – to eliminate other possible diseases and check physical status.
- Questionnaires that the patient fills in– some doctors use standard questionnaires to assess the patient's mental function.

Post Diagnosis: Treatment

If the Symptoms Have Been Diagnosed as Due to a Mental Disorder, the Psychiatrist Should Then Explain What Happens Next in Terms of Treatment and Continued Monitoring

This can be a very upsetting and confusing time for the patient. The patient will, most likely, have many questions to ask. Therefore it would be helpful to think about these questions in advance so that a maximum of information can be given.

Some questions that need to be answered:

- Why do you think I have mental disorder?
- Can I see another doctor?
- What happens next? Do I need further tests?
- What treatment would you recommend? And why? How long?
- How will this treatment help?
- What will be the cost of treatment?
- Are there any side effects to the treatment?
- What happens next if the treatment doesn't work?
- Who should I contact in case of an emergency?

Life Impact Dealing with the Diagnosis: What Now?

To some people the diagnosis of a mental disorder comes as a relief – at last, an explanation for why they have been feeling the way they have. To others it comes as a severe blow. And many more have mixed feelings.

Whichever way the patients feel about the diagnosis, they are likely to have a number of concerns and questions about it and what it will mean for their life.

Outcomes the Psychiatrist Should Give Full Information to the Patient

Questions that should be answered:

How Will Mental Disorder Affect a Life?

Life may change now that he or she has been diagnosed.

On the positive side the patient is now in a much better position to receive the most appropriate treatment for his or her disorder, to help reduce and alleviate the symptoms. There is no doubt that this should improve life considerably.

On the other hand, the patient will have to come to terms with the fact that he or she has a (chronic) mental illness. This is undoubtedly a challenge. But it should be

made clear that, with the right help and guidance, this is a challenge that can be overcome.

Will I Ever Get Better?

Most people with a mental disorder will find that their condition improves significantly once they begin an appropriate treatment.

In time the patient will learn how to monitor his or her condition, recognize the triggers and work with the healthcare team to tailor the treatment accordingly. Equally, the patient will learn how to adjust his or her lifestyle to minimize the impact of the condition. This will allow him or her to live a full and active life.

How Will the Illness Progress?

With an adequate treatment most people with a mental disorder will have periods of their life when they are free of symptoms. However "episodes" are likely to recur from time to time. How often this happens and how long he or she will have between recurrences depends on the individual, on how well the treatment is working and on other issues such as whether or not other illnesses are coexisting. Left untreated, a mental disorder tends to get worse over time, which is why it is so important to get an early diagnosis and begin appropriate treatment.

Will the Patient Need to Go to Hospital?

Many newly diagnosed people are understandably afraid that they may have to be admitted in hospital. This is not usually necessary once the disorder has been diagnosed and is being effectively managed. However, an untreated or poorly treated mental disorder can lead to episodes during which the patient may be at risk and even represent a danger both for himself as for the wellbeing of others. Under these circumstances, it may be necessary to bring the patient to hospital to get his or her condition back under control.

Is the Patient to Be Blamed?

Sometimes a diagnosis of mental disorder can lead the patient or a family member to wonder whether it is something that they have done that has led to the onset of the illness. The truth, however, is that a mental disorder is nobody's fault. It occurs due to a number of factors; many of them are still poorly understood. And it is unlikely that there is anything the patient or the family could have reasonably done to prevent it.

Treatment and Collaboration

The Psychiatrist (and the Health Care Team) Will Need to Work Together with the Patient (and the Family) to Determine What Combination Works Best

But it is likely that the best package of care will include elements of each of these four types of treatment.

- Medication
- Psychotherapy
- Self-help
- Psychoeducation

Medication

Medication is almost always an essential part of the effective care of a mental disorder.

Perhaps understandably, many people with a mental disorder are nervous about taking medicines that act on the brain. The psychiatrist should explain to the patient that a mental disorder is a disorder of the brain, so this is where the medication must act if it is going to work.

Side Effects

Like many other medicines, those used to treat a mental disorder can have unpleasant side effects. The psychiatrist (or the healthcare team) is well aware of this and should be monitoring the progress once treatment has begun. Some drugs are more likely to cause side effects than others, and some drugs produce different side effects at the onset of the treatment and in the long term. In any case, the doctor will be able to help reduce the unpleasant effects of medication, either by adjusting the dose or by switching to a different drug altogether.

Sometimes, it is difficult to tell whether an unpleasant symptom is due to the patient's condition or to the medicines he or she is taking to control it. For instance, if the patient finds that his or her ability to think clearly and make decisions is being affected, he or she may believe this is due to the medication. Sometimes it is. But more often it is a symptom of the disorder. Either way, the patient needs to tell the doctor or healthcare team in order to get proper help.

Psychotherapy

Patients might think that "psychotherapy" involves lying on a couch in a darkened room while a bearded analyst asks difficult questions about their childhood. In fact, psychotherapy is usually a lot more enjoyable than that. Mostly it involves simply sitting down with a therapist, either in one-to-one or group sessions, and talking about their condition and how to cope with it. Indeed, psychotherapy is often referred to as "talking therapy."

Psychotherapy is an important part of managing a mental disorder and is used in conjunction with medication. Its aim is to ensure that once the patient's symptoms are under control, he or she develops the skills and strategies to take charge of their condition and put their life back on track.

Psychotherapy will help the patient manage his or her mood, respond positively to whatever triggers the symptoms, and build a supportive environment in which to live with his or her condition. It will also focus on some of the life skills the patient needs to put his life back together once he or she has started out on the road back to recovery.

There are a number of different approaches to psychotherapy which are delivered in slightly different ways. The patient can therefore choose the approach and the

therapist with whom he or she feels most comfortable. The healthcare team will be able to guide the patient towards the most suitable approach. Or the patient can obtain contact details through therapist professional organizations or through mental disorder support groups.

Support Group

Living with a mental disorder can make the patient feel lonely. The patient may feel he or she is facing insurmountable problems and has no-one to turn to for help. This is where support groups can offer a huge assistance in helping the patient move forward with his or her life.

There are different support groups available, both for people with a mental disorder and for those who care for them. These groups are active at local, national, and international levels and can help people with a mental disorder in a number of ways.

A psychiatrist should inform the patient on the existence of self-help groups active in the region (most of them have leaflets with all useful information – the psychiatrist should make them available to the patient).

Most work on the "strength in numbers" principle and that problems are better shared with people who really understand them.

A support group will enable the patient to join forces with people who have been through similar experiences. By meeting up, talking through problems, or simply by socializing with people who really know what it is like to live with a mental disorder, the patient may find that many of the problems in his or her life become easier to solve.

Different groups specialize in different areas of support. So, for the patient, it is worth looking around for one that is most likely to meet his or her own specific needs. And nothing prevents the patient from joining several support groups. The benefits that support groups can bring include:

Shared Experiences

Most support groups have been set up by people who have been through similar experiences. Often simply sitting down and talking to someone who really knows what the patient is talking about can be an incredible relief. It may help the patient express his or her feelings more freely and start to lift some of the confusion that often surrounds people affected by a mental disorder. If the patient is feeling angry or frustrated about his or her situation or the received care, it is much easier to express these views to someone who might share them than to a professional who may be part of the service the patient is angry about.

Information and Expertise

The only real experts on living with a mental disorder are those who are already doing so. As a result, most support groups are composed of people who can either deal with the patient's questions themselves or know where to go and find answers. Many support groups have used this expertise to produce helpful information in leaflets, videos, and on websites.

Advocacy
People affected by a mental disorder can sometimes find themselves in conflict with the law, in financial difficulties, struggling with the benefits system, or facing discrimination at work. In these situations, it is a lot easier for the patient to stand up for his or her rights when having a strong, well-informed support group backing him or her.

Networking
Support groups have extensive links with groups in various areas of mental health and beyond. This enables them to join forces and campaign on a wide range of issues that may affect people living with a mental disorder. It also enables them to join in consultation exercises that can be hugely influential in deciding future government policy.

Fighting Ignorance and Prejudice
It is not just people with a mental disorder who need to know more about the illness. Society at large remains extremely ignorant of the disorder. This can lead to misconceptions, prejudices, and abuse. Many support groups seek to address this ignorance through awareness-raising initiatives and educational campaigns.

A wide variety of groups and organizations are available to offer support, guidance, or even just a friendly ear. Good sources of information and support should be made available by the psychiatrist, who, moreover, should possess a list of such groups and organizations, at least of those closest to his center of activity.

Psychoeducation

The more the patient learns and knows about his or her condition, the better placed he or she will be to take control of it.

Psychoeducation implements this principle within a clearly defined therapeutic program in which a trained therapist delivers targeted information designed to reduce both the frequency and the severity of the symptoms.

Psychoeducation should be fully integrated in the overall treatment plan. It will increase the patient's knowledge and understanding of his or her illness and treatment and help cope more effectively. It may also encourage the patient to keep taking the prescribed medication.

Many people find that they benefit not only from the information they receive during psychoeducation but also from the learning process itself.

There are several different ways in which psychoeducation can be delivered. These include one-to-one sessions with a therapist, sessions aimed specifically at carers and family members, group sessions attended by several people with a mental disorder, and mixed group sessions attended by a number of people with a mental disorder and family members.

A course of psychoeducation should include a series of sessions over a period of weeks or even up to 3 months.

Psychoeducation can take place even while the patient is acutely ill, but much of the information may have to be repeated once the symptoms have stabilized.

A typical psychoeducation program would cover issues such as:

- Distinguishing causes and trigger factors of psychotic episodes
- Early detection of symptoms of mental disorder (e.g., mania and depression)
- Strategies to help prevent early symptoms developing into full-blown episodes
- How to use mood diaries to chart the condition's progression
- The use of medications
- How to identify side effects and what to do about them
- Pregnancy and genetic counselling
- The risks linked to stopping treatment
- Help to avoid alcohol and street drugs
- Help with establishing a regular lifestyle routine
- How to deal with sleeping problems – either excess or lack of sleep
- How to manage stress
- Help with problem solving

Family-focused psychoeducation may also cover such issues as the financial, social, and psychological strains than can be caused by looking after someone with a mental disorder.

Giving psychoeducation demands a specific training, emphasizing on communication skills and group dynamics. The psychiatrist, responsible for treatment, may refer to a team specialized in psychoeducation.

Psychoeducation services can be accessed, either directly by contacting the psychoeducation coordinators in the patient's region or through mental healthcare services, the family doctor, or via a mental health support group.

The Outcome of Treatment: What Can Be Considered as a Good Treatment

The psychiatrist and the patient should discuss what the outcome of the treatment will be. If possible family and carers can be involved in this discussion.

In general, there are four different visions on outcome, on the goal of treatment:

- Health care professional is mostly focused on reducing symptoms.
- Family and carers are concerned with safety (suicide prevention/aggression).
- Hospital manager/Government will be focused on cost/effectiveness.
- Patients want to improve their quality of life.

It is up to the psychiatrist to discuss this with the patient and to find a consensus between each of these goals.

Patient Rights (Alexander, 1994)

Right to Information

The patient has to be informed on his or her legal situation. What are the legal provisions? What are the rules that are applicable to his or her situation?

Right to Informed Consent

Especially the patient should be informed on the rules of forced treatment and civil commitment.

Right to Complain

The main complains are related to the same themes: treatment, finances, and relationship problems.

The problems concerning the treatment can also be related to the relationship with the doctor or with a lack of information. The gross of the complaints about treatment are related to medication: patients complain about side effects, they want to change or reduce medication.

Financial problems can be of various types: they can concern the patient's own income or information about benefits.

Concerning the relationship with carers in general: it is a quite a common problem that patients have the feeling not to be taken seriously by them.

Right to Privacy

Psychiatrists should not discuss a patient's case when it can be heard by other patients. They should not take phone calls concerning other patients during a therapeutic session.

The door of the staff room should be closed, to avoid that patients waiting in the corridor can hear discussions on other patients.

Adherence to Treatment (Gauci, 2012)

The concept of adherence:

- ***Adherence needs to be the building block of the therapeutic alliance*** *between patients and professional carers (not only psychiatrists, but also psychiatric nurses, psychologists, and social workers).*

- ***Adherence to treatment is more than medication****; it also implies psychotherapy, psychoeducation, and self-help.*
- ***Adherence is a shared responsibility****: patient, family, professionals.*
- ***Personalized*** *to the situation of the person, but also needs to be adapted to the local culture.*

Reasons for not adherence:

- *The patient experienced side effects.*
- *The patient does not believe/trust/respect the treatment.*
- *Stigma: the patient is embarrassed to disclose his or her mental disorder.*
- *The patient does not like the treatment.*
- *The treatment is (was) not effective.*
- *For financial reasons (the treatment is too expensive, patient cannot afford it).*

Stabilization

Once the patient has started to recover, it is likely that he or she will want to start regaining control of his or her life. This is an important part of the healing process as the more independent the patient becomes, the better he or she will be placed to keep the condition at bay.

Mental disorder impacts all areas of life, so there may be some difficult decisions ahead. For each of them a psychiatrist can offer support.

For example:

Family Life

What to tell the children? – This is a difficult decision for anyone to make. But it is important that the mental disorder does not become a secret that nobody talks about. Children naturally want answers, and if they do not get them, they may come up with their own. No one knows the children better than the parent. So the parent must decide how much to tell them and when. Talking to someone at a support group can help to make this decision.

Family Planning

Some medications used in mental disorders should not be used by women who are trying to become pregnant. So if the patient is trying to conceive, she should have the opportunity to discuss this with the psychiatrist. Before planning a family, there are a number of issues that will need to be discussed: the genetic risk that a child may also develop the condition; how to cope with motherhood; the possibility of relapse after giving birth or during the pregnancy. These questions will never be easy.

Information from the healthcare team may help the patient to be in a better position to answer them.

Work Life

Many people with a mental disorder are able to continue to work normally. Others decide to adjust their working lives so as to better suit their condition. This may include changing for a less stressful function, reducing hours of work, avoiding night shift work or taking up a job share. Some employers are much better than others at allowing these adjustments to be made. However, as an employee a patient is protected by both national and international law against discrimination at the workplace. If there is a need to stand up for these rights there are a number of sources of help and guidance that can be addressed. These include: the workplace's human resources department, trade unions, citizen's rights organizations, and support groups.

Financial Planning and Legal Issues

If the mental condition has put limitations on the patient's ability to work, he or she may be entitled to benefits. Sometimes abnormal behavior during psychotic episodes can have legal implications – for instance if the patient spends money that cannot be afforded.

Advice on welfare and legal rights should be available at the healthcare team, citizen's rights organizations, and support groups.

Advance Planning

One way of ensuring that the patient retains control over his or her life, even in the event of a crisis, is to write out a plan of how the patient would like to be treated if such a crisis should occur. For instance, if the patient knows he or she is prone to excessive spending during manic episodes, a family member might be authorized to confiscate credit cards. There may be treatments the patient wishes to receive and others he or she wishes to avoid. Or people the patient would like to be informed should he or she be admitted to hospital.

Recovery Maintenance/Life Progression: Back to Work (ARTEEL, 2013)

At the 2006 general assembly of GAMIAN-Europe in Blankenberge (Belgium) representatives of 60 European patient associations discussed on "What do we expect from the treatment, When do we consider a treatment as successful?"

The unanimous answer was: treatment is successful when at the end of it we are back at work. . ..

Work is beneficial for patients: higher self-esteem, less psychiatric symptoms, less social problems, and improved quality of life. Patients are more motivated to work than the general population. People who do work: less expenses for care. Recover: focus on competencies and not on the limitations.

Take away ultimate expectation and place more emphasis on a healthy life balance. This will be different from person to person. The success does not necessarily come from the treatment and maybe it is a combination of treatment that includes support, appropriate medication that helps somebody to get better but ultimately the success of all of this comes from the person.

Conclusions of the GAMIAN-Europe Regional Seminar Dublin (2013) (MULLER, 2013)

Motivation to work is high!
Mental health has a strong influence on work and vice versa.
Fear for relapse and presence of symptoms make it difficult to get back to work or keep a job.
Social aspect of work is very important – relationship with colleagues.
Need for effective treatments to ensure sufficient symptom reduction so that people can work again and keep their jobs.
Work leads to an increased quality of life – A good life quality includes work.
More and effective programs for people with mental health problems to enable them to find work and keep their job.
Fighting stigma and change of attitude.

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Ethics in Psychiatry Training

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Dominik Groß and Frank Schneider

Contents

Abstract

This chapter begins with a section "Introduction to Clinical Ethics" that defines key terms from the field of clinical ethics and goes on to present and explain the most important ethical concepts.

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The main part of this chapter consists of two sections ("General Ethically Relevant Aspects of Psychiatry" and "Psychiatry and Society: Ethical Aspects of an Interdependent Relationship"). Section "General Ethically Relevant Aspects of Psychiatry" discusses ethically relevant aspects of the relationship between psychiatrists and patients. It starts with a critical normative analysis of patient autonomy in the psychiatric context. This is followed by a discussion of coercive measures in psychiatry and on suicidal ideation, geriatric psychiatry, and addiction medicine. The chapter then focuses on the topic of research ethics. It discusses the opportunities and risks of clinical psychiatric studies that must serve the interests of both medical progress and individual patient safety, before going on to explore ethical aspects of psychiatric genetics and population genetics. This is followed by consideration of patient-relevant tools to support decision making in the field of clinical ethics – namely clinical ethics counseling and advance healthcare directives. The final part of section "General Ethically Relevant Aspects of Psychiatry" offers a critical normative analysis of the recent developments neuroenhancement and wish-fulfilling psychiatry.

The second main section, "Psychiatry and Society: Ethical Aspects of An Interdependent Relationship," is dedicated to the social and regulatory functions of psychiatrists and thus to the relationship between psychiatry and society. It starts with some basic remarks on the role of psychiatrists in society and on ethical misconduct in the history of psychiatry. Using the example of what happened during the Third Reich, it offers a critical discussion on the reappraisal of historical accountabilities. The chapter then goes on to look at the present and future of psychiatry, demonstrating the potential for conflict between psychiatrists' clinical role of working for the good of individual patients and their public role of ensuring the good of society on the basis of three examples of ethical relevance: forensic psychiatry, stigmatization, and equality of access.

Keywords
Medical ethics · Role conflict · Coercive measures · Autonomy · Decision-making capacity · Historical reappraisal

Introduction to Clinical Ethics

Fundamental Definitions

Before the principles, perspectives, and approaches of clinical ethics can be addressed, it makes sense to define the key terms and what they refer to (Gross 2012).

It is useful to start with the difference between the terms "morality" and "ethics," as these are often mistaken for synonyms. The term "morality" (Latin *mos*) refers to the lived standards and beliefs of an individual, community, or society. Morality therefore includes the obligations and values that determine the life of a person or a community, and their reciprocal behavior. Morality evolves with the evolution of

society, being also dependent on culture, political system, and religious belief. In contrast, ethics (Greek ethikos) is a scientific reflection on morality. If morality is the sum of the normative beliefs that regulate human cohabitation within a society, ethics is the critical examination of what morality requires or prohibits. Ultimately, therefore, ethics is the science of morality.

Other central terms are "ethos" and "etiquette." Ethos (Greek ethos) denominates the guiding beliefs of a group, a profession, or an organization. It is often used to denominate professional ethics, e.g., the specific ethics of the medical or dental profession. It is originally linked to the Hippocratic Oath. Therefore, the latter can be looked upon as an early example of the ethos of the medical profession, preserving key aspects such as medical confidentiality, doing no harm, rejecting euthanasia, etc.

In contrast, "(professional) etiquette" (French *étiquette*) denominates a code of conduct. It has a strong focus on the interactions among the members of a profession or a medical professional group. Essentially, the term refers to a code of conduct that is based on professional traditions and describes expectations of social behavior within a group. Codes of conduct do not necessarily have an ethical dimension, but are there, above all, to protect the public image of a profession or occupational group. These include, for example, traditional regulations on how to mutually represent a practice or hand a practice on to a successor, or rules on advertising to ensure adherence to professional standards. Professional etiquette is important for smooth cooperation with colleagues (e.g., not enticing patients away from colleagues, not denigrating colleagues), and for the public image of a profession or specialist group. Many medical declarations contain examples of both professional ethos and professional etiquette, for instance, the Madrid Declaration on Ethical Standards for Psychiatric Practice (WPA 2011).

Many ethical guidelines in medicine and psychiatry are already protected by general legal principles (e.g., medical confidentiality, rejecting euthanasia, etc.) that are enshrined in the constitution or laws of individual states. Others are at least laid down in the declarations and other statements of international medical organizations, such as the World Medical Association (WMA) or the World Psychiatric Association (WPA). Especially, prominent examples include the WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subjects in the current version of October 2013 (WMA 2013) and the aforementioned Madrid Declaration, as amended in September 2011 (WPA 2011).

Welcome as such regulations are, it is equally important to recognize that moral attitudes and behavior can neither be enforced nor replaced by laws and declarations. Also, medical progress consistently entails the need for new ethical clarifications, so regulations of this type will always necessarily lag behind the latest developments.

Ethical Concepts and Their Application in Clinical Practice

Besides the correct use of terms, ethical practice in the clinical context requires the application of suitable ethical theories. These should help achieve acceptable outcomes in cases of clinical dilemmas or ethically relevant issues.

There is a variety of different ethical concepts. The main way to distinguish between ethical theories is the criteria they use to determine what is morally good. Some of these concepts are based on the actor's characteristics (virtue ethics), while others focus on the action itself (deontological ethics), the consequences of the action (teleological ethics), or on principles derived from common morality (principlism). These ethical concepts are described below with a main focus on principlism.

Virtue Ethics

Virtue ethics does not focus on assessing the individual actions of a person, but rather on assessing the person him or herself – in particular his/her character traits and virtues (Gross 2012; Hansen 2015; Radden 2015). Virtue (Latin *virtus*) refers to an inner attitude that causes a person to "naturally tend" to do good actions. Accordingly, good actions are to be expected from virtuous people. The ideal of a virtuous person, that is, a person with the right attitudes and character traits, thus becomes a benchmark for right (virtuous) action. In other words, for virtue ethicists, the proper course of action is not (primarily) deduced from general rules. It rather arises from the virtuousness of the person making the decision. Thus, a person with the right attitudes and character traits is able to make the right decision in a particular situation.

Deontological Ethics

By contrast, the terms "deontological ethics" and "duty ethics" (Greek *deon* = obligation, duty) refer to an ethical concept that measures human action by the fulfilment of basic obligations (Gross 2012): I do what I know to be my duty, so the action is good for me and for others. In deontological ethics, therefore, commands or permissions and prohibitions are the cornerstones of actions. The person carrying out the actions is concerned with "moral laws" or with guidelines and existing responsibilities.

Duty ethics assumes that actions, regardless of their consequences, are good or bad in and of themselves. This approach is frequently associated with German philosopher Immanuel Kant (1724–1804, Kantian deontology) and often illustrated with a formulation of "the end in itself," the categorical imperative. This means the imperative to perform actions in which people are treated as an end and never simply as a means.

Teleological Ethics

In turn, teleological ethics focus on the purpose or the goal of an action (Greek *telos* = goal, purpose). The best-known teleological approach is consequentialist ethics, or consequentialism (Latin *consequentia* = effect, consequence). Both terms refer to an ethical theory in which actions are assessed on the basis of direct or indirect effects or consequences for the person affected by that action (Gross 2012; Teller 2013). It is therefore relevant whether or not the intended purpose or goal is achieved. Frequently, consequentialism is illustrated by the aphorism "the end justifies the means." This ethical theory thus differs fundamentally from both

deontological ethics (which assumes that the action itself is good or bad) and virtue ethics (in which the virtue of the actor is considered decisive). Accordingly, critics accuse advocates of consequentialist ethics of not going far enough because they do not see the "innate" nature of the act itself as morally relevant, but only its consequences.

A more powerful expression of consequentialist ethics is utilitarianism, which assesses actions based on their general utility (Latin *uti* = benefit). An action is considered to be useful, and therefore good, if – to the extent that this can be predicted – it maximizes the total welfare of those affected. The core of utilitarianism can be summed up by the demand to act in such a way that procures the greatest amount of happiness. Utilitarian ethics is therefore aligned to the issue of which actions provide the maximum benefit for the greatest number of people, i.e., it is based on maximizing of the sum of "interpersonal benefits." The main argument against utilitarian approaches is that they only consider the *sum* of the benefit, but not the best possible care of the individual patient, so certain individuals could "fall through the cracks."

Principlism

The ethical theories described above could be seen as fundamentalist, as they declare as authoritative and indispensable a particular area of the moral inventory (virtues, duties, consequences, etc.). A more pragmatic route was taken by American medical ethicists Tom L. Beauchamp and James F. Childress, who advocated principlism (Beauchamp and Childress 2009). The basis of their approach is four relatively simple principles derived from common morality, which given equal priority – and considered together – are supposed to constitute benchmarks for responsible ethical judgment. The four relevant principles are (Allen et al. 2015) respect for a patient's autonomy, (Arolt et al. 2011) nonmaleficence, (Avasthi et al. 2013) beneficence, and (Beauchamp 2015) justice.

Principles ethics is currently very popular in the assessment of clinical cases, so it is worth presenting this approach in more detail:

(1) Respect for a patient's autonomy

This principle means that the physician or psychiatrist recognizes the maturity and self-determination of the patient, and thus the individual's independence from the medical authorities (DGPPN 2014). This principle ensures the personal decision-making capacity of patients with regard to their own interests. After all, decisions always involve individual values and attitudes relating to how one wishes to lead one's own life. Respect for patient autonomy is the most historically recent of the four ethical principles. The recognition of this principle brought about a palpable change in the doctor-patient relationship; it meant a significant reduction in traditional medical paternalism (Latin *pater* = father). However, it should be emphasized that patient self-determination may be limited for a number of mental disorders, in cases where the patient lacks capacity to consent, and for other vulnerable types of patient (e.g., minors). In these cases, this patient right must be exercised by a legal representative (see section

"Patient Self-Determination and Psychiatry" of this chapter). Besides, respecting patient autonomy does not mean that psychiatrists are ethically bound to do *whatever* patients request. Especially, when a patient requests an action that would harm him or her, the physician might act morally by denying that request.

(2) Nonmaleficence

The principle of nonmaleficence, on the other hand, can be traced back to the Hippocratic Oath. It is built on the principle of *primum nil nocere* (Latin, "first, do no harm").

Nonmaleficence is the principle that no physician may inflict unjustified harm on a patient or subject any patient to unnecessary burdens. Even the (careless or intentional) omission of a measure can also be defined as harm, and therefore as a violation of the imperative to do no harm.

In fact, the principle of nonmaleficence is about negligence and about not exposing patients to unpredictable and unreasonable risks. Thus, any form of abuse of power by the treating physician is also prohibited – be it narcissistic, sexual, or economic.

(3) Beneficence

The principle of beneficence (Latin *bonum facere*) describes the medical obligation to promote patients' welfare. While the principle of doing no harm aims to avoid or omit, the principle of beneficence is about positive actions – concrete assistance such as pain relief or curative and rehabilitative measures. There are also conceivable situations, however, in which a patient's welfare can only be promoted by, for example, putting them under intravenous sedation if they represent an acute danger to themselves or others.

It is important to note that the principle of beneficence is sometimes used or misused as justification for medical paternalism. This is an attitude in which the physician or psychiatrist takes on the role of a caring father, making decisions in the patient's (supposed) best interests, and thus disregarding the patient's autonomy. While strong paternalism is directed against the will of an autonomous person, weak paternalism is manifested in nonautonomous action, that is, it is applied to persons who cannot decide autonomously. In fact, the extent to which the medical duty of care can be used as a justification to override (supposedly irrational) autonomous patient's decisions is a recurring matter of debate in medical practice. In any case, it should be noted that, properly understood, care must always aim at promoting or restoring the self-determination of the patient.

(4) Justice

The fourth principle of the Beauchamp and Childress approach is justice (Latin *iustitia*). At the heart of this principle is the equitable distribution of available goods, services, and opportunities. This constitutes a special obligation to society to ensure that every citizen has access to medical services. Justice also means that the attention of the psychiatrist to his or her patients is fairly distributed.

In fact, it means that each patient should get an equal amount of time, commitment, and care, that physicians treat everyone as fairly as possible, and that they do not treat persons solely for the sake of increasing their own benefit.

The four principles can be used to solve almost all medical ethical dilemmas. If the individual principles conflict, a balance should be struck between them. Beauchamp and Childress (Beauchamp 2015; Beauchamp and Childress 2009) emphasize that there is no hierarchy between the four principles. Ultimately, it is up to the respective physician or psychiatrist to decide how he or she balances them. The weighting and the subsequent decision can (and may) turn out quite differently for different therapists. What is decisive, however, is that physicians have a plausible ethical basis for their decision, that is, they can cite the leading normative arguments for their decision and do not decide based on "gut feeling" or pure convention ("we've always done it this way") (Table 1).

It has been mentioned that principles ethics is a particularly well-accepted approach to assessing conflictual clinical cases. There are four main reasons for this (Gross 2012):

1. In contrast to the ethical theories discussed above, the four principles require no philosophical knowledge and are also immediately accessible to nonexperts in ethics (the principles are plausible and intuitive).
2. Principlism is not fundamentalist; that is, it does not declare a particular area of the moral inventory to be an inviolable foundation (nondogmatic approach of principles ethics).
3. The four principles enjoy broad acceptance regardless of cultural origin and religious or philosophical convictions (ability to achieve consensus on principles).
4. The principles are well suited to analyzing specific cases; that is, they have clear practical relevance (practicality of the principles).

Beside the aforementioned four principles, a number of other ethically relevant criteria are also essential for a trusting doctor-patient relationship. These are summarized below:

- The *honesty* of both parties is a prerequisite for building confidence and treatment compliance and thus for a strong therapeutic relationship.
- For the psychiatrist, *empathy* is equally important. This means the sensitive perception of the needs of the patient. The treating physician not only requires a personal talent for this, but especially professional training and continuing education. Alongside empathy, the therapeutic process requires other characteristics such as a capacity for *introspection*, *correction*, and *transparency*. Empathy should not be equated with a lack of distance. Instead, both principles are

Table 1 The four principles according to Beauchamp and Childress (2009)

Principle	Meaning
Respect for patient autonomy	Recognizing patient self-determination
Nonmaleficence	Principle of doing no harm (to the patient)
Beneficence	Principle of doing good (to the patient)
Justice	Fair distribution of goods and opportunities

required; distance from the patient is part of the practitioner's professional conduct.
- Finally, the principle of *economic neutrality* is required. This has already been addressed under the justice principle. Of course, therapeutic intervention may be economically profitable. From an ethical perspective, however, it is important that a therapeutic option is chosen independently of how lucrative it is for the practitioner and is strictly based on the needs and interests of the patient.

Psychiatrists and psychotherapists are primarily bound by the treatment mandate – that is, to diagnose, maintain, and restore the health of the patient. This task and its potential ethical implications are discussed below in the first main section. Psychiatrists and psychotherapists also have a significant social or regulatory function – for example, in cases when patients' behavior endangers themselves or others (see section "Coercive Measures in Psychiatry"). These two functions can lead to a role conflict, so it seems necessary from an ethical perspective to discuss the interactions between psychiatry and society. We do this in a further section.

General Ethically Relevant Aspects of Psychiatry

Patient Self-Determination and Psychiatry

As mentioned above, the traditional doctor-patient relationship used to be characterized by medical paternalism. Based on their technical expertise and treatment experience, doctors claimed to know what was best for their patient. This view is seen as outdated nowadays. In today's society, autonomy and self-determination are fundamental values. This applies to both healthy and ill citizens (Arolt et al. 2011; DGPPN 2014; Hoff and Hinterhuber 2011, Radoilska 2015). Everyone has the fundamental right to make decisions about their own life and therefore on matters that affect their own health. Accordingly, both the informed consent of the patient – that is, consent based on full information – and shared decision making are prerequisites for gaining consent for specific diagnostic or therapeutic measures. Thus, it is the duty of physicians and psychiatrists "to empower the patient to come to a rational decision according to personal values and preferences" (WPA 2011).

However, in certain cases, mental illness can limit a person's capacity for discernment and self-determination. The mere presence of a mental illness does not mean that a patient is not capable of making decisions (DGPPN 2015). In such cases, expert examination of a patient's capacity for self-determination is all the more important. Especially in the context of affective disorders, obsessive-compulsive disorders and delusions, a patient with limited capacity to act may lose the freedom to choose between different options. Equally, it cannot always be assumed that the wishes that patients express correspond to what they actually want.

This relates to the ethically relevant question of whether, or in what circumstances, a psychiatrist may admit that a patient is not making decisions for his or her own presumed good. This reflects the particular situation of psychiatry. It is

controversial to what extent the established concepts of self-determination and informed consent, which were mainly developed for *physical* medicine, can do justice to the requirements and problems in the field of psychiatry and psychotherapy – if at all. Particularly in borderline cases, further ethical orientation is required for good medical conduct. A distinction must be drawn between autonomy as a right and autonomy as a capacity (Birnbacher and Kottje-Birnbacher 1999): the right to autonomous decision making is fundamental in nature and should not be relativized; however, it may only be exercised if the patient is actually capable of making such decisions. As mentioned, in some cases, psychiatric patients are not (entirely) capable of discerning or making judgments. However, seemingly irrational behavior does not always necessarily mean that a psychiatric patient is not capable of making decisions. Rather, it should be emphasized that in principle, of course, the patient has the right to make (supposedly) unreasonable decisions – if he or she can grasp the probable consequences of those decisions.

Capacity for self-determination and the right to want something unreasonable are, therefore, not fundamentally mutually exclusive (Bundesärztekammer 2015). In fact, also in physical medicine, it is often the case that patients exercise self-determination to reject a measure that would actually benefit them. If a patient is capable of self-determination and no significant acute danger exists, such a decision has to be accepted. Everyone also has the "right to illness." It is equally important at this point to note that patients who are unable to work can be perfectly capable of making self-determined decisions on specific medical measures. Even the existence of legal assistance does not fundamentally exclude the capacity for self-determination (Schneider et al. 2015).

The criteria for self-determination in a specific case are the capacity to understand the information (i.e., when doctors explain the situation, patients must be able to develop an understanding of what needs to be decided), capacity for discernment (i.e., patients must realize that they have an illness or that their own health is limited), capacity for judgment (i.e., they must be able to recognize and comprehend the importance of the decision to be taken), and capacity for expression (i.e., they must be capable of expressing their decision verbally or nonverbally). The above capacities have various gradations in individual cases and therefore, from an ethical perspective, these capacities need to be thoroughly examined for each decision that has to be made. In cases of doubt, the assistance of an independent colleague who is not involved in treating the patient is advisable, both for professional reasons and for quality assurance, documentation, and forensic security purposes in the event of an impending conflict.

If a patient is not capable of self-determination in a specific case, it is necessary to obtain proxy consent – that is, consent by a named or legally appointed representative – or, in cases of acute danger to patients themselves or to others, the practitioner must first take a paternalistic approach. Even then, however, the medical measures taken should aim to restore understanding and discernment and enable patients to exercise their right to self-determination (DGPPN 2015).

A basic principle of the Madrid Declaration applies (WPA 2011): "No treatment should be provided against the patient's will, unless withholding treatment would

endanger the life of the patient and/or the life of others. Treatment must always be in the best interest of the patient." Furthermore, each case of limited capacity to discern and give consent should be treated individually and decisions made on a case-by-case basis. Patient-centered ethics in psychiatry should thus constantly seek to balance the traditional paternalistic approach and a radically interpreted patient right to self-determination.

Patient self-determination fundamentally includes being informed of the diagnoses made.

Coercive Measures in Psychiatry

Coercive measures are generally understood as keeping mentally ill persons in a medical institution against their express wishes and other measures (such as isolation or restraint) to confine patients against their will. Medical coercive measures are diagnostic and therapeutic interventions (e.g., drug treatment) against the express will of the patient (Allen et al. 2015; Arolt et al. 2011; Ernst et al. 2012; Hoff and Hinterhuber 2011; Liégeois and Eneman 2008; Vollmann 2010).

Coercive measures on psychiatric patients usually have two components: medical and regulatory. For the psychiatrist, the medical task – ensuring the patient's welfare – takes priority; however, both these aspects of coercive measures need to be considered.

Unlike most physically ill patients, some psychiatric patients lack the capacity to discern that they are ill and require treatment – a fact that often leads them to refuse treatment classed as medically necessary. In these cases, a balance needs to be struck between a patient's right to individual freedom and protecting society from the threat of a patient who represents a danger to others or protecting the patient from life-threatening behavior in line with the respective legal requirements.

It is one of the tasks of psychiatry (as well as of the state) to protect any mentally ill persons who present a significant danger to themselves. The actions of the psychiatrist must conform to the legal framework and be implemented in an ethically appropriate way in the individual cases. The principle of proportionality applies here. Accordingly, the Madrid Declaration (WPA 2011) states that no treatment should be carried out against the will of a patient, unless withholding such treatment would endanger the life of the patient or other persons around him or her.

In serious cases, society legitimizes repressive measures to protect the welfare of patients. Confinement, like any restriction of a person's liberty, is a serious infringement of individual personal rights. Forced treatment is a violation of the fundamental right to physical integrity. Confinement and forced treatment are therefore only ethically defensible when persons who are acutely incapable of self-determination concretely and significantly put their health and life at risk (self-endangering behavior) and when this cannot be avoided by any other means, such as targeted attempts to convince patients of the danger of their behavior and their need for treatment. The moral prerequisite for such coercive measures is that patients' refusal of treatment is an expression of their mental illness and not of

their autonomous free will. Coercive measures taken by doctors must be reasonable in terms of the expected benefits and burdens, and correspond to the presumed will of the patient. Treatment for the exclusive welfare of third parties or the general public is ruled out, because the welfare of third parties must not take precedence over the welfare of the patient. Thus, confinement can serve to avert danger to others (i.e., a threat to the health and life of other people) as well as danger to the patients themselves, but treatment measures against a person's will that restrict his or her freedom solely in the interests of third parties or society (e.g., danger to others) is not covered by the medical code of ethics and therefore cannot be arranged or performed by doctors (Bundesärztekammer 2015; Bundesärztekammer 2016).

Let us take as an example a situation in which a patient cannot decide for himself and rejects treatment that is necessary from a medical perspective in order to prevent serious health problems and avert life-threatening conditions (e.g., acute risk of suicide or severe cognitive impairment due to dementia). Treatment against the self-determined will of the patient should, on the one hand, protect against serious damage to his health and, on the other hand, – as long or as soon as possible – restore his capacity for self-determination. This always involves taking into account not only the potential benefits and risks of the procedure itself, but also the subjective experience of the patient, possible effects on the therapeutic relationship between patient and doctor, and finally the possible adverse effect of compulsion on treatment success. The fact also needs to be considered that avoiding coercion may also constitute failure to provide vital assistance.

Coercive measures in the event of danger to others also raise specific ethical questions. If a patient presents a potential danger to others, he or she is expected to make a particular sacrifice in the interests of the threatened integrity of the community – namely to undergo coercive measures. The criterion of averting danger is closely linked to considerations in forensic psychiatry. Despite everything, medical treatment in the event of a patient presenting a danger to others may not be justified exclusively for the benefit of third parties or the general public; instead, it must protect patients against unwanted and serious (health) damage and restore their capacity for self-determination. Force is also justified through the concept of care (beneficence), which provides for the referral and confinement of the person concerned, especially as an action to help that individual. Quite fundamentally, coercive measures must be preceded by serious efforts to obtain the assent of the patient to cooperate. Here, a distinction must be drawn between an ethical attempt to convince and manipulative persuasion. There is a fine line between these two situations, which is why the use of force on mentally ill people is justified only under strictly defined conditions. This makes regularly continuing professional development for psychiatrists all the more important. This includes participation in quality control circles, best practice case discussions, and/or communication skills training. The fundamental ethical premise is that coercive treatment should be a last resort to avert imminent harm (DGPPN 2015).

If it seems possible that a patient could present a danger to themselves or others, it is advisable to create psychiatric treatment agreements at a stage when the patient is more lucid and thus capable of doing so. These agreements can serve as a guide

when decisions need to be taken, increase the autonomy of people with mental illness, and help reduce instances of forced treatment (see section "Advance Healthcare Directives and Joint Crisis Plans").

To ensure that the ethical conditions for a coercive measure are met, the decision on forced treatment should be taken by a multidisciplinary team of professionals, in line with the legal requirements.

From an ethical perspective, particular attention should be paid to the setting, aspects of the procedure and quality assurance, and aftercare. Psychiatrists should tend to use those interventions that are least restrictive to the freedom of the patient. Coercive measures should be as gentle as possible. Furthermore, psychiatrists should seek advice in areas "in which they do not have primary expertise." When psychiatrists have to assess a patient, it is indispensable to first inform and advise the patient "about the purpose of the intervention, the use of the findings, and the possible repercussions of the assessment" (WPA 2011). If a patient's freedom of movement is restricted by restraint, a caregiver must stay close to them and be available for conversation and assistance. Emergency coercive measures such as restraint, isolation, and restrictions on freedoms of any kind must be precisely justified and documented. The decision to implement a coercive measure must be reviewed at short intervals. When the restriction is lifted or the psychopathological situation improves, the reasons for the measure must be clearly explained to the affected patient in a way that she or he can understand. It is necessary to work toward obtaining subsequent acceptance of these measures. From both a clinical and an ethical point of view, it is imperative that all those working in psychiatric institutions receive regular training to ensure that all patients are treated in a nonviolent manner. Such training includes de-escalation seminars, subject-specific standardized debriefing of the entire team after coercive measures have been applied, and awareness of the correct procedures for coercive measures as a firmly integrated part of continuing professional development programs.

From a clinical ethical perspective, it is also necessary to question the opinion that forced *treatment* should be avoided whenever possible because it is more invasive than "mere" confinement and thus implies further escalation. This stance is based on the argument that a danger to others can be averted without treatment, through measures that restrict freedom and provide protection (e.g., restraint) alone. This argument does not tell the whole story, however. Restraining highly agitated – e.g., psychotic – patients without providing accompanying therapeutic measures is highly controversial from both a clinical and an ethical perspective. It is associated with increased risk of injury to both patient and treating physician – especially because without accompanying treatment patients often have to be restrained for a longer period – and thus may also increase the risk of psychological sequelae (trauma).

Particular Aspects of Clinical Psychiatry

Suicidal Ideation

The treatment of suicidal patients raises particular ethical issues (Hoff and Hinterhuber 2011). This topic relates clearly to the question of coercive measures

in cases of self-endangerment (see section "Coercive Measures in Psychiatry"). When there is a risk of suicide, confinement may be necessary, which often has a negative effect on the level of trust between doctor and patient.

From an ethical point of view, the relationship between respect for patient autonomy and medical prevention of suicidal behavior – which corresponds to the ethical principle of nonmaleficence – is a particularly delicate issue. Nearly all suicidal acts can be explained by mental illness (e.g., depressive symptoms, addiction, or a psychotic disorder). That means that the act is not an expression of free will – which is precisely the ethical basis for psychiatric intervention in the event of (threatened) suicidal acts.

As is the case in the period after initial confinement, the patient-psychiatrist relationship is vulnerable when the patient is placed in psychiatric in-patient care after a suicide attempt or is placed under observation for suicide prevention. In all these cases, alongside the appropriate therapeutic care, the focus is on encouraging empathy and creating a situation in which the patient feels safe and cared for. This includes not only providing medical empathy and comfort, but also working to counteract feelings of guilt, bolster self-esteem, and contribute to improving a patient's living situation as far as is possible.

Geriatric Psychiatry

Geriatric psychiatry involves a wide range of ethical issues (Dunn and Misra 2009; Hoff and Hinterhuber 2011; Hughes 2015). These include dementia patients' ability to give consent, their individual needs and preferences, and issues relating to limitations on psychiatric services provided to elderly patients (resource allocation). Many problems are exacerbated by social conditions. Examples include patients' lack of mobility and restrictions on autonomy imposed by the social setting (e.g., accommodation in nursing homes or at-home care), problems taking or metabolizing prescription drugs, or even medication against a person's will. Insofar as far as they can, psychiatrists should try to influence the following social and individual ethically relevant issues (Hoff and Hinterhuber 2011):

- Expanding out-patient and mobile services with the sociopsychiatric goal of allowing people who have become dependent to continue living in familiar surroundings as far as is possible.
- Expanding day care and providing respite care options so that working people can continue to take care of their relatives at home, or relieve them temporarily.
- Empowering nursing-home residents and integrating them in internal decision-making processes.
- Promoting (social) activities among nursing home residents, including promoting the possibility for (community) spiritual or religious activity (if the patient so wishes).
- Enabling equal access to medical and psychiatric treatment and care services.
- Ensuring dignified end-of-life care.

The latter also includes careful definition of the indications for tube feeding. The principles of informed consent or any statements made by persons with power of

attorney or by the patients themselves in written advance directives are to be observed. Nevertheless, the responsible psychiatrist also always has to determine whether refusing food is simply a characteristic of a psychiatric condition.

Addiction Medicine

Sooner or later, alcohol dependency, illegal drug use, or addiction to prescription drugs leads to social and physical impairment. In addition, the comorbidity of addictions and mental disorders is considerable. Moreover, many addicts experience social stigma (see section "Stigmatization and Destigmatization"). In this respect, psychiatric treatment of addicts is especially challenging (Hoff and Hinterhuber 2011) from both an ethical and a therapeutic perspective. Addicts often lack the awareness of their condition that is required for a positive therapeutic alliance. They are also often unwilling to submit or adhere to treatment. In addition – as with most other mental disorders – dependency is often affected by the social environment, which can lead to a variety of conflict situations, with third parties often approaching the psychiatrist with their own expectations and demands. This can result in a conflict of loyalties between the interests of the patient and those of the patient's family and of the social environment. Even when a psychiatrist's task clearly extends beyond responsibility for the patient, he or she must make decisions based first and foremost on the patient's welfare. The goals of addiction therapy are: Survival, harm reduction (with, if necessary, adequate substitute treatment), promoting quality of life, and – the long-term and most challenging goal – permanent abstinence.

Ethics and Psychiatric Research

The need for basic scientific research and clinical trials is undisputed, but the fundamental danger of abuse of patients and of corrupt behavior by drug trial investigators who accept personal financial contributions (Arolt et al. 2011; Avasthi et al. 2013; Bracken-Roche et al. 2016; Gross 2011a; Helmchen 2005; Helmchen 2014; Hoff and Hinterhuber 2011) is equally indisputable. Thus, the potential role conflict between the physician as therapist and the physician as researcher can give rise to research ethics issues. Many declarations in the field of medical research are the result of precisely this role conflict and are based on historical experiences. The Nuremberg Code (1947) is a set of research ethics principles for human experimentation. The code was drawn up in response to crimes committed in the name of medical research, particularly the human experiments conducted in Nazi concentration camps (Gross 2014 and section "Foundations and Historical Aspects" of this chapter). The same is true of the Declaration of Geneva. It was adopted by the WMA in September 1948 and most recently revised in May 2006 (WMA 2006). The Declaration of Helsinki, adopted by the WMA in 1964, has particular significance for the field of human medical research. Since its adoption, it has been revised many times, most recently in 2013. It states that economically disadvantaged people or those with health issues are particularly vulnerable and must be protected from harm. The Madrid Declaration has a similar emphasis for psychiatric patients (WPA 2011):

"Because psychiatric patients constitute a particularly vulnerable research population, extra caution should be taken to assess their competence to participate as research subjects and to safeguard their autonomy and their mental and physical integrity." The Madrid Declaration also requires adherence to further framework conditions: "Research activities should be approved by an appropriately constituted ethics committee. Psychiatrists should follow national and international rules for the conduct of research. Only individuals properly trained for research should undertake or direct it. Ethical standards should also be applied in the selection of population groups, in all types of research including epidemiological and sociological studies and in collaborative research involving other disciplines or several investigating centres."

One central ethical issue is possible conflict of interest. A conflict of interest exists when a psychiatrist is influenced in his or her professional activity by secondary interests. Collaboration with the pharmaceutical industry in implementing new research projects not only compromises the independent decision-making capacity of the physicians conducting the research but may also influence their judgment. Nonfinancial conflicts of interest (allegiance effect) may arise if certain patients are deprived of the chance of recovery. A concrete example would be the rejection of more effective therapeutic measures for ideological reasons. Although, in certain clinical situations, electroconvulsive therapy represents an effective and safe treatment; it is not used in many hospitals or states or included in studies, which violates the fundamental ethical principle of equality of access and distributive justice.

Placebo-controlled research also deserves special attention from an ethical perspective. Regarding the use of placebos, the Declaration of Helsinki states that: "The benefits, risks, burdens and effectiveness of a new intervention must be tested against those of the best proven intervention(s)." Double-blind, placebo-controlled studies should be viewed critically if patients in the placebo arm are deprived of an established effective therapy. The use of placebos seems appropriate where there is no proven method. Helmchen (Helmchen 2005) believes that placebo-controlled testing of antidepressants is only ethically justifiable for milder depression, and not for more severe depression, because effective antidepressants are available for this. Placebo-controlled studies are not acceptable for schizophrenic patients. There is clear evidence of the efficacy of commercially available antipsychotics, which are eligible for the control arm. A placebo-controlled study should ultimately be considered only if the objective can be reached without controversial practices and only by means of a purely placebo-controlled study (e.g., to demonstrate the efficacy of a new therapeutic principle), and if the burdens and risks for the patient are reasonable.

Basically, as far as is possible, research approaches that benefit individuals should take priority over those that benefit groups or third parties. Also, the integration of subjects capable of consent is obviously less ethically problematic than the inclusion of patients with diminished or nullified capacity for consent (Helmchen 2005; Helmchen 2014). Examples of the latter include treatment trials on patients with acute psychosis or dementia, or on minors. Ethical decision making is a particular dilemma in clinical trials of medicinal products aimed at counteracting cognitive

decline in patients who are no longer capable of making decisions, meaning that the research approach may be of individual benefit or at least group benefit. A categorical ban on such studies would be ethically questionable, although the inclusion of such patients also raises ethical issues (ethical aporia).

Treatment trials are a special case. If certain conditions are met, in most countries these may also be performed on patients who are unable to consent because there is hope of a concrete medical benefit to the health of the patients concerned. In the aforementioned cases, consent must be given by a legal advocate, who decides, to the best of his or her knowledge, in the best interests of the person incapable of consent.

The greatest potential for ethical conflict arises in third-party research on persons incapable of consent. Some ethicists believe that decisions on research that benefits external parties cannot be delegated to third parties, which effectively means a ban on such research. While such studies are generally prohibited from the perspective of deontological ethics, the consequentialist position would allow research on patients incapable of consent where there is an expected benefit to patients with the same symptoms (group benefit research) and the risk to the individual patient is limited. The Biomedicine Convention of the Council of Europe (Council of Europe 1997) also applies strict conditions to external research on persons incapable of consent. There may be no research of comparable efficacy on persons incapable of consent. In addition, the potential risks to such persons should not be disproportional to the potential benefits of the research. Moreover, the competent authority must have approved the research project according to specific criteria. The persons concerned and, if applicable, their legally appointed guardian must be informed about their rights and the proposed safety measures. Besides, the affected persons should not show any signs of opposition to the planned research. Consent must be granted in writing for each specific instance by the legal representative and a designated authority, and the research must aim to significantly broaden scientific understanding of the condition, disease or disorder of the patient him/herself or other affected persons. In many states, people who have been hospitalized by judicial or administrative order are excluded from participating in such research.

Ethical Aspects of Psychiatric Genetics and Population Genetics

It is foreseeable that rapidly advancing genome research will create a paradigm shift in medicine, leading to personalized interventions that make it possible to identify and prevent diseases in the preclinical stage. However, knowledge about the molecular basis of mental illness is still limited. Accordingly, it is difficult to estimate the future ethical implications (Ryan et al. 2015). For example, the commercial availability of genetic tests for various forms of dementia and other diseases should be viewed in a critical light. The Madrid Declaration (WPA 2011) pays particular attention to the field of genetic research and counseling. The following statement is key: “Psychiatrists involved in genetic research or counseling shall be mindful of the fact that the implications of genetic information are not limited to the individual

from whom it was obtained and that its disclosure can have negative and disruptive effects on the families and communities of the individuals concerned." For this very reason, psychiatrists should ensure that both patients and families participating in genetic testing "do so with fully informed consent," that "any genetic information in their possession is adequately protected against unauthorized access, misinterpretation or misuse," and that "care is taken in communication with patients and families to make it clear that current genetic knowledge is incomplete and may be altered by future findings." Further, the Madrid Declaration emphasizes that psychiatrists should only refer patients to facilities that can guarantee "satisfactory quality assurance procedures for such testing" and "adequate and easily accessible resources for genetic counseling." With regard to family planning, genetic counseling should "be respectful of the patients' value system, while providing sufficient medical and psychiatric information to help patients make decisions they consider best for them."

Population genetic surveys connected to psychiatry deserve special attention. These are health initiatives targeted at entire population groups. Such measures aimed at the common good will inevitably give rise to conflicts with the principle of respect for individual autonomy. From an ethical perspective, participation in such mass screening programs must not be declared as an individual obligation, but at the most as a moral imperative. In other words, all potential subjects for such studies must have given their informed consent. Furthermore, the subjects must have the possibility to withdraw from the study without giving reasons.

Patient-Relevant Tools to Support Decision Making in the Field of Clinical Ethics

Clinical Ethics Consultation

The relatively new clinical tools for supporting decision making in cases of ethical conflict or dilemma include clinical ethics consultation, which is now usually institutionalized in the form of a Clinical Ethics Committee (CEC) (Vollmann 2010).

There are fundamental similarities between clinical psychiatry and clinical ethics. "What the two disciplines have in common is that psychiatric consultation services and clinical ethics consultation have developed in response to medicine as a field that is becoming increasingly technical and more specialized. Both complement the modern, primarily science and technology-oriented approach to medicine with psychosocial and ethical dimensions. Interdisciplinarity requires competence in communication and mediation from both clinical ethicists and psychiatrists" (Vollmann 2010).

But although professional communication and mediation are said to be key competences of both clinical psychiatry and clinical ethics, the origin, aims, and responsibilities of both disciplines are different: due to their focus on psychiatric and mental diseases, psychiatrists have special competences in that clinical field. Besides, they are personally accountable for their medical decisions. On the other hand, the responsibilities of clinical ethicists include the identification and analysis

of ethical issues. But they are not responsible for the treatment. Instead, their role is to *assist* with the decision-making process.

Another difference is that clinical ethics consultations, in contrast to psychiatric counseling services, are carried out by an *interdisciplinary* consortium. Although proof of ethical expertise is key for being asked to serve on a CEC, a CEC usually brings together members with very different medical expertise and specialities (e.g., surgical and nonsurgical) and usually also includes nonmedical representatives (e.g., from the care sector, social work, and pastoral care). Due to their specific aforementioned expertise, clinical psychiatrists should certainly be among the members of the CEC.

In addition, the tasks and areas of application of clinical ethics consultation are also quite varied. Without a doubt, the focus is often on individual advice on clinical and ethical conflicts, for example the question of forced treatment. Clinical ethics consultation gives practitioners the chance to reflect on their own practice by including a facilitator trained in ethical decision-making processes who is not involved in treating the patient concerned. This contributes to best practice training.

But the responsibilities of a clinical ethics committee also cover the continuing training of staff members in clinical ethics. Through continuing professional development events, clinical ethics committees can positively influence the treatment culture and raise awareness of ethical aspects in everyday clinical practice among therapeutic and nursing staff. The tasks of a CEC also include the development of ethical guidelines. Such guidelines can help to structure clinical decision making and ensure ethical standards. They can also serve as a basis for dealing with stakeholder groups and the public.

In sum, clinical ethics can also be an important part of effective clinical governance. For ethics consultation to work, however, it is crucial that it is regularly requested. This is often the case for clinical ethics consultation, while less attention is sometimes paid to aspects of ethical training and guideline development.

Advance Healthcare Directives and Joint Crisis Plans

The increased ethical and legal significance of patient autonomy in modern medicine has led to the development of advance healthcare directives, also known as living wills (DGPPN 2014; Hoff and Hinterhuber 2011; Radenbach and Simon 2016; Sass and May 2010). These are intended to give patients the opportunity to make advance decisions for the event that they lose their capacity for self-determination. An advance healthcare directive is a document in which a person specifies what healthcare actions should be taken or refrained from when she or he is no longer able to make decisions. In more and more countries, the directive has gained legal status; in others, it is legally persuasive without being a legal document. Advance healthcare directives emerged because more and more people were worried about losing their right to self-determination in the event of serious terminal illness, due to loss of consciousness or severe dementia. People therefore sought to influence the circumstances and nature of their end-of-life situation. However, advance directives do not only relate to the end of life, but also to many other situations.

In everyday clinical practice, ethical conflict situations can also arise precisely because of the existence of a living will – for example, if patients who have drawn up such a directive reject a potentially effective therapy (such as an antipsychotic medication), thus hindering or preventing recovery of their capacity for self-determination and the treatment of disease-related risks to themselves or others. The key question is whether the advance directive was composed at a time when the patient or author was capable of making such a decision. Legal obligation protects patients from having their treatment needs ignored, but does imply that patients take a high level of responsibility for their own health and course of treatment.

Even if a patient has composed the advance directive while he or she was capable of making decisions, and it is therefore to be viewed as valid, this does not mean that the doctor has to implement any and every measure requested in the directive. This is particularly true of requests that are not medically indicated. Fundamentally, physicians always have the right of freedom of conscience. The patient must respect that a physician will not carry out requests for which he or she cannot take professional responsibility or which go against his or her moral convictions. Otherwise, patient advance directives are binding if they relate to the specific treatment situation and if no circumstances are identified that might imply the patient has distanced himself or herself from the advance directive. If communication between patient and doctor is possible, an advance directive may never be viewed or treated as a document that might make consultation expendable.

Last but not least, due to the problems described, in addition to the "classic" patient directives, advance directives have been developed that are more procedural and participatory and specifically relate to application in psychiatry contexts. Concrete joint crisis plans and the concept of "advance care planning" are more and more based on a structured discussion process between patient and practitioner. This strengthens both the therapeutic alliance and participatory decision making. In psychiatric crisis situations, such as when coercive measures are required, these provide important information about the interventions the patient has requested or rejected. In ideal cases, they also provide written information about what measures have proved effective in similar situations in the past.

The expectations placed on psychiatric advance directives are high. It has been demonstrated that the quality of advance directives increases if patients are supported (by their doctors) in drawing them up. In psychiatry, concepts for "facilitated psychiatric advance directives" that most closely correspond to the overall concept of advance care planning have been implemented mainly within the framework of research projects (Radenbach and Simon 2016).

Fundamentally, the documentation of an advanced directive can relieve *all* the people involved in acute psychiatric situations and thus, in the long term, also contribute to an increase in the quality of acute treatment. In this respect, it seems sensible to develop advance care planning programs that draw on existing (international) experience and to more firmly establish such programs in clinical practice. This process should be scientifically accompanied, evaluated, and optimized in an iterative process. Like ethics consultations, in the best cases, advance healthcare directives can help reduce instances of coercive measures in psychiatry and mitigate

the potential for ethical conflicts. It is all the more important that these tools in their various forms become a systematic component of continuing professional development. Psychiatry and advisory medical ethics should work closely together to resolve difficulties in everyday clinical practice and to increase the efficacy and positive potential of these tools.

Neuroenhancement and Wish-Fulfilling Psychiatry

All ethical aspects discussed so far in this section are more or less directly related to the relationship between the psychiatrist and the patient. Neuroenhancement, or wish-fulfilling psychiatry, is categorically different from this, because it does not just concern treating *patients* (Brukamp and Gross 2012; Greely et al. 2008; Gross 2011b; Levy and Clarke 2008). Neuroenhancement or neurocognitive enhancement is rather defined as a sum of possibilities that improve individual cognitive performance or mental state *in healthy individuals*. This concerns both – essentially visionary – brain engineering measures (Gross 2011b; Laryionava and Gross 2011; Vuilleumier et al. 2014) and medicinal neuroenhancement (Gründer and Benkert 2012). Due to its greater clinical relevance and direct relevance to psychiatry, the focus here is on the latter.

Since the 1980s we have witnessed an increasing "extratherapeutic" use of drugs. Neuroenhancement sounds more impressive and tends to gloss over the rather negative associations of the term "brain doping." Both terms denominate the use of drugs (and other brain interventions) for enhancement reasons. Such uses include cognitive enhancement, memory improvement, the heightening of attention, mood enhancers, the "modulation" of personality characteristics, and the reduction of the need for sleep.

Notwithstanding the terms used, it should be noted that enhancement is not a therapeutic measure. The starting point is not a diagnosis, but the desire to enhance something that does not require treatment from a psychiatric perspective. The drugs in question were originally developed for patients with attention disorders (e.g., Methylphenidate), dementia (e.g., Donepezil), depression (e.g., Fluoxetine), or narcolepsy (e.g., Modafinil). They are often used for enhanced competitive performance – whether at school, university, or work.

In a liberal society, voices in favor of allowing self-determined individuals the freedom to "enhance" themselves are increasingly making themselves heard. But are psychiatrists required to support their patients in such enhancement efforts? In this context, from an ethical perspective, respect for patient autonomy conflicts with the principle of doing no avoidable harm (nonmaleficence). However, firstly it should be noted that this does not exactly concern a *patient* and the need to ensure his or her right to autonomy. The person does not require treatment but is requesting a service. Secondly, generally no medical indication can be given for enhancement measures – which is actually a professional prerequisite for providing treatment.

Neuroenhancement measures thus raise medical and medicoethical issues. With regard to the medical issues, it must be stressed that the mechanism of action of

"brainbusters" in healthy individuals is not yet known. In addition, there are also still no secure data available on the long-term mental, physical, and social consequences. This also raises questions about the potential development of dependency or premature cognitive aging. It is also important to consider that there are also less risky "natural" neuroenhancement forms such as psychotherapy, coaching, biofeedback methods, progressive muscle relaxation (PMR), and autogenic training.

Neurocognitive enhancement raises important ethical issues, both on the individual and the societal level.

Arguments from an Individual Perspective (Gross 2011b)

- Autonomy and self-determination: Should the decision to enhance one's mental capabilities be left to the individual's desire? Some bioethicists proceed from the dominant enlightened ideals of our society. Given this background, they find it difficult to understand why a possible improvement of physical nature based upon this ideal should be less compatible than the traditional ideal derived from mental and moral improvement. On the other hand, it has to be stressed that individual freedom reaches its limits when the rights of other individuals or society are concerned. Thus, the decisive question is if the enhancement causes any harm to third parties. This question cannot, at least, clearly be answered in the negative (see arguments from a societal perspective).
- Human identity: Personal identity is strongly linked to the brain as the organ of consciousness. Neuroenhancement affects the brain and might thereby also influence one's identity.
- Informed consent: Special attention has to be given to vulnerable groups that are particularly at risk, such as the elderly, who might feel an increasing social pressure for lasting cognitive abilities, and others such as children and adolescents whose parents might find it necessary to "provide" these kinds of neuroenhancement.

Arguments from a Societal Perspective (Gross 2011b)

We have to consider the sociocultural context and the anthropological framework in which the medicoethical discussion is placed.

- Coercive influences from societal developments: Neuroenhancement reinforces social disparities and distorts competition. Against this backdrop, many critics compare neuroenhancement to doping in sport. They argue that it is not clear why doping in sport should be banned while brain doping should be permitted as both can be used to gain a competitive advantage.
- "Hypercompetitiveness": Widely propagated neuroenhancement might result in individuals experiencing indirect coercion to undergo the procedure in order to participate in the new way of meeting the demands of social competition. Therefore, citizens have to be protected from a climate of "hypercompetitiveness."
- Socially unacceptable path: A further argument illuminates the assumption that it is not the goal of neuroenhancement but the path to that goal which is socially

contested. Enhancement by "classic" learning, meditation, or autogenic training is socially accepted, whereas enhancement by drugs is dubitable. Some argue that it does make a difference if I can ascribe "improvements" to my own conduct and execution, or whether these changes were just accomplished by drugs.
- Shift of normative standards: Neurocognitive enhancement may also change our concept of normality and our perception of what counts as an "average" performance. Given an increasing number of people with enhanced capabilities, the performance of non"enhanced" people might be perceived as substandard. Besides, the establishment of neuroenhancement could also lead to a lack of acceptance of "deviant" characters.
- Unequal access: It is assumed that neuroenhancement – not only, but especially on a global scale – is not accessible to everyone, so, regardless of the lack of indication, problems of distributive justice also arise.

Given what we know today, medication for merely enhancement purposes must be seen very critically – from both a medical and a medico-ethical point of view. Moreover, this is beyond the psychiatrist's actual scope of activity. The task of a psychiatrist is to provide diagnoses and prognoses, to alleviate suffering, and to prevent illness (or the recurrence of illness). Neuroenhancement measures are not part of this treatment mandate, but are pure wish-fulfilling medicine. Besides, they carry the risk of psychiatrists being commercially engaged by involved companies.

For all these reasons, neuroenhancement is to be rejected, not least because of the manifold individual and socioethical implications.

The above discussions show that, to a greater extent than almost any other medical field, psychiatry is characterized by diverse social contexts and interactions. These social functions have many ethical implications. These topics will be dealt with systematically in the following section.

Psychiatry and Society: Ethical Aspects of an Interdependent Relationship

Foundations and Historical Aspects

Psychiatrists play a dual role in their professional lives. On the one hand, they are physicians (and/or clinical researchers), but they also have a public, and sometimes a regulatory, role (Miller 2009). Their public role is particularly evident when they are called upon to give an expert assessment in court, for example, or to state whether or not a patient requires confinement or legal care, or to judge a patient's decision-making capacity when he or she drew up a healthcare directive or living will.

These kinds of public functions always have a political dimension. This can be seen very clearly by looking at the past: Psychosurgical interventions that we regard as highly ethically questionable today had the sociopolitical purpose of tranquilizing patients or of making them more "docile" (Gross and Schäfer 2011). A particularly heinous example of moral misconduct were the medical judgments made in the

"euthanasia" program of the Third Reich and the active role played by psychiatrists and many other physicians in the systematic murder of patients in psychiatric clinics (von Cranach 2010; von Cranach and Schneider 2011). It is important to stress how psychiatry was politically instrumentalized in the service of the Third Reich, and to remember that many medical professionals were very willing participants.

We must also consider the significance for modern psychiatry of today's efforts to reappraise historical accountabilities, particularly in light of the fact that for many years the German psychiatric society did not take any steps toward reappraising its National Socialist past – that is, the German Association of Psychiatry, Psychotherapy and Psychosomatics (DGPPN) and its predecessor organizations (Jütte 2011).

It was the "Law for the Prevention of Hereditarily Diseased Offspring," passed in 1933, that launched one of the darkest chapters in the history of German medicine. The law was intended to ensure "racial hygiene" in the German Reich and called for people whose descendants would probably "suffer from some serious physical or mental hereditary defect" to be sterilized. From 1934 onward, doctors forcibly sterilized up to 400,000 people. As many as 5000 people died as a result (Bock 1986).

Hitler then issued a decree to start a "euthanasia" program (subsequently known as Aktion T4). From October 1939, registration forms were sent out and the main selection criterion was the supposed "value" of people's lives. Medical staff judged the patients in their care according to "curability," "ability to learn," and "ability to work." The selected patients were collected from their hospital or nursing home in buses and taken to one of six mental institutions equipped with gas chambers, where they met their deaths. Approximately, 50 selected psychiatrists and neurologists, among them renowned representatives of the field such as Prof. Friedrich Mauz (Münster) and Prof. Friedrich Panse (Düsseldorf), were appointed as assessors.

Aktion T4 lasted 2 years, during which time more than 70,000 patients were killed. At the same time, over 30 psychiatric and pediatric hospitals began murdering physically and mentally disabled children as part of the "decentralized euthanasia" phase. And the killing went on: tens of thousands of psychiatric and neurological patients were systematically starved to death or killed by a drug overdose in psychiatric hospitals. What's more, before being murdered, many patients were subjected to medical experiments intended to further scientific research. A total of more than 300,000 psychologically, mentally, and physically disabled people fell victim to a health and population policy based on the principles of "racial hygiene" (Faulstich 2000). And it is not the case that doctors had no room for maneuver against the prevailing ideology in society and could not have taken any action without suffering immediate negative consequences (Schneider and Roelcke 2013); this is proved by the examples of Walter Creutz (Schmuhl 2013), Hans Roemer (Roelcke 2013), John Rittmeister (Teller 2013), Gottfried Ewald (Beyer 2013), and Werner Leibbrand (Seidel 2013). But overall, far too few people put up any kind of opposition.

It was not until 2009 that the DGPPN began systematically reappraising its historical accountabilities and that of its predecessor organizations during the Nazi era. That year, the society added the following text to the first paragraph of its

Articles of Association: "The DGPPN recognises that it bears a special responsibility to protect the dignity and rights of people suffering from mental illness. This responsibility is the result of its predecessors' involvement in the crimes of National Socialism, in killing and forcibly sterilising hundreds of thousands of patients" (Schneider and Roelcke 2013).

Also in 2009, the DGPPN's Executive Committee decided to establish an initial international commission of historians to address the activities of the predecessor associations during the Third Reich. This independent commission was made up of four renowned medical and scientific historians. It provided support on DGPPN-initiated and financed research projects investigating the extent to which the DGPPN's predecessor organizations and their representatives were involved in the "euthanasia" program, in forced sterilizations of mentally ill patients, and in other crimes during the period between 1933 and 1945. Currently, a second research project is running to investigate how the Nazi era impacted on both West and East German psychiatry during the years after 1945 (Schneider 2012).

In the meantime, the DGPNN regards the reappraisal of its history as a topic of central importance. Since 2010, the association's annual convention has dedicated a large number of events to the victims of psychiatry under National Socialism. One of the highlights of the congress in 2010 was a commemorative event with around 3000 participants that publicly acknowledged German psychiatry's responsibility for the murder of mentally ill and mentally disabled people, forced sterilizations, unethical research, and the expulsion of colleagues. Personal accounts by victims and their relatives poignantly described the terrible fates and suffering of many individuals. The incumbent president of the DGGPN closed his speech with the following words "In the name of the German Association for Psychiatry, Psychotherapy and Psychosomatics, I ask you, the victims and relatives of the victims, for forgiveness for the pain and injustice you suffered in the name of German psychiatry and at the hands of German psychiatrists under National Socialism, and for the silence, trivialisation and denial that for far too long characterized psychiatry in post-war Germany."

The DGPPN made another important gesture in 2011 when it revoked the honorary memberships of psychiatrists Friedrich Mauz and Friedrich Panse, two former presidents of the society (Schneider and Roelcke (Editorial) 2013).

In order to permanently overcome the decades of silence and to take responsibility for the past, the DGPPN also created a traveling exhibition in cooperation with the foundations Memorial to the Murdered Jews of Europe and Topography of Terror. The exhibition received extensive support from individual medical professionals and from other professional societies and associations and the German Medical Association. Since its initiation, the traveling exhibition has been very well received. It started with a fundraising campaign launched by the DGPPN in late 2011 to raise awareness of the atrocities and to commemorate the victims. The DGPPN then quadrupled the donated sum. The German Bundestag and the Federal Ministry of Labour and Social Affairs also provided considerable funding for the exhibition. The raised funds made it possible to realize the exhibition and to include comprehensive measures to make the exhibition accessible to people with disabilities. Many doctors and psychiatrists have also got involved by organizing the

presentation of the exhibition in their own city or by participating in the accompanying program (e.g., by giving lectures) (Schneider and Lutz 2014). The question of the value of life is central to the exhibition, and it also considers the intellectual and institutional backgrounds to the murders; outlines the crimes of marginalization, forced sterilization, and mass extermination; and considers case studies of victims, perpetrators, accomplices, and opponents. It also investigates how the topic was dealt with in the years after 1945.

The exhibition closes with numerous quotes from doctors, politicians, victims' relatives, care personnel, and others, reflecting on the events of that time from the perspective of today. The contributors also consider the question of what significance the events have for them personally. Most of the stations of the exhibition include a supporting program, often directed at specific target groups, in order to explore the exhibition's themes more deeply. The programs include academic presentations, discussions, film screenings, and guided tours for school groups and people with disabilities. Some venues have used the exhibition as an opportunity to intensively appraise their own regional history and have designed special panels presenting local victims, perpetrators, or institutions. To give examples, in Munich the group "psychiatry and care in national socialism in Munich" created five panels showing a memorial plaque for victims of forced sterilization at the local university gynecological hospital as well as four regional destinies of forced sterilization and forced abortion. In addition, Würzburg elaborated forced labor, forced sterilization, and murder of patients around Würzburg as well as the history of the perpetrator Prof. Werner Hyde – director of the university hospital in Würzburg as well as medical director of the "T4" central office and therefore one of the main people responsible for the "euthanasia" murders – within their accompanying program. In Vienna, the exhibition was shown within the Austrian Parliament and supplemented by excerpts of the exhibition "The War against 'the Inferior.' On the history of Nazi medicine in Vienna." In this context, the president of the Austrian Association for Psychiatry and Psychotherapy followed the German model and asked the victims and relatives of the victims for forgiveness for their suffering under psychiatry in National Socialism.

The traveling exhibition opened in the Bundestag on 27 January 2014 (Holocaust Remembrance Day, which in Germany is the date on which all victims of National Socialism are remembered), under the auspices of Federal President Joachim Gauck. It was subsequently shown at the Topography of Terror. From early 2015, the exhibition went on display in several state parliaments in Germany, as well as in many other clinics, town halls, museums and memorials. So far the exhibition visited more than 30 venues in Germany.

Alongside the original version of the exhibition, poster and roll-up versions were designed that allow the exhibition to be presented around the globe and in places with less available space, meaning that a wider range of buildings can be selected to host the exhibition. The exhibition has thus already been staged in the UK, Austria, Italy, Canada, South Africa, Japan and Australia. Further stations are planned for 2018/2019. In total, more than 350,000 visitors have seen the exhibition at 50 venues in 8 different countries (for further information see www.dgppn.de/exhibition).

Partly in response to the psychiatric atrocities of the Third Reich as outlined above, the Madrid Declaration states: "There are aspects in the history of psychiatry and in present working expectations in some totalitarian political regimes and profit driven economical systems that increase psychiatrists' vulnerabilities to be abused in the sense of having to acquiesce to inappropriate demands to provide inaccurate psychiatric reports that help the system, but damage the interests of the person being assessed." It continues: "It is the duty of a psychiatrist confronted with dual obligations and responsibilities at assessment time to disclose to the person being assessed the nature of the triangular relationship and the absence of a therapeutic doctor-patient relationship, besides the obligation to report to a third party even if the findings are negative and potentially damaging to the interests of the person under assessment. Under these circumstances, the person may choose not to proceed with the assessment."

To this day, the public and/or regulatory functions of psychiatrists represent ethical pitfalls, but at the same time, psychiatrists offer a valuable and in many cases indispensable service to society. This ambivalence will be explained in more detail in the following three sections looking at forensic psychiatry, stigmatization, and equal access.

Forensic Psychiatry

In forensic psychiatry, there is obvious potential for conflict between psychiatrists' genuine responsibility for their patients (obligation to promote patients' well-being, establishing a therapeutic relationship, duty of medical confidentiality) and society's need for safety or for the "just punishment" of a criminal (Muysers 2014). Forensic psychiatry is thus the medical field in which there is the greatest risk of the lines between justice and medicine being blurred. This risk is particularly great in *Unrechtsstaaten* (nonconstitutional states) and in countries where dissidents and/or mentally ill people, whether they are criminally liable or not, are treated as guilty criminals. In *Rechtstaaten* (constitutional states), on the other hand, mentally ill people with diminished or nullified responsibility have the right to remain free from punishment when they commit an offence that is linked to their condition. The question of legal responsibility is a central advisory task for psychiatrists working in the criminal justice system. At the same time, they have to tell the court whether a mentally ill person represents a danger to society, so that the public are not exposed to potential threats. In such cases, the psychiatrist will not be the patient's medical practitioner, instead functioning merely as an advisor or assistant to the court.

Forensic experts are thus committed to uphold a different ethical reference system from psychiatrists who treat patients. The duty of the experts is to determine and present the truth, even if this is not in the interests of the person being examined. A psychiatrist who is treating a patient, on the other hand, has to put the patient's interests first. It is therefore all the more important that the psychiatric examination begins with an announcement of the framework of the appraisal and its goals, with particular reference to the fact that the forensic expert is not obliged to keep confidentiality. Psychiatrists working in the field of forensic psychiatry, particularly

physicians treating patients who are detained in psychiatric institutions or consultants working in prisons must ensure that their patients – just like all inmates of a penal institution – are given the care due to them and that their human rights are protected, regardless of the crime they have committed. The Madrid Declaration also expressly states that "psychiatrists shall not take part in any process of mental or physical torture, even when authorities attempt to force their involvement in such acts."

Stigmatization and Destigmatization

According to universal human rights, people with mental illnesses are equally entitled to access all normal spheres of life, participate in society, and lead as independent a life as possible. In other words, mentally ill people have the inalienable right to the best-possible medical, social, and professional care. Accordingly, the UN Convention on the Rights of Persons with Disabilities, which came into force in 2008 promises "to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity" (Art. 1). The General Principles (Art. 3) of the Convention include individual autonomy, full and effective participation, respect for human diversity, and equality of opportunity (Division for Social Policy and Development Disability 2008).

However, efforts to ensure equality of opportunity are often hampered by stigmatization and discrimination (Ernst et al. 2012; Gross et al. 2008; Maier et al. 2014). Since people with mental illness are particularly stigmatized, it is important to focus particular attention on this problem. This is reflected by a recent survey done by Dinesh Bhugra and the WPA on the lack of civil rights of psychiatric patients (Bhugra 2016).

The process of stigmatization has four key components (Mehta and Thornicroft 2010): (1) Labeling of personal characteristics which are noticed as deviant, (2) stereotyping, which is linked to undesirable characteristics, (3) separating, by differentiating between the "normal" and the labeled group, (4) status loss and discrimination, by excluding the labeled group.

Stigmas against people with mental illness can contribute to negative therapeutic outcomes as well as to developing self-stigmatization and contributing to reduced self-esteem. They exist in different sociopolitical systems all over the world, and seem to be even more pronounced in developing countries. Although these kinds of stigmas have a long tradition, the attention to stigmatization and discrimination against people with mental illness is quite a recent phenomenon.

Such societal discrimination means that psychiatrists have a particular responsibility and a moral imperative to act in a certain way. The Madrid Declaration states: "Psychiatrists shall ensure that people with mental illness are presented in a manner which preserves their dignity and pride, and which reduces stigma and discrimination against them." Indeed, psychiatrists have the socioethical obligation to draw attention to the discrimination experienced by mentally ill people in many areas of society. Often, patients are not capable of asserting their rights, or they are afraid of

appearing in public out of fear of ridicule and ostracism. Where necessary, psychiatrists must also ensure that adequate conditions are created for mentally ill people of the same standard as those for people suffering from physical illnesses. This applies to both actual medical care and social (re)integration (Schneider et al. 2012). For the latter to be successfully achieved, it is crucial to dismantle misguided assumptions and prejudices within society and to counter the often considerable rejection of mentally ill people by helping to develop antistigma campaigns.

Resource Allocation and Equality of Access in a Global Perspective

Another social injustice is that not all people have equal access to psychotherapy and psychiatric treatment. It must be the societal goal of organized psychiatry to work toward ensuring equal access and equal allocation of resources (Engelhardt 2009; Hoff and Hinterhuber 2011; Kious 2015). It is undeniable that in many industrialized nations, more financially lucrative patients (usually privately insured) receive treatment more easily and/or quickly than other sufferers. The global discrepancies are even greater. Katz et al. (Katz et al. 2014) emphasize: "Global psychiatry stands apart from other areas of health care when it comes to ethical considerations for at least six distinct reasons:

1. There is a paucity of resources to enable and support psychiatric care abroad and a greater demand for psychiatric health care professionals relative to other fields of medicine.
2. Longitudinal treatment is usually necessary for successful psychiatric care.
3. Psychiatry inherently places more emphasis on care rather than cure.
4. The effects of mental illness are often intangible.
5. Language barriers are more imposing on psychiatry than on other areas of health care.
6. Culture, spirituality, and other belief systems have an effect on psychological 'mindedness'."

Thus, the international organizations of psychiatrists and the global health community should insist on equal, unimpeded access to psychiatric treatment.

According to the Madrid Declaration (2011), psychiatrists should be "concerned with the equitable allocation of health resources" and "advocate for fair and equal treatment of the mentally ill, for social justice and equity for all." At this point, we should emphasize that those barriers to access currently in place not only constitute the withholding of necessary therapeutic treatment, but also represent social discrimination.

Conclusion

Suitable ethical concepts are needed to achieve acceptable outcomes in cases of ethical conflict. "Principlism" is a particularly popular concept among clinicians. This approach is based on four simple principles, which are derived from common morality and can form a normative standard for decision-making processes.

Representatives of the psychiatric profession are faced with particular ethical challenges. Psychiatrists and psychotherapists are primarily bound by their treatment mandate – that is, to diagnose, maintain, and restore the health of their patients. They are also assigned an important social and/or regulatory role. Both their activity as practitioners and their social/regulatory functions raise ethical issues.

With regard to ensuring respect for patients' self-determination, a distinction should be drawn between autonomy as a right and autonomy as a capacity. The right to make autonomous decisions is absolute, while actual capacity for self-determination may be limited. If capacity for self-determination is lacking, the therapeutic measures – as far as possible – should be aimed at restoring this capacity. Otherwise, treatment has to be in the best interest of the patient and should not be provided against the patient's will, unless withholding treatment would risk the life of the patient or any third parties. Coercive measures and forced treatment are therefore only ethically defensible when persons who are incapable of self-determination concretely and significantly put their own or others' health or life at risk, and when this cannot be avoided by any other means, in particular targeted attempts to convince patients of the risky nature of their behavior and their need for treatment. The welfare of third parties must not take precedence over the welfare of the patient, as treatment for the exclusive welfare of third parties or the general public is ruled out. The moral prerequisite for such coercive measures is that a patient's refusal of treatment is an expression of their mental illness and not of their autonomous free will. Coercive measures taken by doctors must appropriately reflect an assessment of the expected benefits and harm. Consideration also needs to be given to the fact that avoiding coercion may also constitute failure to provide vital assistance. Therefore, the procedure must be determined and justified according to the individual circumstances, based on thorough medical, ethical, and legal knowledge.

Geriatric psychiatry presents particular ethical challenges. These relate to the ability to give consent, resource allocation, elderly suicide, and end-of-life care. As far as they are able, psychiatrists should go beyond simply providing adequate treatment and actually work to overcome social injustices (striving to achieve fair access to treatment and patient empowerment).

Another area with significant potential for ethical conflict is research on or with psychiatric patients. Many research ethics issues arise as a result of role conflicts between the physician as therapist and the physician as researcher. There is a fundamental risk of patient abuse, and of corrupt behavior by drug trial investigators who accept personal financial contributions. The potential risks to the person involved should not be disproportionate to the potential benefits of the research. External research on persons incapable of consent should therefore be subject to strict conditions.

Another increasingly important field for psychiatry – genetic research and population genetic approaches – also contains ethical pitfalls. The psychiatrists involved should allow for the fact that the implications of genetic information are not limited to the individual patient, but can also have detrimental effects on his/her family. Population genetic approaches not only raise issues of confidentiality and data protection, but also the issue of informed self-determination. Participation in this type of screening process must not be declared as an individual obligation, but at the

most as a moral imperative. Furthermore, the subjects must be able to withdraw from the study without giving reasons.

In all the above areas of conflict, it is possible to draw on ethically relevant tools for decision making in difficult clinical situations – clinical ethics consultation and advance healthcare directives. Clinical ethics consultation gives practitioners the chance to reflect on their own practice by including a facilitator trained in ethical decision-making processes who is not involved in treating the patient concerned. This contributes to best practice training. Special advance directives that are more procedural and participatory and specifically relate to application in psychiatric contexts are playing an increasingly important role. These should strengthen both the therapeutic alliance and participatory decision making and help to reduce instances of coercive measures in psychiatry.

The ethical problems surrounding neuroenhancement are fundamentally different from the situations described above, because this is not a matter of treating ill patients but of "improving" the cognitive performance or mental state of healthy individuals. In this context, respect for individual self-determination collides with the principle of doing no avoidable harm (nonmaleficence). Given what we know today, medication for merely enhancement purposes must be regarded very critically. Neuroenhancement measures go beyond the actual task of the psychiatrist, as they are not part of the treatment mandate.

More than almost any other medical field, psychiatry is characterized by diverse social contexts and interactions. This can be seen very clearly by looking at the past. A particularly heinous example of moral misconduct was the involvement of psychiatrists in the "euthanasia" program of the Third Reich. It is not only an ethical imperative to systematically reappraise these historical events, but also a professional and political necessity. This reappraisal must be consistently driven forward, as the DGPPN has been doing since 2009.

The manifold evidence of the stigmatization of mentally ill patients also creates a moral imperative to act. Psychiatrists must advocate for the social integration of their patients and make sure that people with mental illness are presented with dignity. Antistigma campaigns are an important measure in this regard. It is also necessary to work for equal and unrestricted access to psychiatric treatment, which should be attributed the same social value as physical treatment.

All of the above demonstrate the high normative demands on psychiatry in both clinical and social contexts. Living up to these demands requires heightened awareness of ethically relevant problems and implications, and of how to impart ethics knowledge and skills in continuing professional development.

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Building Resilience and Mobilizing Hope in Brief Psychotherapy

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Lisa Catapano and James L. Griffith

Contents

Abstract

Brief psychotherapy differs from traditional outpatient psychotherapies in that it is not only tailored to fit a patient's diagnosis, but also to fit the patient's life situation, including limitations of time and money. Clinical utility requires that brief psychotherapy be effective, efficient, portable, and nonstigmatizing. The first section of this chapter presents four strategies to optimize the clinical utility of brief psychotherapy, including translating common factors of psychotherapy into interventions; focusing on and building resilience; and optimizing the functioning of major brain circuits critical for resilience to stress. The second section

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presents an expanded discussion of a set of psychotherapeutic interventions for building resilience and mobilizing hope.

Keywords
Resilience · Psychotherapy · Brief psychotherapy · Common factors · Neurobiology

Introduction

Brief psychotherapy serves a specific clinical role that is not met by long-term psychodynamic psychotherapy, which historically has dominated psychiatric residency training. People seeking help from psychotherapy often are limited by their life circumstances. Sometimes change must occur within a limited time frame, such as a decision whether or not to accept a new job offer or marriage proposal. Sometimes only limited time or money is available to spend on psychotherapy. In either case, "something needs to happen" using only the spare resources of time and money that are available.

Every psychiatrist needs practical skills for aiding patients who have agendas for what needs to happen soon, despite limited time or money for treatment.

The Evolution of Brief Psychotherapy

Psychotherapy began as the "talking cure" in which language and relationship, applied by a trained professional, was elevated in status to a bonafide medical treatment. At its beginning, psychoanalysis started as a brief psychotherapy. Sigmund Freud's early psychoanalyses often consisted of a handful of irregularly scheduled sessions applied to resolve specific symptoms. As psychoanalysis evolved, however, efforts to intensify its effects led to progressive lengthening of the treatment. By the second half of the twentieth century, psychoanalyses were sometimes lasting for a decade of four sessions per week – a total of 2000 sessions. Since many patients came with problems needing more rapid resolution, efforts were made to shorten psychotherapy.

Early efforts by psychodynamic psychotherapists to create brief psychotherapies led to therapies which were brief by comparison to psychoanalysis, but still required 20–50-hour-long weekly sessions, often for a full year (Koss and Shiang 1994; Demos and Prout 1993). Soon, however, psychotherapies appeared claiming that only a handful of sessions were needed to resolve targeted symptoms. Proliferation of brief psychotherapies became rampant utilizing a multitude of different psychotherapeutic approaches, including psychodynamic, cognitive-behavioral, interpersonal, strategic, and narrative, among others. By the year 2000, there were dozens of brief psychotherapies practiced by different clinicians.

Today we can examine the scope of brief psychotherapies with an added vantage of five decades of empirical psychotherapy research studies to help determine what works best, for whom, and under what treatment conditions (Wampold 2001; Duncan et al. 2002; Sprenkle et al. 2009). The different psychodynamic brief psychotherapies share common roots in psychoanalytic theory. Similarly, different cognitive-behavioral brief psychotherapies share origins in classical and operant learning theory and in cognitive theories of information processing. Surveys of brief psychotherapies commonly organize discussions around their underlying psychological theories, pointing out differences among different brief psychotherapies depending upon which symptoms or disorders are targeted.

However, neither psychodynamic nor cognitive-behavioral brief psychotherapies have made clinical utility their major organizing principle. That is, both psychodynamic and cognitive-behavioral psychotherapies require a series of regular psychotherapy sessions. They each require a treatment contract with a patient, including a shared agreement as to how dialogue about the problem will help lead to change. They each require a setting for psychotherapy in terms of a safe space for confidential dialogue. Unfortunately, these preconditions are often not available when patients are dealing with overwhelming crises, unsafe living conditions, or struggles to survive. Stigma is an additional obstacle to formal psychotherapy. A treatment contract implies acknowledgment that one has a mental health problem, which feels devaluing to many people in need of mental health services.

Brief psychotherapy can fill a treatment gap by treating clinical utility as a primary objective. Clinical utility requires that brief psychotherapy be effective (evidence-based), efficient (minimal costs in time and money), portable (usable for different clinical problems, treatment settings, and patient populations), and nonstigmatizing (respectful and normalizing). It must also be easily teachable if it is to be utilized by mental health workers without formal psychotherapy training. Psychodynamic and cognitive-behavioral methods and techniques can still be incorporated insofar as they fit a primary agenda of clinical utility. The first section of this chapter presents four strategies to optimize the clinical utility of brief psychotherapy. The second section presents an expanded discussion of a set of psychotherapeutic interventions for building resilience and mobilizing hope.

Optimizing Clinical Utility in the Design of Brief Psychotherapy

When patients face adversities under conditions that render traditional psychotherapy difficult, four strategies can render brief psychotherapy usable and effective:

(1) Translate common factors of psychotherapeutic change into practical psychotherapeutic interventions, such as mobilizing hope
(2) Emphasize interventions that build resilience, rather than targeting psychopathology

(3) Embed nonpsychotherapy resilience factors into psychotherapeutic interventions
(4) Optimize effectiveness of executive functions, social cognition, and emotion regulation, which together provide a neurobiological infrastructure for resilience to stress

Translate Common Factors for Psychotherapeutic Change into Practical Interventions

Consistently, psychotherapy outcome studies have shown psychotherapy to be more effective than many well-regarded medical treatments for physical diseases. Meta-analyses of psychotherapy outcome studies have typically found psychotherapies of differing types each to produce significant change with similar degrees of effectiveness, whether the outcome measures were symptom remission, improved functioning, or patient satisfaction. Most commonly, this effect size has been reported as $r = 0.8$, meaning that a person receiving psychotherapy will show significant changes greater than 79% of individuals who do not receive psychotherapy (Duncan et al. 2002; Wampold 2001; Sprenkle et al. 2009).

According to Lambert's (1992) widely referenced overview, the breakdown for these factors are (Lambert 1992; Miller et al. 1997):

- 40% Patient factors (client's skills, competencies, and resources)
- 30% Therapeutic alliance (shared agreement between therapist and client regarding overall goals of treatment, steps for achieving those goals, and a trusting and open emotional bond between the parties)
- 15% Mobilization of hope and expectancy for change
- 15% Specific methods and techniques that belong to different schools of psychotherapy

More recently, Luborsky et al. (2002) applied methodologies that could account for therapist allegiance in psychotherapy outcome studies. When drop-out rates are also accounted for, as little as 1–2% of the variance in outcome can be attributed to specific methods and techniques identified with particular schools of psychotherapy. This finding has added further impetus to efforts to teach directly how to activate the common factors, such as hope. An expanded discussion of strategies for hope-building is presented in the second section of this chapter.

Adopt a Framework of Resilience

Resilience refers to the study of psychological strengths. A resilience-focused psychotherapy seeks to identify a patient's strengths, skills, knowledge, and competencies that can be mobilized to meet treatment aims. Organizing psychotherapy around a patient's strengths speeds progress toward treatment goals and strengthens self-esteem, in contrast to a focus on skill deficits and psychopathology.

There are multiple differing definitions of resilience in the clinical and research literatures on stress and coping (Layne et al. 2007; Bonanno et al. 2006). Some definitions more than others fit the agenda of psychotherapy, which is to help those less resilient to become more resilient in the future. The definition that has greatest clinical utility regards resilience as the capacity to emerge from adversity stronger and more capable (Walsh 2006). This definition regards resilience as a learnable set of skills, not as a fixed personality trait.

What stands as resilience depends upon context. An individual may be resilient in one domain of life (e.g., work) but not in another (e.g., family); during one phase of their life (e.g., middle age) but not during a different phase (e.g., adolescence); or in response to one type of trauma (e.g., death of a parent) but not another (e.g., physical disability). Resilience can also refer to the competencies of dynamic systems (Southwick et al. 2011a). Not only individuals, but families, communities, or cultures can show resilience in their responses to adversity (Walsh 2006).

Resilience-focused brief psychotherapy seeks to identify strengths, skills, competencies, resources, and practical wisdom from lived experiences, both at the individual level and at family, community, and societal levels. Psychotherapy then helps amplify and extend the scope of these resilience factors as the patient faces life's adversities.

Embed Nonpsychotherapeutic Resilience Factors into Psychotherapeutic Interventions

The interdisciplinary study of resilience by Steven Southwick, Dennis Charney, and colleagues has identified attitudes, behaviors, and life practices that resilient people employ (Charney et al. 2006; Southwick et al. 2011a). Former prisoners of war, patients with severe medical diseases, and special forces soldiers were interviewed to determine what factors contributed to their resilience under extreme or prolonged stress. A resilience-focused psychotherapy can use these factors as an inventory to assess a patient's capacities for resilience. New resilience factors can be added to a patient's repertoire of coping responses. These factors include:

(a) Role models – Resilient individuals uniformly report utilization of mentors and role models. Through imitation, modeling, and observation, resilient individuals learned attitudes, values, skills, and other patterns of thought and behavior from their role models. Role models can be drawn not only from real life but also from history, spiritual traditions, literature, or film.
(b) Optimism – Resilient individuals hold a bright view of the future. Optimists readily engage in problem-solving, which favors rapid management of stressors. However, realistic optimism is necessary when facing uncertain or threatening conditions or when stress became chronic. Realistic optimism typically has two complementary features – paying close attention to negative information, but also refusing to dwell on it.

(c) Humor – Nearly all resilient individuals use humor. Humor and irony create emotional distance that permits reassessment of difficult situations. Resilient individuals learn not to get caught up in resentment or bitterness lest they deplete vital stores of emotional energy.

(d) Moral compass – Resilient individuals derive clarity from an inner sense of right and wrong; just and unjust; worthiness and unworthiness. Vice-Admiral James Stockdale served as a specific case study. He was a prisoner of war for 7½ years in North Vietnam and in solitary confinement for 4 years. In recounting his endurance, he particularly emphasized the importance of taking inventory of one's moral code *before* going into a stressful situation. To endure such travails, he relied most upon the stoic philosopher, Epictetus, whom he had studied before his deployment to Vietnam: "Look not for any greater harm than this, destroying the trustworthy man within you." Stockdale also quoted Alexander Solzhenitsyn (Stockdale 1993, p 8):

> Solzhenitsyn learned, as I and others have learned, that good and evil are not just abstractions you kick around and give lectures about and attribute to this person or that. The only good and evil that means anything is right in your own heart, within your will, within your power, and it's up to you. Enchiridion 32: "things that are not within our own power, not without our Will, can by no means be either good or evil." Discourses: "Evil lies in the evil use of moral purpose, and good the opposite. The course of the Will determines good or bad fortune, and one's balance of misery and happiness." In short, what the Stoics say is "Work with what you have control of and you'll have your hands full."

For Stockdale, Epictetus and Solzhenitsyn served both as mentors and as sources of his moral compass.

(e) Social support – Social support may be the single greatest contributor to resilience. Social support can draw from many different types of relationships, including attachment, confiding, family or team role, mentoring, social network, and altruistic relationships (Eisenberger 2013; Uchino 2004; Brown et al. 2003).

(f) Altruism – Epidemiology, social psychology, and functional magnetic resonance imaging (fMRI) brain imaging studies on social support have shown conclusively that both giving and receiving social support diminish activation of brain systems for alarm. However, giving social support to others produces a greater reduction in physiological stress (Eisenberger 2013).

(g) Religion and spirituality – Many resilient individuals rely upon religious faith as a source of worldview, moral code, and spiritual practices. Religious and spiritual coping can be expressed in many different forms, such as narratives of religious experiences, religious beliefs, prayers, communal practices, rituals, spiritual practices, and ethical commitments.

(h) Signature strengths – People feel invigorated and excited when using signature strengths. "In the flow" results when challenges and abilities are well -matched (Csikszentmihalyi 1990).

(i) Active, approach-oriented coping – An active, approach-oriented coping style is a resilience factor broadly supported by empirical research studies (Southwick et al. 2011b, p 289–306). Eckhart Tolle, in *The Power of Now*, has taught: "Accept, then act. Whatever the present moment contains, accept it as if you had chosen it. Always work with it, not against it." (Tolle 1999).

(j) Facing fear – Fear is a normal signal to reassess a situation. Adaptive responses to fear involve:
- Getting information
- Learning skills to move through fear
- Having a plan and a back-up plan
- Placing confidence in colleagues

(k) Training – Highly resilient individuals uniformly train by utilizing didactic studies, practicing with feedback, training outside their comfort zones, competing with self and with others, and practicing endurance of pain. The optimal stress level for training is outside one's comfort zone but still manageable.

(l) Cognitive flexibility and posttraumatic growth – Cognitive flexibility refers to the capacity to adopt a perspective that reframes the meaning of an adverse encounter so that positive change can result. Posttraumatic growth refers to an enhanced capacity for compassion and acceptance that some people acquire through experiencing traumatic stress. For example, Albert Camus endured deep despair when, caught in a political divide, he was targeted by death threats from both right-wing Gaullist and left-wing Communist extremists for his determined pursuit of political justice for both French Pied Noir settlers and indigenous Arabs in French Algeria. Out of this experience, his oft-quoted words: "*In the depth of winter, I finally learned there lay within me an invincible summer*," captured how cognitive flexibility can lead to posttraumatic growth (Camus 1952). Vice-Admiral Stockdale quoted Alexander Solzhenitsyn (Stockdale 1993, p 8):

> It was only when I lay there on the rotting prison straw that I sensed within myself the first stirrings of good. Gradually it was disclosed to me that the line separating good and evil passes not between states nor between classes nor between political parties, but right through every human heart, through all human hearts. And that is why I turn back to the years of my imprisonment and say, sometimes to the astonishment of those about me, "Bless you, prison, for having been a part of my life."

(m) Meaning and purpose – From his studies of trauma survivors, Robert Jay Lifton has described how survivors often develop "survivor missions" based upon meaning and new purpose drawn from encounters with adversity: "In the survivor experience, one can either close down or open out." (Lifton 2012).

This list of empirically derived resilience factors can be a topic for collaborative inquiry in brief psychotherapy, in which patient and therapist examine together whether one or more could be usefully added to the patient's repertoire of coping strategies. One or more of these resilience factors can be selected as a focus for

disciplined training during the course of psychotherapy (Maddi 2002; Southwick et al. 2011b, p 289–306).

Strengthen Efficiency and Effectiveness of Brain Circuits that Support Coping with Adversities

Executive functions, social cognition, and emotion regulation provide a neural infrastructure upon which most hope and resilience practices rely. Capacity to sustain hope depends upon the functional integrity of these circuits (Griffith 2018).

Expansion of the human prefrontal cortex occurred 200,000 to 2 million years ago so that prefrontal cortex, vestigial in other animals, became 25% of the human brain. This large prefrontal cortex brought to human life adaptive capabilities not possessed by any other mammals – executive functions, i.e., organizing, planning, multitasking, utilizing language to regulate emotional states, and social cognition, i.e., recognizing patterns of social interaction, making psychological sense of others, sensing empathically the experience of other persons. These new competencies enabled humans to solve predicaments in living and to create more desirable physical and social worlds. However, this new prefrontal cortex also became the region of the brain most vulnerable to disruption by excessive emotional arousal. Emotion regulation was vital for keeping subcortical threat systems, centered around the amygdala, insula, and ventral anterior cingulate gyrus, in relative quietude (Arnsten 2009; Arnsten et al. 2012; Gross 2013; Roozendaal et al. 2009).

Sustaining emotion regulation helps optimize both executive functions and social cognition. Interventions that provide a structured, low-stimulation environment can be essential for hope-building when a patient carries a vulnerability to excessive emotional arousal, as with schizophrenia or posttraumatic stress disorder. The metabolic health of the brain is critical for problem-solving and relational coping and becomes a concern when a person is exposed to prolonged physical stress or nutritional depletion (Griffith 2018).

Awareness of interactions between emotion regulation, executive functions, and social cognition also provides a framework for integrating psychopharmacology and psychotherapeutic interventions to strengthen capacity for hope, as when antidepressants, mood stabilizers, or antiadrenergic medications are used to improve emotion regulation or when psychostimulants are used to improve executive functions.

The Hope Modules: A Resilience-Building Brief Psychotherapy

Hope was selected as an optimal core construct for resilience-building psychotherapy due to its prominence as a common factor of therapeutic change. Decades of psychotherapy research studies have demonstrated the role of hope in therapeutic change and the potency of hope for simultaneously activating other common factors. Mobilizing a patient's hope typically means that the therapist also has attuned well to the patient's cognitive style and tolerance for emotions and has built a strong therapeutic alliance. Mobilizing hope further means that a patient will more likely

adhere to specific treatments, such as medications or behavioral assignments (Snyder 2000; Snyder and Taylor 2000).

Most importantly, hope is a specific antidote for despair, which would undermine any type of treatment. Patients who fall into despair lose capacities for effective executive functions, social cognition, and emotion regulation. A despairing patient becomes helpless and socially isolated. Despairing patients fail to adhere to either psychiatric or medical treatment regimens (Griffith 2018).

For brief psychotherapy, hope is best defined as a practice, "something you do" rather than "something you are" (Weingarten 2010; Griffith 2014, 2018). "Practice" is employed in the sense of a spiritual practice or an ethical practice, as a program of action undertaken, not just for pragmatic purposes, but as an expression of identity as the kind of person one wants to become and how one wishes to act in the world (Weingarten 2010; Griffith 2014, 2018).

Hope, like resilience, has a family of definitions, with some definitions at odds with others. Thinking of hope as "feeling hopeful" is problematic because many traumatized people are too numb to feel. Depressed, demoralized, or grieving persons may be too worn down, numb, or in pain to be able to feel hopeful. Nevertheless, someone traumatized, demoralized, or sorrowful often can act with hope even when not feeling hopeful.

Hope Modules, as a resilience-focused brief psychotherapy, has been designed to fit this role (Griffith 2018). Hope Modules fill a practice gap by providing psychotherapeutic interventions that help a person struggling against difficult challenges to muster strength and to avoid despair. People struggling with difficult life situations need interventions that can be effective, efficient in use of time and financial costs, and portable across a breadth of clinical problems, treatment settings, and patient populations.

Hope can be practiced in two steps – first, to locate a deep desire or commitment; second, to take a step in action toward that desire or commitment (Weingarten 2007, 2010). Defining hope as a practice aligns closely with such empirically validated resilience factors, such as active coping, acceptance, hardiness, and grit (Southwick et al. 2011a; Maddi 2002). Patients who are too numb or depleted to feel hopeful often can gain clarity about "what really matters" in their lives and to take some step toward it. Practicing hope encourages facing, embracing, and engaging adversity, rather than avoiding, submitting, or withdrawing.

Each hope module packages skill sets for assessment, formulation, and intervention around a single evidence-based hope practice. This enables relevant hope modules to be inserted into nonpsychotherapeutic clinical encounters, such as psychopharmacological treatment or case management. Hope modules provide a scaffolding from which patients in despair can rebuild hope (Griffith 2014, 2018).

Assessment and Formulation

Discovering a patient's signature strengths for sustaining hope while under duress is the most important step in brief psychotherapy. Helping a patient to exercise skills for hope-building is an efficient and effective path to a successful

psychotherapy. Discerning signature strengths for hope-building can be conducted by asking two questions about a patient's current or past encounter with adversity – *How did it affect you? How did you respond?* – then attending to the type of response (Wade 1997, 2007).

Patients typically seek psychotherapy when feeling trapped in a predicament or face challenges they are unable to meet. Asking *How did it affect you?* seeks to hear, understand, and bear witness to the impact of losses, traumas, and threats that the patient is facing. Related questions that give voice to these impacts include:

- *What did it take from your life?*
- *What is not happening in your life that should be happening due to this stress?*

These questions typically elicit a narrative of demoralization, grief, helplessness, or anguish.

The second question, *How did you respond?*, most commonly elicits a narrative of resilience about problem-solving, seeking relational support, relying upon inner strengths, or relying upon restorative self-practices, such as exercise, mindfulness practices, personal spirituality, or other self-care. It is important to listen for the type of coping response the patient first makes. This initial response usually points to the patient's strong suit for coping. The clinician then can help the patient to expand the scope or to intensify use of this coping strategy.

For example, a 48-year-old woman was diagnosed with a neurodegenerative disease. When her neurologist first explained her diagnosis, she was inconsolable, but then called her sisters and a close friend who quickly gathered to provide emotional support (relational coping). The psychiatric consultant met with the patient and her community of support to organize help with parenting and daily tasks.

Patients request psychotherapy when initial efforts to solve problems, resolve conflicts, or meet expectations are failing. Demoralization is usually the proximal reason for seeking psychotherapy (Frank and Frank 1993). Demoralization represents a sense of subjective incompetence when a person is unable to meet their own or others' expectations (de Figueiredo 1993). In addition to appraising hope-building competencies, it is thus necessary to determine the "why" of despair— why is hope not happening?

For example, an elderly man was admitted to a psychiatry inpatient unit with a diagnosis of depression, after his primary care physician expressed concerns about his apathy and self-neglect of his health. When admitted, the patient stated he had "no reason to keep living." A psychiatric social worker who investigated the patient's life circumstances found that his best friend recently retired and moved to another state. The patient's son had begun spending less and less time with his father since receiving a major job promotion at work. The patient, now widowed, had thrived on friendships and social activities throughout his life. Based upon the assessment that the patient relied upon relational coping to sustain hope and purpose, the treatment plan shifted to helping him rebuild a social network, regular social activities, and group therapy. His spirits improved and concerns about depression resolved without intensive treatment with medications.

A formulation that explains a patient's despair requires broad consideration of biological, psychological, and social factors that can disrupt hope. In the above example, accurate formulation depended upon the social worker's assessment that identified her patient as a life-long "relational coper" whose current life was impoverished of relationships. An accurate formulation helps clarify when current life circumstances so limit a patient's preferred coping style that an alternative strategy needs to be considered.

Designing Interventions Utilizing Hope Modules

Problem-Solving and Goal-Seeking Strategies

Cognitive strategies for mobilizing hope rely upon thinking through problems, appraising resources and obstacles, and creating a realistic plan to achieve objectives, including "giving myself a talking to" when that is needed to regulate emotional distress. These capacities rely upon the integrity of prefrontal cortex and executive functions, which act in concert with the dorsal anterior cingulate gyrus and its allocation of focused attention. The vital importance of "pathways thinking" and "agency thinking" to generating hope has been empirically validated over recent decades in a series of research articles and books published by the Department of Psychology at the University of Kansas (Snyder et al. 2000; Snyder 2000).

Agency-Thinking Module

Agency refers to the motivation necessary to move toward goals. It reflects the appraisal of whether one can initiate action and can persevere toward goals. Agency-thinking refers to cognitions that sustain the sense that one can take effective action. In Norman Cousin's words, "There is never a time when nothing can be done (Cousins 1990)." (Snyder 2000; Snyder and Taylor 2000; Griffith and Dsouza 2012). The process of agency-thinking includes:

I. Assessment:
   A. Noting expressions of *helplessness*:
      - "Nothing I try to do matters"
      - "I don't know how"
      - "I don't know what to do"
   B. Noting expressions of *alienation*:
      - "I don't belong"
      - "There is no place for me"
      - "I wish I could become invisible or disappear"
      - "I no longer recognize myself"

II. Formulation – Identify factors that generate helplessness or alienation and elucidate how they interact:
   - Confusion or inability to make sense of one's situation
   - Lack of knowledge or skills
   - Social isolation

- Marginalization from stigma, discrimination, or other social injustice
- Apathy from depression, PTSD (avoidance cluster), schizophrenia (negative symptoms), or brain injury (traumatic brain injury with impaired executive functions)

III. Intervention – Ask questions that separate problems from the person, expand voice, and promote assertive coping rather than avoidant coping:
- Externalize the problem by separating it from sense of self as a person (White 1989, 2007). Some questions that help externalize problems include:
  1) *"What else should I know about you as a person in addition to your diagnosis [or that you are a "torture survivor" or "incest survivor"]?"*
  2) *"What would be happening now in your life if this problem were not there?"*
  3) *"What percent of your life is controlled by this problem? What percent do you control?"*
- Expand the scope of awareness of personal agency (voice, authorship):
  1) *"What has kept alive your determination to live and recover?"*
  2) *"The fact that you can still feel outrage over injustice – within you as a person – to what does that speak?"*
  3) *"What steps have you taken to keep this problem from impacting your life even to a greater extent?"*
- Formulate a plan of action by identifying a theme in which the patient feels some sense of agency despite limited control, i.e., lack of knowledge or skills, isolation, or need for treatment of depression.
- Identify the smallest step of assertive coping that the patient can be able to undertake, and help the patient to find sufficient motivation to take it. For example:
  1) "*What would be a step that you [we] could take today that would be big enough to matter, but not so big as to feel overwhelming?*"

Pathways-Thinking Module

Pathways-thinking is planning strategies to meet goals. It requires appraisal of one's current situation, envisioning of a desired future, then imagining possible paths from one's current situation to the desired future. In the face of obstacles, it often involves persistent generation of plausible pathways toward one's goals. Pathways-thinking and agency-thinking can be distinguished from each other but are closely related and often co-vary. The process of pathways-thinking includes:

I. Assessment – Listen for expressions of futility or entrapment, such as (Griffith and Gaby 2005):
- *"There is no light at the end of the tunnel."*
- *"I can see no way out."*
- *"Nothing works."*

II. Formulation – Listen for absent or failed efforts to generate pathways to goals. Identify factors that hinder generation of pathways and describe how they interact:
- Confusion or inability to make sense of one's situation
- Lack of knowledge or skills

- Avoidance of disappointment from potential failure
- Cognitive impairment, e.g., metabolic encephalopathy (impaired attention and executive functions); schizophrenia (impaired executive functions); mania (impaired attention, impaired impulse control); attention deficit disorder, traumatic brain injury, dementia, or other cognitive disorder with impaired attention or executive functions

III. Intervention – First, coach the patient through a process of envisioning a desired future as an expression of a deeply felt desire or commitment. Second, aid the patient in imagining a pathway toward that envisioned future and setting manageable steps as goals (White 1989, 2007; Penn 1985):
   - *In what different direction would you wish your life to be headed?*
   - *If these problems were resolved, what would be happening then in your life that is not happening now?*
   - *What is your best sense of what your life is about?*
   - *If you imagine yourself at the end of your life looking back over these years, what would you need to see in order to feel that you lived a good life?*
   - *If we were to spend time working together in psychotherapy, what needs to happen in order for that to be worthwhile?*
   - *If this therapy is successful, what will be happening in your life at its end that is not happening now?*
   - *What would indicate to us that the therapy is finished?*

Case Illustration

Bill T. was a 24-year-old man who sought psychiatric treatment for panic attacks and depersonalizing experiences in which he "felt like [his] internal organs [were] disappearing." He had incapacitating shyness and anxiety in social settings, even with well-known acquaintances or family members. He wanted to date but had never had a girlfriend. His symptoms were worsening since moving to his current community 2 years ago. He had no social interactions outside the workplace. Treatment with paroxetine failed to reduce his anxiety. He had never attempted psychotherapy.

After hearing how social anxiety had affected his life, his psychiatrist completed an assessment of Mr. T.'s hope-building competencies by asking how he typically responded when feeling overwhelmed by social anxiety. Mr. T. would re-double his conscientiousness at work, to the extent that he sometimes completed three-fourths of the total work assignment given to his team of four in his office. The psychiatrist heard this response as indicative of a primary coping style of goal-seeking and problem-solving as an individual.

The psychiatrist shifted to a detailed inquiry for how Mr. T. could expand pathways-thinking into a vision for what he would most desire psychotherapy to accomplish. These questions sought a description of the future he would want to move toward, not just the panic attacks and depersonalization he wished to move away from:

- *If this therapy were to be successful, what would be different in your life?*
- *What will indicate to us that the work of the therapy is finished?*
- *Where in your life will these changes be most evident?*
- *Who will be first to notice the new changes? What will they likely notice?*
- *Which relationships in your life will be changed most? In what ways?*
- *How will you feel differently about yourself as a person after these changes have come to pass?*

Mr. T. initially found these questions difficult to process: "I don't know. I'm not good at those sorts of questions." He seemed to show little capacity for imagination. However, the psychiatrist noted that Mr. T. took pleasure in movies and watched them avidly. He asked: "If you were producing a film about the life you would most want, how would the movie go?" Mr. T. could then describe that he would see in such a movie:

- "I would be expressing myself clearly."
- "I would have a girlfriend, and eventually marry."
- "I would be working in a job I enjoy."
- "I would be making plans to go to graduate school."
- "I would be spending time with friends."

These responses sketched a picture of Mr. T.'s desired future. They could be translated into specific goals.

The psychiatrist then shifted to an inquiry that might help mobilize a sense of personal agency that these objectives could be attainable. Mr. T. could not identify any "strengths" that he thought he possessed. However, the question: "Tell me about areas of your life where you have been able to keep the anxiety pushed back" elicited strengths he could acknowledge:

- Despite his anxiety and discouragement, he reliably had been attending church on Sunday mornings.
- He had a passion for movies.
- He had been intelligent, competent, reliable, and conscientious at work.

The psychiatrist then turned to questions that would help Mr. T. to translate his vision of a desired future into specific goals with steps along pathways to those goals. When Mr. T. was asked what stood in the way of his realizing this future, he mainly described social and relational obstacles: "All my problems have to do with shyness, trying to be invisible, or off the radar as much as I can be." Specific elements included sadness and loneliness, a lifelong history of shyness, social isolation, parental conflict, and divorce that left no model to emulate for a successful relationship.

With clarity about Mr. T.'s envisioned future, the strengths he could draw upon, and the obstacles standing in the way, it became possible for Mr. T. and his

psychiatrist to negotiate a collaborative contract for psychotherapy. The psychiatrist asked Mr. T. to reflect upon about the goals discussed: "If these goals represented all of the future you desire. . ..

- *What percent of it have you already changed?*
- *Were there steps you had taken even before you called for an appointment?*
- *What would be the milestones along the way that would tell you that you had achieved a fourth of the change? Half the change? Three-fourths of the change? All of the change?"*

The psychiatrist and Mr. T. agreed that developing friendships should be the initial aim for therapy. The first step would be to identify possible friends at church, to meet someone, and to learn about the person's life, then to initiate meeting outside church on a social occasion.

Over the coming days, Mr. T. found the step of actually calling someone to be difficult, so the psychiatrist focused upon strengthened his resolve:

Mr. T.: "I work have to work up the courage to call a friend to get together."
Psychiatrist: "What percent likelihood is there that you will call?"
Mr. T.: "Maybe 50%."
Psychiatrist: "What percent likelihood you will enjoy your week more if you do call?"
Mr. T.: "90%."

A few days later, Mr. T. did invite someone from church to go to a movie. They went out, and the friend then invited Mr. T. to a gathering with other friends, which led to some other invitations.

At the 12th session, Mr. T. had successfully met with a friend socially several times. The psychiatrist asked: "Where do you think you are in progressing towards your goal of spending time with friends?"

Mr. T.: "Maybe 60%."
Psychiatrist: "What steps have contributed most to your being able to reach this 60% point?"

Mr. T. listed several different types of interventions and out-of-session homework assignments that had been utilized:

- Studying successes (drawn from solution-focused psychotherapy)
- Thought diaries to learn the content pattern of intrusive, self-deprecatory thoughts (drawn from cognitive-behavioral psychotherapy)
- Pacing the therapy by exploring his concerns about disappointing the therapist (drawn from psychodynamic psychotherapy)
- Role-playing assertive interactions with boss (drawn from interpersonal psychotherapy)

- Planning a visit and tour of Washington for his parents (drawn from family systems psychotherapy)
  By the end of the 18th session, Mr. T. assessed his friendships as meeting 90% of his original aims. He was making phone calls to family and friends with little hesitation.

At work, he assertively asked his boss to reduce his allocation of work responsibilities, to which the boss responded positively. He had joined church groups where he would have chances to meet girls. The panic attacks and depersonalization symptoms that originally brought him into psychotherapy diminished and mostly stopped as he adopted a more assertive coping style. Mr. T. commented: "I think my life had been on auto-pilot for two or three years. . .. The therapy gave me something to go towards that I wanted."

Relational Coping Modules: Using Relationships to Mobilize Hope.

Turning to a relationship is perhaps the most common strategy utilized by human beings when they need to mobilize hope and sustain it. Relational coping turns pathways-thinking and agency-thinking by an individual into a couple-, family-, or team-based effort (Weingarten 2000, 2006, 2007).

There are multiple types of relationships, depending in large part on whether the relationship is personal, a group role, or an impersonal belonging within a collective. The following six types of relationships are supported by empirical research studies for their attenuation of physiological stress responses and for promoting active coping (Weihs et al. 2008; Eisenberger 2013; Hornstein et al. 2016). Activating these relationships can enable hope.

Confiding Relationship Module

A confiding relationship is one in which each person openly expresses to the other their authentic thoughts and feelings:

I. Assessment:
   - *With whom can you speak about emotional concerns?*
   - *Who truly knows what you are going through?*
   - *Who can listen without criticism or judgment?*

II. Formulation – Identify obstacles and describe how their interaction hinders confiding:
   - *Is there access to protected spaces where private dialogues can occur?*
   - *Is there a history of distrust that hinders openness?*
   - *Are there barriers of differences in social class, religion, ethnic identity that hinder confiding?*

III. Intervention:
   - Create structures for dialogue within routines of daily life.
   - Resolve relational conflicts or other obstacles that hinder dialogue.

Attachment Relationship Module

Attachment relationships are organized by emotional security felt within a relationship characterized by proximity, a safe harbor during times of threat, and a secure base when exploring one's environment. In a secure attachment, a person feels that the relationship will be reliably secure and protective if called upon (White 1988; Weihs et al. 2008).

I. Assessment:
   - *In whose presence do you most feel a sense of comfort and relaxation?*
   - *Who knew you well growing up who would not be surprised to see you hopeful even in the presence of many adversities?*

II. Formulation:
   - How is access to an attachment relationship hindered by either physical (separation) or psychological (fear, shame, guilt) factors?

III. Intervention:
   - Practice imagining the presence of an attachment figure who is actively aware of one's struggles.
   - Re-connect with someone who has provided a secure attachment relationship in the past.

Embracing Group Role Module

Role performance refers to acceptance of one's role and responsibilities in a group of identity. Hope is evoked by embracing one's role in a family, team, or organization.

I. Assessment:
   - *To whom do you belong? To what group?*
   - *How do members of this group count on you? For what?*
   - *How do you count on them? For what?*

II. Formulation – Identify obstacles that hinder accepting a role and describe how they interact:
   - Is there lack of clarity about roles and responsibilities?
   - Does this person lack confidence?
   - Do blame, shame, or guilt interfere with performing one's role?
   - Is there a lack of knowledge or skill about how to perform one's role?
   - Is this person conflicted about the mission or values of the group?

III. Intervention:
   - What steps can be taken to help this person take ownership of one's roles and responsibilities?
   - Who can help?
   - Who provides a model?

Supportive Social Network Module

Social support relationships are those to whom one can turn for practical help, even though the relationship may not be a confiding or attachment relationship.

I. Assessment:
   - *When you need help getting a task done or a problem solved, who can you call upon for assistance?*
   - *Who has the necessary knowledge or skills to help?*
   - *This can be a hard illness [or problem] to endure. Who do you want to go with you as you go through it?*

II. Formulation – Identify obstacle that hinder creating a social network and describe how they interact:
   - *What tasks need to be accomplished?*
   - *What skill sets are needed to accomplish these tasks? Who could provide these skills?*
   - *Who has time to help?*
   - *What obstacles hinder accessing these relationships?*

III. Intervention:
   - Based upon the formulation, collaborate with the person in strategizing how to engage people who can provide practical help.
   - Consider gathering a "community of support" around the problem that needs a solution.

Altruism and Generativity Module

Altruism refers to social exchange processes in which group members act with beneficence toward other group members. Altruism promotes group cohesion and longevity of relationships between group members:

I. Assessment:
   - *To whose life have you contributed in a way that made a difference?*
   - *Who has ever told that your life touched theirs? In what ways?*
   - *What would you wish to pass on to those you care about?*
   - *What would you want to be your legacy?*
   - *What stands in the way of your making the kind of contribution you would want to make?*
   - *What would be a first step?*

II. Formulation:
   - Assess obstacles to altruism and generativity – whether uncertainty for what could be offered, lack of clarity for what might make a difference, or lack of contact with potential recipients.
   - Assess whether patient has awareness of contributions made to the lives of others or awareness of their impacts.

III. Intervention:
   - Help the patient to discern what he or she has to offer others.
   - Construct a life narrative that identifies those who have been recipients of generosity, compassion, or mentoring and reveals differences that those contributions made.
   - Help the patient -making to make contact with someone who had been the recipient of generosity or compassion in order to learn how such contributions had made a difference.

Case Illustration

Mr. R. was a 67-year-old patient who was referred for psychotherapy for depression following a diagnosis of pancreatic cancer. After hearing how devastated Mr. R. had felt after hearing his prognosis, his psychiatrist asked how he had responded to the bad news. Mr. R. had sought more information about the diagnosis and treatment, but he primarily had turned to his important relationships for emotional support. In particular, he had valued the unexpected reappearance of an old friend whom he had not seen in years but who recently surprised Mr. R. with a call. "His getting in touch was just what I needed at that moment."

The psychiatrist heard Mr. R.'s response as indicative that he primarily coped relationally, rather than by individual problem-solving. The psychiatrist then broadened his scope of questions to learn which types of relationships most supported Mr. R.'s capacity for hope. Mr. R., a widower, had relied most upon periodic contact by e-mail with two adult children who lived in other states. He had several friends who he mainly stayed in touch with, also by e-mail. He had been raised as a Catholic but had become alienated from the Catholic Church during his adult life and had stopped attending Mass on a regular basis. However, he described how lonely he felt, and how much he longed to feel part again of the church community that used to provide him with a sense of kinship and belonging:

Mr. R.: "I went to church this morning before coming here. You know, sometimes I do that. I won't go to Mass but I'll just go stand inside the church."
Psychiatrist: "What was it like to visit the church this morning?"
Mr. R.: "Well, it seems that just being in the church can be peaceful. . .it's quiet and sometimes there are a few other people there, too."
Psychiatrist: "Do you feel connected to the others who are there?"
Mr. R.: "Well, it's not like I know them. . .but, yes, sometimes I feel that maybe they might be dealing with depression too, or maybe someone they know someone who died, or maybe they are sick. So, even though I don't talk to them, I may feel a connection."
Psychiatrist: "So how does this sense of connection differ from your experience of going to Mass?"
Mr. R.: "During Mass I can get overwhelmed. . .sometimes I don't like what the priest says or I feel like I don't fit in."
Psychiatrist: "It's different then when you are in church during the week?"
Mr. R.: "Yes, I try to write down the names of people I want to pray for, and then I say a little prayer for them when I'm in the church."
Psychiatrist: "Do you feel a part of the community when you are in church at those times?"
Mr. R.: "Maybe a little."

Noting the importance of a social network to Mr. R. as a resource for sustaining hope, the psychiatrist encouraged him to contact a lay ministry associated with the church. The lay ministry was made up of church members who volunteered to visit people too ill or disabled to attend church. Mr. R. joined the lay ministry and became

a regular visitor to the ill whom they served. Over the course of the psychotherapy, he developed friendships with members of the lay ministry, and it became the new community of support for which he had longed.

Identity Modules: Mobilizing Hope by Asserting a Core Identity

Activating a core identity is an emotion-focused intervention that can mobilize assertive coping, and secondarily hope, through a heightened awareness of a personal, group, or collective value or commitment. Activating identity accesses a vital relationship to self, to a group of identity (e.g., family/clan/workgroup), or to a collective of which one is a part (e.g., one's profession, nation, religious group, political party). A threat to such vital relationships is experienced as if it were a threat to life or limb. Accessing a core identity can activate hope-building when other efforts have faltered. The relevance of preservation of identity to mobilization of hope has been validated in palliative care research studies (Chochinov 2012). This process includes (Griffith 2014, 2018; White 1988, 1989):

I. Assessment.
   A. Personal identity
      - *In your "heart of hearts," who are you? Who do you know yourself to be?*
      - *What have you found to be most authentic in your living?*
      - *Who is it important that you become?*
      - *What life stories contributed to this sense of personal identity?*
   B. Family/clan/team/work group identity
      - *Who is in your group? Who are your "people"? To whom do you belong?*
      - *This is a difficult illness [or problem]. Who do you want to go with you as you strive to meet its challenges?*
      - *For whom would you be willing to fight in order to protect? Who would fight to protect you?*
      - *For whom is it important that you persevere in your work?*
      - *What life stories contributed to this sense of family [or group] identity?*
   C. Collective identity
      - *Of what greater whole are you a part?*
      - *Of those aspects of your collective [gender, ethnic, racial, religious, national] identity, for which would you be willing to sacrifice and suffer in order to protect?*
      - *What life stories contributed to this sense of collective identity?*

II. Formulation— Note which core identity most evokes an assertive emotional response, then conduct an inquiry that expands an understanding of the depths of emotion it evokes. Possible questions include:
   - *Would you tell me about some salient experiences that taught you the importance of [personal, family/team/work group] in your life?*
   - *If you were not to honor [personal, family/team/work group identity], from whom would you feel separated?*

- *Can we put together into a sentence what it is that your life would most need to protect or to honor, so that you would be able to look back later with no regrets?*

III. Intervention— Ask questions that amplify emotional awareness of this core identity and its implications for action:
- *What is one step you can take toward that person you know yourself to be?*
- *Twenty years from now, if you could look back upon yourself in this situation, what would you hope to see yourself doing now?*
- *What do those who count on you expect of you in this situation?*

Case Illustration

Dr. J. was a 77-year-old patient who sought psychotherapy for insomnia and depressed mood following recent diagnoses of Parkinson's disease and prostate cancer. While denying any suicidal ideation, he stated his intent to move to Oregon, where physician-assisted suicide would be available if his health continued to deteriorate.

Over a 40-year-long career, Dr. J. had held executive positions in both national and international social policy and advocacy organizations, where he regularly interacted with major political and religious leaders. His leadership had been credited with significant humanitarian accomplishments. Now he felt despondent reading the daily news and wondering whether his life had made any positive impact upon the world. He also felt despairful when discerning a decline in his memory or a slowing of his thoughts.

When his psychiatrist asked what his awareness of cancer and Parkinson's disease has taken from his life, Dr. J. spoke at length about service to his nation through environmental, social, and economic policies he had successfully advocated. He felt that this role was now under assault. When asked how he responded to this threat, he spoke about mentor relationships he, despite his retirement, had continued with younger colleagues. He benefited richly from supportive relationships with his wife, family members, church, and colleagues. However, it was his ability to continue mentoring that most sustained him. Recognizing his reliance upon this core identity, the psychiatrist began strategizing how best to preserve and strengthen this sense of identity. The psychiatrist asked:

- *"If you think about three or four signature events in your life that most defined who you became as a person, which would you select?"*
- *"To whom do you feel gratitude for how they influenced who you became as a person?"*
- *"If you were to think about the legacy you would wish to leave behind, what would it be?"*

He spoke about his sense of justice and humility that his mother provided, and his adventure-seeking drawn from his father. He expressed remorse for losing contact with colleagues and mentees he used to know. During his psychotherapy, he

reconnected with some of them in order to express appreciation for their contributions to his life.

Dr. J. recounted how he and his wife visited a lake and waterfall in the western US. During that trip, he watched in horror as a mother and child were swept away by a violent current. What stood out in his memory was the moment the mother realized that it was inevitable for her to go over the falls. At that point, she appeared resolute and, instead of fighting the current, relaxed, held her child, and went over. Fortunately, the mother and child were not badly hurt, but Dr. J. kept replaying that moment in his mind: "I realized later that the current of life will sweep over me eventually. There is no fighting it, but I would like to feel something of that resolution and comfort in those last moments." When facing end of life care, he wanted to remain assertive, embracing reality and meeting whatever is in front of him, rather than avoiding it.

The major thrust of the psychotherapy centered upon two objectives. First, Dr. J. and his wife, with his psychiatrist's assistance, prepared a videotaped record of Dr. J.'s advanced directive that would guide future surrogate decision-makers if he should become cognitively incapacitated as the Parkinson's disease progressed. In the event of severe, irreparable cognitive impairment, he wanted his doctors and family member to observe his wishes for a natural death without forced feeding. Second, he and his psychiatrist organized a role for his continued mentoring of young people in an environmental advocacy organization. He would maintain the teaching and mentoring to which he was devoted, for as long as he was able.

Emotion Regulation Modules

Emotion regulation is the ability to respond to ongoing demands of lived experience with a range of emotions that is subjectively bearable, socially tolerable, and flexible enough both to permit spontaneous reactions or to inhibit spontaneous reactions as needed to carry out important life agendas. It involves monitoring, evaluation, and modifying one's spontaneous emotional reactions. Emotion regulation can focus upon either modifying one's subjective experience (feelings), emotion-related physiological responses (body arousal), or emotion-related behaviors (actions or expressions) (Arnsten et al. 2012; Gross 2013).

Neurobiologically, emotion regulation refers to the "top-down" regulation of subcortical brain circuits that process "bottom-up" sensory information streams. These bottom-up systems, including the amygdala, insula, and ventral anterior cingulate gyrus, react to emotionally salient events by generating emotional responses. These bottom-up circuits are regulated by top-down circuits of the prefrontal cortex, dorsal anterior cingulate gyrus, and hippocampus.

The prefrontal cortex is the brain region most vulnerable to disruption from emotional stress due to amygdalo-cortical pathways. Robust emotion regulation protects the functional integrity of the prefrontal cortex. Impairment of the prefrontal cortex from impaired emotion regulation can secondarily disrupt such executive functions as "pathways-thinking" and "agency-thinking" (Arnsten 2009; Arnsten et al. 2012; Roozendal et al. 2009). Restoring or strengthening emotion regulation is thus a vital component of hope-building:

I. Assessment – Examine how expressions of emotion are maladaptive for effective coping:
   - What are cognitive, emotional, behavioral, or somatic indicators that emotion regulation is failing?
   - What type of dysregulation occurs? Do emotional responses occur too quickly, become too intense (or too numb), or persist too long?

II. Formulation:
   - Are there identifiable precipitants, or triggers, of emotion dysregulation that can be modified?
   - What has been the patient's repertoire of methods for achieving emotion regulation when stressed in the past? What cognitive strategies, specific techniques (mindfulness practices, exercise), spiritual practices, relationships, or use of medications has been effective in the past?
   - What appears to be the patient's signature strength for achieving emotion regulation under extreme stress?

III. Intervention:
   - Modify precipitants of emotion dysregulation
   - Utilize patient's signature strength for achieving emotion regulation
   - Cognitive-behavioral de-arousal strategies (monitoring body arousal, grounding techniques, visual imagery, progressive muscle relaxation, breathing techniques)

Stressor Reduction Module

Stressor reduction improves emotion regulation by unloading stressors, such as physical pain, fatigue, nausea or vomiting, insomnia, or other sources of distress. It can also refer to anguish, fear, shame, or other intolerable emotional states:

I. Assessment:
   - *What is the hardest thing that you are facing? What next? What next after that?*
   - *What is the greatest source of suffering in your life right now? What next? What next after that?*
   - *Is your greatest suffering more physical suffering or emotional suffering?*
   - *What would tell us that this suffering were lessened? What would be happening in your life then that is not happening now?*

II. Formulation:
   - For each major source of acute distress, identify psychological or medical interventions that could diminish the burden of distress.
   - In particular, identify any physical sources of distress, such as insomnia, physical pain management, nausea, pruritus, or other somatic distress that can be attenuated with medical treatment.

III. Intervention:
   - Develop a systematic plan to reduce stressor burden for each source of distress.
   - Identify a supportive community of family members, friends, and lay or professional helpers who can collaborate in interventions to relieve distress.

- Provide psychoeducation that can enable the partner and his or her family members to partner more effectively in interventions to reduce stressor burden.
- Honor struggle – Frame the purpose of intervention as both relieving the suffering of the individual and supporting the values and commitments that can be better advocated after suffering has been attenuated.

Attrition Stress Management Module

Managing attrition stress is a subcategory of emotion regulation that refers specifically to strategies for coping with ambiguity, uncertainty, and waiting. These are stressors that often matter most over the long haul of chronic illnesses or long-term adversities. The initial step in managing attrition stress is to make "uncertainty" or "waiting" visible by naming it as the primary problem. Then the struggle can be framed as a long distance race, rather than a sprint. Building capacity of relational supports, whether confiding, attachment, or "community of support," provides the greatest protection (Griffith and Griffith 2010, p 292–300).

I. Assessment:
   - *Which is harder, the pain you are feeling or the uncertainty [or ambiguity, or waiting] about what will happen next?*
   - *What do you call [or what name do you use for] this stress in your life?*
   - *How does the uncertainty [ambiguity, waiting] affect you? What does it take away from your life?*

II. Formulation:
   - *From where do you draw strength? What has kept you from giving up?*
   - *For whom, or for what, does it matter that you survive and prevail?*
   - *How can you best conserve strength and resources if this is a long struggle?*
   - *What sustains your hope?*
   - *Are there thoughts does the uncertainty [waiting, ambiguity] put into your mind that diminish your strength?*

III. Intervention:
   - Identify and mobilize a community of support who can help counter the uncertainty, ambiguity, and waiting.
   - Locate values, commitments, and relationships that provide a sense of certainty for direction into the future.
   - Identify personal resources (spiritual resources, core identities, anchors/oases/safe places, etc.) that counter the specific impacts of uncertainty, ambiguity, and waiting.
   - Formulate a strategy to conserve resources.

Case Illustration

Ms. S. was a 23-year-old woman who requested psychotherapy to assist her emotional coping while pursuing Master's degree graduate studies. Ms. S. had a history of bulimia, self-harm behaviors (cutting), methamphetamine, and alcohol abuse,

together with a history of extensive childhood physical and sexual abuse. She had achieved sobriety through a successful drug treatment program and planned to continue its maintenance outpatient program. However, she worried that any relapse of mood, posttraumatic, or dissociative disorder symptoms could jeopardize completing her academic degree. Her psychiatrist asked how her past traumatic experiences most impacted her life currently. She said she was most vulnerable in the quietness of night when memories of childhood returned. "It was at night I was abused." She would then feel agitated and could not lie still or sleep. The psychiatrist then asked how she best managed this agitation. "Music," she responded. "All kinds of music." She described how important music was in her life for its ability to transport her mood out of dark places. The psychiatrist recognized the preeminent importance of emotion regulation in her life and began to inventory the emotion regulation practices she could draw upon, in addition to music. She had a small group of friends to whom she could turn for support. She recently had returned to her religious faith due to the influence of Christian friends. She told how she prayed and could feel "the warmth of God's presence." Most of all, speaking with her grandmother on the telephone brought about a visceral relaxation.

The psychiatrist provided psychoeducation on the relationship between emotion regulation and its enabling effectiveness of executive functions and social cognition in finding solutions for life's problems. She first practiced noticing early signs of hyperarousal, then emotion regulation skills that she could draw upon in order to remain within her zone of tolerance. Using a "fire drill" analogy, she practiced conducting a rapid response to signs of hyperarousal, such as racing heart, numbness, tightness in her chest, or impulses to flee.

Building Resilience in Brief Psychotherapy

Hope Modules are psychotherapeutic interventions designed to help people struggling against harsh circumstances. People whose daily lives are a struggle to survive need interventions that can be effective, efficient in use of time and financial costs, and portable across a breadth of clinical problems, treatment settings, and populations. Hope Modules provide a set of hope-building interventions that can be inserted into routine patient care without added time requirements. These features have been optimized for treatment during crises or in settings that preclude organized psychotherapy, such as care for refugees or medically hospitalized patients.

Hope Modules also can be adapted for use in outpatient psychotherapy. In this setting, it can be more useful to use the Hope Modules as a "review of systems" for coping. Discerning when a sector of hope-building practices – individual problem-solving, relational coping, activating a core identity, or emotion regulation – appears missing entirely from a patient's life opens the opportunity for making competencies in these hope-building practices a specific objective for the therapy. For example, a patient who has never utilized a mentor can use brief psychotherapy to learn to how to identify a mentor and to develop a mentoring relationship.

Conclusion

Brief psychotherapy differs from traditional outpatient psychotherapies in the degree to which it is tailored to address a patient's predicaments in living. When patients have sufficient time and resources to invest in a number of sessions, the classical model of negotiating a collaborative contract, envisioning a future, clarifying obstacles, taking an inventory of resources works well. When resources are more limited, or stress more extreme, brief psychotherapy provides a model for interventions based on building resilience and mobilizing hope.

Hope is an optimal core construct for resilience-building because of its prominence as a common factor of therapeutic change. Psychotherapeutic interventions that promote hope-building help a person struggling against difficult challenges to muster strength and avoid despair. The Hope Modules outline a process for assessing a person's signature strengths, formulating a picture of the obstacles that interfere with the patient's ability to utilize their preferred coping style, and implementing interventions for developing and/or strengthening hope-building strategies.

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Opportunities of e-Learning in Education in Psychiatry

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Contents

Abstract

e-Learning is an expanding field in which many psychiatrists play an active role by teaching, training, and pursuing their continuing professional development. In this chapter, we describe the use of e-learning systems and its outcomes in psychiatric education. Research studies were identified through a literature search using PubMed, with the following terms: "e-learning," "online," "psychiatry training," and "medical training" and examining e-learning related documents published by the European Psychiatry Association (EPA). Several studies have revealed that e-learning has similar, if not better, outcomes in comparison to traditional educational systems led onsite by teachers. Although e-learning has been considered cost-effective, the costs relative to the development of a system with high technical and educational quality standards need to be considered.

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While e-learning is spreading in other medical fields, its use has been limited in psychiatry due to some intrinsic limitations, such as the lack of live interaction with patients. Nevertheless, research studies prove that e-learning can be successfully applied in psychiatry, with better outcomes obtained when these systems are blended with the more traditional ones. While e-learning may attract students' interest, several critical factors, such as appropriate time management, efficient use of educational materials and techniques, and adequate on-line participation, need to be further considered. Expectations for the future are that e-learning will spread in the field of psychiatry, hopefully contributing to the harmonization of education across countries and to the exchange of opinions and experiences on emergent topics.

Keywords
e-Learning · Psychiatry · Training programs · Online course

Introduction

The use of e-learning to deliver knowledge and continuing education to the medical community has recently been growing (Wilkinson et al. 2004). In the last decades, thanks to the widespread use of the internet, this new type of learning system has become very popular and its use is opening new ways to gather scientific information (Holloway 2005) and to enhance knowledge and clinical performance (Wentling et al. 2000; Rosenberg 2001). Advances in electronic communication and information technology applied to the field of health care have changed the practice of medicine and medical education (McKimm et al. 2003). The growth of e-learning probably also reflects the constant increase in the amount of new medical information: the Internet is the fastest and most accessible way to spread it among medical students, trainees, and specialists. In fact, Internet has a high potential for delivering online and computer-based electronic continuous medical education (CME), as illustrated later in this chapter. The positive impact of online courses on behavior change in medical practice, physician's confidence, and use of evidence-based information has been widely documented in the health care field (Casebeer et al. 2010). Compared to traditional learning systems, the efficiency of e-learning in transferring information has been reported as equivalent to onsite learning in enhancing knowledge acquisition and even clinical skills, in some cases (Ruiz et al. 2006). In mental health care education, the use of e-learning systems is not yet as widespread as in other medical disciplines (Rigby et al. 2012) and its use is highly variable among medical schools, depending on economic issues and type of core curriculum provided by the school; however, in general, it appears more common in basic science courses than in clinical clerkship (Ward et al. 2001). Unlike in other medical disciplines, in psychiatry the face-to-face interview with the patient is still a key tool to gather information about someone's clinical and psychological condition. Being in the presence of the patient during the clinical interview is still regarded as undeniably necessary to build a good therapeutic relationship. This emphasis on the

importance of the intersubjective experience has probably contributed to limit the use of e-learning courses in psychiatry. The use of e-learning courses as a learning system blended with other traditional ways of learning, such as classes, lectures, and practical internships, is more appealing in mental health care education. In fact, the combination of the two different types of tools seems to be more adequate than either approach alone to upgrade learners' knowledge and skills.

Main Characteristics and Advantages of e-Learning Systems

There is no consensual definition of e-learning and it can also be referred to by using different names, such as web-based learning, online learning, distributed learning, computer-assisted instruction, or Internet-based learning (Ruiz et al. 2006). A study conducted by Sangrà et al. (2012) confirmed that it is difficult to create a definition of e-learning that would be accepted by the entire scientific community. This difficulty is mainly due to the existence of many forms of e-learning, such as:

- Distance learning, where students receive at remote locations information through computers from teachers that are in a central site
- e-Learning programs based on the use of the computer in a classroom
- Computer-based learning, which uses computers to deliver knowledge at remote locations, through uploaded educational materials for learning and teaching
- Computer-supported collaborative e-learning, where the collaboration among students is central to the learning process (Stahl et al. 2006; Ruiz et al. 2006)

According to Lewis et al. (2014), e-learning systems can also differ in the ways educational contents are delivered, which can be either synchronously or asynchronously. In the first case, all learners receive information simultaneously and they can exchange information directly with the other learners; this is a real-time e-learning system led and planned by the instructors. There are different types of synchronous features in e-learning courses, such as teleconferencing, internet chat, forums, and instant messaging. In the asynchronous system, the information is not delivered at the same time for all participants, as the learners choose the time and place of their course and their own pace to gain specific knowledge. In this latter case, learners and instructors are not in real-time communication, but they can interact through feedback technologies, using for example e-mails, message board, and chats (Ruiz et al. 2006). The possibility to choose the time and location for taking an online course is one of the most important and helpful advantages of e-learning systems, as reported in a recent survey among European trainees in psychiatry (see later in this chapter). Regarding the use of e-learning in training programs, it must be considered that trainees in need of medical education spend a certain amount of time committed to their training program, which includes clinical and educational activities. In this case, attending a traditional course could be difficult since trainees are engaged in other activities most of the time. Therefore, e-learning systems offer the chance to schedule the participation in an online course

by deciding when and where to take it. In this way, trainees are made responsible for part of the management of their own education. The main issue arising in this case is whether a health care professional would personally sign in for an online course unless it is mandatory. Several steps need to be taken to spread the use of e-learning tools, depending on the setting in which the courses are provided. For example, online courses should be properly advertised in case a broad audience, including doctors working outside university or teaching hospital settings, is foreseen. The possibility to acquire CME credits by attending e-learning courses would also encourage health care professionals to undertake them. In case the courses are provided as part of a medical university program, it would be preferable to make them mandatory to ensure a large participation. Furthermore, the inclusion of online courses for medical students would represent an important step to guarantee the spreading of e-learning systems in the health care community. In fact, if medical students are educated to the use of e-learning systems before graduation they will be more likely to use them after graduation and would also obtain better results in continuing medical education.

Other important characteristics of e-learning systems include the use of feedback and assessment methods, as well as the training of instructors who participate in the preparation of an online course (Gibbons and Fairweather 2000). Feedback mechanisms are required to allow students to verify their level of knowledge and skills and to check whether e-learning tools are being correctly used and improvement is occurring. Furthermore, feedback can also represent the system through which students and trainees actively participate in the course, since they provide information about whether the course is useful. Alongside necessary feedback mechanisms, assessment methods in e-learning activities should also be used to reinforce learning while allowing to develop critical thinking skills through performance-based evaluation. There are multiple assessment methods that can be implemented in an online course, especially performance-based evaluation, and the use of most of them will also lead to a successful transfer of information (Palloff and Pratt 2009). It is crucial that innovative methods of assessment and feedback are developed and implemented to improve e-learning practices in medical education for the future. Finally, to ensure an efficient educational process, the online materials have to be well thought and organized; therefore, it is necessary that faculty members, participating in the development of online courses, are properly trained. This is necessary since the simple uploading of traditional courses does not guarantee high quality of educational levels and does not meet the proposed learning objectives. Therefore, even though e-learning has been around for decades, once institutions decide to use it as an educational tool, they need to provide their faculty members with adequate training in the field, in order to create or improve what is called their "digital literacy." The most frequent limits and challenges that might be encountered, during the transition to new technologies, are reluctance to change and to learn the use of a system that is not fully understood (Lewis et al. 2014). Therefore, faculty members need to be provided with basic information and technical knowledge to develop effective learning materials.

e-Learning Systems in Literature

With regard to the use of e-learning systems, several studies conducted so far persistently analyzed three aspects: utility, cost-effectiveness, and students' satisfaction. Several studies outside of the field of health care have revealed that most often e-learning is at least as good as, if not better than, traditional educational systems led on site by instructors, such as lectures and seminars (Wentling et al. 2000; Gibbons and Fairweather 2000). A review of the e-learning literature in different medical education contexts showed similar findings (Chumley-Jones et al. 2002). Chumley-Jones and colleagues (2002) reviewed 76 studies from the medical, nursing, and dental literature on the utility of web-based learning. About one-third of the studies evaluated that, with e-learning systems, knowledge gains were successfully obtained, generally using multiple-choice questionnaires, although standardized patients, i.e., healthy people trained to portray the personal history, physical symptoms, and the emotional characteristics of an actual patient, were used in one study. In terms of students' improvement in knowledge, e-learning was found equivalent to traditional methods. Of the two studies evaluating learning efficiency, only one found evidence for more efficient learning via web-based instruction (Chumley-Jones et al. 2002). In a meta-analysis focused on Internet-based learning in the health professions, Cook et al. (2008) found that e-learning was associated with large positive effects compared with no intervention. However, effects compared with traditional teaching were heterogeneous and generally small, suggesting a similar effectiveness (Cook et al. 2008). A more recent review showed that technology-enhanced simulation was associated with small to moderate positive effects, compared with other instructional methods (Cook et al. 2012). Furthermore, e-learning has other advantages since it may be also cost-effective. Delivering specific educational information through e-learning tools, such as clinical case discussion or a focus on specific topics, could be less expensive than carrying out the same activities as traditional face-to-face courses (Allen et al. 2003). Studies in the nonmedical literature have shown that e-learning can result in significant cost-savings, sometimes as much as 50%, compared with traditional learning (Gibbons and Fairweather 2000). In contrast with these findings, in one study conducted in the medical field evaluating the cost-effectiveness of e-learning compared with traditional learning, the authors found that the printing and distribution of educational materials was less expensive than creating e-learning contents (Chumley-Jones et al. 2002). This result is expected, but it is difficult to argue that distributing printed educational material achieves the same outcome an online interactive teaching session would. Another study in the field of medicine concluded that an Internet-based learning curriculum in sleep medicine was cost effective for medical students (Bandla et al. 2012). However, most of the reviewed studies underlie the need of carrying out more cost-benefit analyses before adopting e-learning systems, since there are several countries in which the economic issue represents a relevant factor to be considered when developing medical programs or training programs. In this case, the use of e-learning tools could represent a less expensive alternative not only for the

participants, who do not have to travel to the course location, but also for institutions such as universities and medical training centers, which oversee planning medical education programs, and need to take into account their budget. As regards the level of students' satisfaction, studies in both the medical and nonmedical literature, comparing e-learning systems to traditional ones, have consistently demonstrated higher satisfaction rates with e-learning especially when there is a perceived ease of use and access, navigation, interactivity, and user-friendly interface design (Wiecha et al. 2003). Furthermore, students reported that online courses need to be integrated in the traditional systems, instead of replacing them (Chumley-Jones et al. 2002; Gibbons and Fairweather 2000).

State of e-Learning in European Psychiatry

In European countries, the use of e-learning systems in psychiatry training programs is very unequal, given that not every core-curriculum includes e-learning activities. While several studies have been conducted regarding views on e-learning of general medicine physicians (Young et al. 2011), there is not enough information about the psychiatrists' preferences on how e-learning should be provided. To fill this gap, the European Federation of Psychiatric Trainees (EFPT) and EPA's networks recruited a sample of psychiatric trainees and early career psychiatrists, in order to provide useful information to adapt online courses to the needs of a specific target population of learners (Casanova-Dias et al. 2015). The questions asked to the involved trainees explored different areas of interest, such as what psychiatric trainees and early career psychiatrists want to learn via e-learning, what are the limitations and the facilitating factors for accessing these new types of learning systems, and which modalities should be chosen to provide e-learning courses. Twenty-one trainees and early career psychiatrist from 15 different European countries participated in the study. Their experience with these systems was variable: 47.6% of them had experience of asynchronous courses; 14.3% of synchronous courses; 28.6% had participated in both; and 9.5% had no experience at all. Among them, 9.5% had experience of both online teaching and asynchronous and synchronous courses. According to the EFPT survey, the content of e-learning courses should be of high quality and focused on specific topics (such as suicidality, research methodology, interdisciplinary subjects such as neuropsychiatry, psychopharmacology, and guidelines), since general topics are often dealt with in traditional courses. This further confirms the need for a blended learning system where traditional courses are held to discuss general topics and e-learning courses are used to deepen the knowledge on specific topics, preferably tailored to the trainees' requests. Furthermore, in order to obtain high quality knowledge and successfully improve one's skills, up-to-date information coming from papers, from international experts, or from guidelines should be provided. The wish to have access to experts is probably related to difficulties in participating to international conferences, where usually these topics are discussed. Furthermore, not all trainees have full access to scientific papers. Therefore, e-learning would not only represent a chance for each medical trainee to gain knowledge and skills, but it could increase the homogeneity of training and continuous medical education across Europe.

In order to further evaluate the current state of e-learning in European countries, EPA sent a survey to all European members of EPA National Psychiatric Associations. Ten countries participated in the survey; among these, only three had already developed an e-learning system (Ireland, UK, and Germany):

1. Ireland has developed an e-learning course including 18 modules; after completing them, trainees also have to attend an in-person workshop based on what they learned from the 18 modules; this makes the Irish e-learning project a blended one where students are requested to participate in both online and "in person" activities.
2. The Royal College of Psychiatrists in the UK has developed an online course with 167 modules and 68 podcasts for trainees.
3. In Germany, three out of the thirteen e-learning tools suggested by the answering countries were associated with CME credits.

Eight countries answered that they would recommend EPA e-learning courses if they were produced, while the Royal College of Psychiatrists would not recommend external tools, and Ireland would recommend it only after vetting them. This survey shows that most of the European countries are not yet ready to provide their psychiatric trainees with online tools and that if they are, there are different ways to implement an e-learning course. One of the most debated issues remains whether to associate an e-learning course to CME credits; this would probably get more trainees to sign in for an online course in order to get credits for their career. Nevertheless, there are European countries, such as Italy, where the training programs are already associated to CME credits, thus making difficult to get more trainees to sign in for online courses without getting an advantage out of it, except for personal knowledge improvement. The current state of e-learning in Europe indicates the need to make a stronger effort to spread the use of e-learning systems. Countries that do not have online programs might recommend the use of programs implemented by other countries. This would provide opportunities to share information across Europe in a unified way and would help European psychiatrists speaking one language, favoring a more productive discussion about emergent psychiatric issues. The wide use of e-learning tools would allow European trainees to have equivalent medical education and students of less developed countries to have the opportunity to continue their medical education at the same level as their European colleagues. Of course, unifying e-learning systems assumes that a professional curriculum is accepted by all European countries. The fact that those systems are cost-effective when compared to traditional learning methods (Ruiz et al. 2006; Bandla et al. 2012) should be regarded as a major incentive to improve medical education, and specifically psychiatric education, all over Europe.

Disadvantages of e-Learning Systems

Although there are remarkable advantages in using e-learning tools to improve medical knowledge, there are studies showing that some disadvantages should be considered when planning the development of e-learning courses and before

applying them to training programs. Bigeni et al. (2012) reported that if e-learning is not included in the design of a curriculum, participation is low. A recent pilot study done by Abendroth and colleagues (2013) also showed that only 30% of medical students invited to use e-learning actually accepted the invitation and suggested incorporating e-learning into the training curriculum. Mandatory e-learning in medical education was also suggested by Critchley et al. (2009), when only 61–70% of final-year medical students completed a series of e-learning case scenarios. Therefore, one of the main concerns about e-learning systems is the extent of the participation of students, trainees, and specialists when these courses are not compulsory. Furthermore, once an online course attendee is registered, it does not guarantee that he/she will attend the whole course, spending all the necessary time in front of the computer. Being at a remote location makes it difficult to prove that a student is actually learning using the educational materials provided by the online course. Bigeni et al. (2013) studied a group of 87 final year medical students, unaware of being monitored, that were awarded with a pulse oximeter after completing an online respiratory course, with lectures recorded by specialists and then streamed online, and a group of 14 forewarned trainees in a separate assessment; their main purpose was to establish the exact duration of the modules to try and fully understand the extent of the participation of the students. Two arbitrary criteria were chosen to prove how many students actually spent time in front of the computer after signing in: students were considered to be not actively in front of the computer if they spent less than 5 min of the total time of the course or more than double the duration of the module. The following results were reported in the nonforewarned group: 65.5% of the lectures were completed within the expected time frame; 19% of the lectures resulted in a log in session time shorter than the duration of the course; and in 14.7% of the cases the log in time was more than twice the expected time of the lecture. Only 16.3% of students completed all lectures within the expected time period; 27.9%, 20.9%, and 18.6% missed one, two, or three lectures, respectively, and 16.3% missed more than four lectures. The results from the second group of forewarned students showed that 35.7% of the lectures were completed within the expected duration of the lecture; in 19% of the cases, users logged in for a period of less than the expected time, while in 44.5% of the cases, the time during which students were logged in was longer than expected. Only 2.3% of students completed all lectures within the recommended period; 4.7%, 18.6%, and 9.3% missed one, two, or three lectures, respectively, and 65.1% missed more than four lectures. The results of this study showed that students participating in an online activity on a voluntary basis spend less time or no time at all on the e-learning activity and often skip the lectures. This problem could be solved by integrating the online courses in the curriculum of medical undergraduates and of medical specialties trainees, thus making it mandatory. Melissa Olt (2002) suggested several measures to minimize this problem, such as:

- Assigning usernames and passwords to log in
- Giving shorter assessment questionnaires during the modules
- Giving assignments that require group collaboration

- Adopting a plagiarism search service to check whether the answers have been copied from other original online materials
- Using a software that tracks log-in and log-out times
- Carrying out assessment with multiple-choice questions
- Using rotating curriculum to assign learners to different levels of expertise (e.g., beginner, intermediate, advanced) and then having different teachers rotating through all the levels

The author also considered that having a discussion about academic integrity with students and making them aware that they are being monitored might also help reduce this behavior during online courses. Regarding students' monitoring, the above-mentioned study did not confirm the validity of this suggestion. Adkins et al. (2005) used a questionnaire asking students if they would cheat in a web-based examination and it led to the following results: 42% stated that they would cheat, but this percentage was reduced to 14% when the same students were previously warned that they were going to be monitored and that other students, in previous sessions, had been caught by the system. Therefore, these results suggest the need to implement e-learning systems with integrated features capable of detecting irregularities. Another concern is using e-learning technologies in "high-stake" examinations to obtain specific qualifications. In this case, security is a key issue, with rigorous efforts made to verify the identity of the candidate an absolute necessity (Hare 2009). In addition, a major disadvantage of not being in the same room is the loss of human interaction with the lecturer or patient. Eye contact, body language, gut feeling, awareness of feelings brought out by the patient (countertransference), and the potential for positive role modeling are all factors considered important in psychiatric education (Andlauer et al. 2016). When the online course cannot be made mandatory, the participation should be increased by giving CME credits. Furthermore, in order to ensure a high participation of students and have the highest rate of students completing the course, online systems should be built around a well-thought structure that allows participants to keep interest in what they are learning. A study conducted by Harris et al. (2010) about the deficiencies in instructional design of e-learning courses and the use of low-technology educational contents, such as pure text and repurposed live lectures in most online CME courses, provided further evidence of the necessity to apply pedagogic rules: e-learning systems should use efficient instructional designs, with well-structured objectives, specific teaching strategies, systematic feedback, and structured evaluation. In this case, there is a number of models available to guide educators in the instructional design process (Wang and Gearhart 2006) that could be adopted to create an efficient e-learning system based on pedagogic rules. Teaching methods to be used for e-learning courses are significantly different from a face-to-face context and learning could be self-directed, active, collaborative, or interactive, depending on the kind of educational design that is proposed. Although certain quality standards already exist for online courses and need to be met, the possibility cannot be excluded that new pedagogic approaches and innovative teaching methods are still to be developed. For the time being, the combination of rigorous instructional design,

well-thought course structure, student centered pedagogy basis, useful and high quality technology is advisable (Lewis et al. 2011). Unfortunately, the current state of e-learning systems highlights the need for more training of e-learning educators in these areas. A set of quality standards to be applied to this aim has been developed, i.e., the Quality Matters Rubric (QMR) (http://www.qualitymatters.org) that contains a set of 8 general standards and 41 specific standards used to evaluate the design of online and blended courses assessing a number of areas, such as overall design of the course website, including navigational features, use of learning objectives, assessment strategies, policies, and tools, instructional materials and resources, learner interaction, course technology, and learner support and accessibility. Adopting these standards or developing new ones based on the need of a specific population of students should reduce concerns about the quality of e-learning systems.

Trials of e-Learning in Psychiatry

e-Learning has been used in psychiatry residency programs and found to improve residents' performance and confidence in making medical prescriptions (Gorrindo et al. 2011). Incorporating multimedia tools, such as videos, into a psychiatric lecture has been shown to increase long-term retention of the educational material and students' level of satisfaction with their educational program (Averbuch and Garvan 2009). This seems relatively easy for psychopharmacology course; however, there are very few e-learning studies in the field of psychotherapy teaching. In fact, psychotherapy is completely built upon the face-to-face interaction between a patient and its psychotherapist. Although these difficulties may be hard to overcome, some studies tried to use e-learning and evaluate its success. One of these has been conducted by Williams et al. (2001). They used computer-based tutorial systems (CBTS) in psychotherapy and developed a range of training modules using a cognitive behavioral therapy approach called "Calipso." Video clips of patients describing psychiatric symptoms were shown to the students. In a randomized controlled trial in which 80 students in psychiatry were assigned to the CBTS group and 86 to a more traditional type of learning system, based on lectures. Students who attended the lectures rated themselves as having learned significantly more as compared to the students in the CBTS group. However, a multiple-choice test showed that there were equivalent levels of knowledge gained in both groups, while analyzing the ratings of a skill-based task, participants in the CBTS group were found to have significantly better skills. Therefore, the authors concluded that CBTS may enhance skill acquisition compared to traditional lectures. Given the importance of skill acquisition in psychotherapy, this finding is interesting and suggests the need to develop evidence-based e-learning psychotherapy programs. In response to this need, Weerasekera (2013), developed PTeR, i.e., psychotherapy training e-resources, using the ADDIE Model of Web Design, developed by Peterson in 2003 (Peterson 2003). ADDIE stands for "Analysis, Design, Development, Implementation and Evaluation." In this model, an analysis of the educational need is run to determine what students and teachers need. Based on the results of this

analysis, a curriculum is then designed and developed; it is then implemented with all the features required and finally evaluated. In this case, the e-learning program is offered alongside onsite psychotherapy seminars and supervision and is, therefore, part of a blended and structured learning course. The educational contents learned during the seminars are enhanced by the material obtained through the online program that is enriched with multimedia resources including PowerPoint presentations and simulated patient videos. PTeR, the system evaluated during the study conducted by Weerasekera (2013), has been created to assess competences by offering multiple-choice questions based on simulated patient videos, with the possibility to focus on a variety of case presentations, explained through text and simulated patient encounters. PTeR provides a general view of a specific problem that can later be applied to real cases (Davis and Galbraith 2009). This is an example of how a blended course can make learning occur contextually, with students first approaching the theoretical part of a specific topic and then having the chance to experience situations similar to those that they will encounter in their clinical practice. When comparing multimedia educational material to the traditional ones, such as textbooks and lectures, it appears that the first solution might represent an efficient way to provide a more comprehensive psychotherapy education, with the possibility to experience the body and language cues of the patient, without having to be there. Of course, the chance to experience a face-to-face interview conducted live by a therapist is also necessary in the educational path of each psychiatry trainee, for teaching "the more subtle and nuanced aspects of actual psychotherapy practice" (de la Croix and Skelton 2013). This aspect is crucial, since both verbal and nonverbal cues are central to the teaching process and are not easily replicated by actors or simulated patients. Given the intrinsic difficulty in replicating spontaneous verbal and nonverbal cues, many multimedia materials cannot successfully represent the intensity and variety of emotions that the psychotherapist can experience during a live session (Nushat et al. 2014).

In conclusion, available studies suggest that, in the presence of several advantages, despite some disadvantages that need further consideration, e-learning systems remain a viable option also in psychotherapy training. Weninger et al. (2009) explored the feasibility of adding psychiatric cases to an educational system that was primarily oriented towards somatic diseases and evaluated the degree of acceptance rate of child and adolescent psychiatric cases among them. Once cases had been developed, they were integrated into an online course as a one-and-a-half-hour web-based seminar. The evaluation included data from 69 participants, of which 80.8% had no previous experience of using e-learning systems in seminar sessions. The study, conducted to evaluate the acceptability of e-Learning course with psychiatric cases showed that 44.9% of the students were quite satisfied with the e-Learning systems with psychiatric cases.

Other studies have been conducted in psychiatry using e-learning systems for nurses training programs. Lahti et al. (2014) proposed an e-learning course lasting 3–6 months to nurses working in psychiatric hospitals in Finland. Results were encouraging: after completing the online course, nurses were able to apply the evidence-based clinical information acquired during the course in their clinical

practice. In this study, and in contrast to earlier studies conducted among nurses (Kontio et al. 2011), a better attitude was noticed by the nursing managers toward psychiatric patients. Interestingly, the nurses did not reported a change in the attitudes the same way as the nursing managers had observed, indicating that self-assessment on this specific topic might not be as reliable. Kontio et al. (2011) carried out a randomized controlled study in which 12 wards were randomly assigned to two different groups: ePsychNurse.Net was the group that participated in the e-learning course, while the other group included the nurses that received the traditional course. Baseline and 3-month follow-up data on nurses' knowledge about coercion-related legislation, attitudes towards physical restraint and seclusion, job satisfaction, and general self-efficacy were analyzed for 158 subjects. Knowledge about coercion-related legislation and general self-efficacy improved in the experimental group, while knowledge on physical restraint improved and that on seclusion remained unchanged in both groups. The attitude towards seclusion improved in the traditional learning group. In conclusion, ePsychNurse.Net showed better or similar efficacy rate than traditional learning systems on several items assessed. In another study conducted by Kontio et al. (2014), the impact of an e-learning course for nursing staff on rates and duration of seclusion and mechanical restraint among psychiatric inpatients was explored. In this study, conducted with similar methods to the ones described above, the e-learning course was developed using six modules with specific topics, including legal and ethical issues, behavior-related factors, therapeutic relationship, self-awareness, teamwork, and the benefits of integrating knowledge with practice. The rates of incidents occurring per 1000 occupied bed days and the duration of the coercion incidents were examined before and after the course. After completing the e-learning course, the duration of incidents involving the use of mechanical restraints decreased. These studies show that psychiatric topics can be dealt with in a satisfactory way using e-learning systems, taking always into account that the integration into an existing curriculum is always advisable and live interaction with the patient needs to be part of any psychiatry training program.

Use of Smartphone in Medical Field

In the last decade, smartphones have been increasingly used both at a personal and professional level (Robinson et al. 2013). This new technology has rapidly spread all around the world, even in developing countries where an increased impact of mobile phones in the educational field is registered (Valk et al. 2010). There are several research studies showing the utility of smartphones for educational purposes even in the medical field, with a great potential for medical students that are now able to upgrade their knowledge anytime and anywhere (Robinson et al. 2013; Trelease 2008). The most frequent use of medical apps by students includes note taking, cloud storage of medical information, medical calculators, imaging and web browsing, clinical and text handbooks, question banks, and simulation apps (Mohapatra et al. 2015). Data show that more than 39% of medical students uses smartphones and medical apps for learning (Rohilla et al. 2016), leading to better decision-making,

increased access to medical knowledge, higher interactivity, improved communication between doctors, and greater telemedicine capability. Some disadvantages, which can be applied to all e-learning technologies described above, are obviously reported too, such as greater levels of distraction among doctors, unprofessional behaviors, difficulties in managing technical issues, variable learner participation, privacy concerns (Payne et al. 2012; Kolli 2015). Considering the wide use reported, it is important to gather further evidence about the use of smartphones in the medical field, and especially in psychiatry, with more than 81% of students that cannot live without their phones for more than 1 day (Jamal et al. 2012) and with more than 92% of all healthcare professionals, including medical students, residents, and physicians, that use their smartphone in healthcare related activities (Boruff and Storie 2014). An interesting finding is related to higher numbers of smartphone use among younger residents and physicians and also doctors working in bigger hospitals (Garritty and El Emam 2006). Nevertheless, research also shows how students, that frequently use their smartphones, report side effects such as sleep disturbance, recent and long-term memory impairment, chronic headache, and concentration impairment (Jamal et al. 2012). All these data available for the general use of smartphones are not yet so wide as regarding the psychiatric field, despite the numerous psychiatric apps available nowadays (Kolli 2015). Zhang and colleagues, in 2014 (Zhang et al. 2014), found that there are 240 apps on the GooglePlay store and 160 on the Appstore, although they also reported the presence of a very limited number of educational apps containing high-quality comprehensive textbooks and e-learning materials; they found that most of the available material contained reproduction of hardcopy version of famous psychiatry textbooks, with limited possibilities of a more interactive educational opportunity. Research has also focused on how, despite the wide use of smartphones, students and residents utilize them for different purposes and with different modalities. In fact, it is reported that medical students use them more frequently for educational purposes, requiring longer times of usage, while residents utilize apps predominantly for clinical purposes, with prevalent download of medical calculators and drug formularies, resulting in more rapid checks for references at their smartphones (Payne et al. 2012). The average time of use of smartphones among doctors for clinical purposes is between 1 and 20 min per day, while students use them for a considerable longer time (Payne et al. 2012). This brings the question of whether the difference in timing is due to different external time pressure of the working environment, such as busy work schedules for doctors, or due to a different need between the two categories at study, considering that students use apps as an alternative way of learning and doctors to improve their clinical abilities (Payne et al. 2012). Furthermore, in 2016, a study conducted by Ying Liu et al. reported that among 125 general practitioners the average use of smartphones for clinical aid was less than 30 min (Liu et al. 2016). Another relevant finding is that medical students use fewer apps during their rotations in psychiatry, surgery, obstetrics, and gynecology, suggesting that in those fields a more experiential way of learning is to be preferred and probably, that there is a need for more high-quality apps (Kolli 2015). Regarding psychiatry, third-year medical students suggested that medical apps in this field should focus on question banks, clinical support, and self-directed learning

modules, and this finding represents an interesting way of directing the development of further psychiatry apps (Kolli 2015). The most recent psychiatry apps regard role-play simulations in child and adolescent psychiatry, telemedicine for peer-to-peer psychiatry learning, clinical performance evaluation, and the use of virtual patients as tools to improve clinical interviewing skills (Zhang et al. 2015). Those results show how it is possible to integrate the need for a more experiential learning process in psychiatry with e-technologies and smartphones. As an example of a psychiatric educational app, Zhang and colleagues (2015) developed in 2013 a core textbook enhanced with videos, downloadable via the common app stores, containing chapters about psychopathology, clinical interview, formulation and management, schizophrenia and psychotic disorders, mood disorders, anxiety disorders, personality disorders, substance misuse and dependence disorders, eating disorders, psychiatric emergencies, psychotherapies, sleep disorders, psychosexual disorders, somatoform and dissociative disorders, consultation liaison psychiatry, old age psychiatry, child and adolescent psychiatry, and forensic psychiatry and psychiatry ethics. They reported that more than 95% of students interviewed suggested that the possession of a psychiatry app, including textbooks and videos, could be very helpful. Therefore, it is interesting to see how smartphones can be very well integrated in the educational plans of medical students but also in the clinical environment of trainees and physicians. The advantages are several, ranging from a wider access to medical information, to the easing of communication between doctors; it is obvious that disadvantages are relevant too and they need to be addressed when thinking of developing smartphones apps, especially in the field of psychiatry where a particular attention to the privacy concerns about patients' information need to be drawn and where developers should also focus on the need of more interactive ways of learning. For these reasons, it could be important for trainees and physicians to actually take part in the developing of medical apps in order to guarantee higher quality services and materials. Currently, there are two methods that can be used to develop HTML5 mobile web-based apps, without any programming skills, such as WordPress and iBuildApp (https://wordpress.com/; http://ibuildapp.com/). These sites would allow doctors to have a central role in developing medical apps, using them for educational and research purposes, although, the need for a greater guidance and security control of medical apps, regarding the accuracy of the information spread, is strongly felt especially when external parties take care of the developing process without any actual consultation of medical members. At the moment, most of the available mental health apps are used to spread information about psychiatric disorders, with a limited utility (Zhang et al. 2015). If experts were to take a central role in the development, there could be an improvement in quality, a wider clinical utility, and a more accurate way of learning and of treating mental health patients. Finally, since it is widely reported that younger physicians and trainees, alongside medical students, have a natural predisposition to the use of smartphones, it would be interesting to evaluate how these new technologies can be integrated with the more traditional ways of learning, especially in psychiatry.

Conclusion

e-Learning systems have been spreading in the last years as useful tools to improve medical education. Nevertheless, its use is variable across European countries, as not every core curriculum features either e-learning systems alone or implemented with traditional learning systems. The question arising from this discussion is whether e-learning can be successfully integrated in educational programs and whether it is effective in terms of costs and educational outcomes for the students. Most of the research studies discussed above indicate that e-learning is cost-effective, by reducing the costs of organizing on-site lectures and classes. Nevertheless, universities and training programs need to evaluate their cost-benefit ratio in order to introduce new systems that guarantee high technical and educational quality standards. In terms of efficiency in educational outcomes, several studies show how e-learning provides the same, if not superior, possibilities to successfully improve one's medical education and clinical skills. However, to achieve proposed learning objectives with success, both students and instructors need to appropriately approach e-learning systems by managing online time courses adequately, participating regularly to online activities, and using educational material and techniques efficiently. All these recommendations need to be considered before adopting e-learning systems. Regarding the psychiatry training programs, there is not yet a unique line of action when it comes to e-learning. All efforts trying to understand the current European situation have failed so far to give a full and satisfying answer, since numerous of countries have not introduced e-learning systems yet and, in some cases, sufficient information about it is missing. The main purpose of adopting e-learning throughout Europe would be to allow students and teachers to speak one common language and to constantly spread up-to-date information in the easiest and fastest way. Furthermore, there are several other objectives that can be achieved through the use of online courses, including the possibility to focus on specific issues and on the newest topics, the opportunity to hear the experts' point of view and to expand knowledge about topics actually encountered during clinical activity, to improve clinical skills in those situations where the possibility of doctor-patient interaction is limited, to discuss online about current topics with other colleagues and teachers. The concerns about the lack of live interaction with the patient can be dealt with integrating e-learning systems into traditional ones, which is not only desirable but probably necessary to guarantee a complete and high quality psychiatric education. Meanwhile, on-site lectures and classes will remain the easiest way to gain general psychiatry knowledge. Therefore, the desirable future for psychiatry training is that e-learning will be part of a more complete and efficient educational system, with the possibility for each country to adopt these systems using development criteria approved by all other countries, in order to ensure an equal psychiatric education to each student. Furthermore, the use of English, as main language for online courses, is preferred to ease the communication between trainees and teachers, but the choice of the language remains a relevant factor to be discussed. Therefore, all main advantages and critical factors considered, e-learning represents

a new way to successfully improve medical and, particularly, psychiatric education, giving thousands of students and trainees the same opportunities all over Europe. In this case, the future prospect is that the spreading of e-learning in psychiatry will ease the discussion about relevant psychiatric topics and guarantee more efficient education throughout Europe, which will hopefully and ultimately lead to improvement regarding the diagnosis and the treatment of psychiatric disorders.

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The Place of Exchange Programs

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Contents

Abstract

Over the last decades, interest in international educational experiences has increased among students at all levels and in every field of education. Many educational institutes and organizations around the world have acknowledged the need to prepare students for a globalized work environment and actively promote international exchanges. In this chapter, we explore the historical and political contexts which allowed for the development of these exchange programs in different regions of the world, and how these have changed over time. We review several existing exchange programs within the field of mental health which range

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across the different educational and professional levels. Some of these programs are well-known and large-scaled operations, such as the Erasmus programs, whereas others are successful examples of smaller-scales initiatives independently ran by (associations of) healthcare professionals. We go on to evaluate the impact which the duration of the exchange, language barriers and psychological cultural adaptation phenomena may have on the outcomes of an international experience. Finally, we critically evaluate the limitations and the merits of exchange programs on an individual and societal level, in a contemporary context where local and global mental health are increasingly connected.

Keywords
Global health · Medical mobility · Psychiatry education · Exchange programs

Introduction

"The world is a book, and those who do not travel read only a page." – Saint Augustine

It is often said that life's real education happens outside the classroom. Similarly, travel – as a powerful agent for change – has always been an essential part of young people's education, helping them to broaden horizons and find purpose. Student exchanges in their current, well-organized, form became popular after World War II, and were intended to encourage participants' understanding and tolerance of other cultures, while also improving their language skills and broadening their social horizons. Exchange programs were also used as a tool of Government Foreign Policy. This is most evident in the Unites States of America (US), where the introduction of relevant legislation in the postwar period led to increased US Government support and formalization of cultural exchange programs such as the 1946 Fulbright Program. To date, more than 200,000 students have participated in this program across over 150 countries worldwide. The notion that exchange programs could play a role in establishing and maintaining good international relations between countries was explicitly mentioned by US President Eisenhower, who stated that after his 1955 meeting with Soviet Premier Nikita Khrushchev in Geneva, "*The subject that took most of my attention was the possibility of increased visits overseas by the citizens of one country into the territory of the other nation. In this subject, there was the fullest possible agreement between the West and the Soviet Union*" (People to People International Website). In 1961, the U.S. Congress passed the Mutual Educational and Cultural Exchange Act, mandating an increase in governmental programs to enhance mutual understanding between the people of the United States and other countries (United States Congress 1961). This increased government focus and spending on Exchange programs, particularly exchanges between the US and Soviet Union, dropped significantly after the Cold War came to an end. Yet following 9/11, there has been a new increase in US support for exchange programs, this time targeting Arab and Muslim countries. An example is the creation of the Partnership for Learning (P4L), which provides scholarships for

secondary school students from countries with significant Muslim populations to spend up to one academic year in the United States (Djerejian 2007).

In Europe, the establishment of Exchange programs paralleled the progressive development of the European Union, which sought political and economic collaboration as an antidote to extreme nationalism in order to secure lasting peace on the continent. This process began in 1957 with the Treaty of Rome which created the European Economic Community (EEC), a customs union between six countries. Following the Maastricht Treaty of 1993, the European Union was founded and has since then steadily grown to incorporate 28 member states today. An important milestone in this process has been the 1985 Schengen agreement, which paved the way for the creation of open borders without passport controls and facilitated international exchanges (European Union Website). Two years later, in 1987, the European Union initiated its international university mobility programs.

Over the last decades, interest in international educational experiences has increased among students at all levels and in every field of education. Many educational institutes and organizations around the world have acknowledged this need and are now promoting exchanges and the internationalization of school curricula. Their aim is to prepare students for a globalized world and work environment.

Exchange programs have traditionally been designed as programs in which students from a secondary school or higher education institute are given the opportunity to study at one of their institution's partner institutions for a certain period of time. The term "exchange" here means an agreement between partner institutions to accept each other's students. However, it does not necessarily mean that a student has to find a counterpart from the other institution with whom to exchange. Although such exchanges do not necessarily need to take place abroad, in this chapter we will focus on international exchange programs, which provide participants with an opportunity to study or work in a different country and environment. We will cover the place of exchange programs in terms of why to implement them in medical training, when and under which format they can take place. We will also cover how to take part and follow that with a broader discussion on the value of professional exchanges and expected outcomes. The focus will be on exchanges in medical training, but the topics covered can be applicable to other healthcare professions.

The Place of Exchange Programs in Medicine and Psychiatry

Exchange programs can be found in various shapes and sizes throughout the medical curriculum, undergraduate and postgraduate. In a globalized world, both patients and healthcare professionals demonstrate greater mobility than ever before due to improved transportation and changes in the economic and political landscape. Understanding of different healthcare structures and how culture influences service provision and care becomes of great value. A number of advantages can be identified

in support of exchanges in the field of medicine, as it has become clear that both society itself as well as the sending and receiving institutions and the individual undertaking the exchange can benefit from them. On a professional community level, such exchanges stimulate exchange of best practices and facilitate the sharing of knowledge (Monroe-Wise et al. 2014), They provide opportunities to create networks of professionals to help facilitate additional learning opportunities. When long-term relationships are formed, these can in turn result in valuable research collaborations. The person leaving on an exchange can do it for their professional development, achieved for instance through increased cross-cultural competence and better communication skills (Mutchnick et al. 2003; Jeffrey et al. 2011). On a personal level, the person leaving on an exchange may also do it to improve their foreign language skills, or for general personal growth through an increased sense of independence and confidence.

In psychiatry in particular, there is an increasing understanding of the fundamental role that the social environment plays in the etiology, access to care, and outcomes of mental illnesses. Rising immigration, mass movements of refugees, and international travel have led to the recognition that in a globalized world, the psychiatrist of the future will need to be equipped to understand and assess mental health problems across different cultural groups. Culture shapes the clinical presentation of mental disorders, as well as interactions between doctor and patient within mental health services (Kirmayer 2012). Exchange programs can therefore provide an excellent added value to the future psychiatrists' training. Exchange programs allow them to obtain better skills to treat patients of a certain background or with a certain type of intervention unavailable in their own country.

Furthermore, global mental health has been recognized as a key domain of study and research for several years now (Patel and Prince 2010). Some advocate that in view of the recommendation to obtain and demonstrate global health competencies, psychiatrists should be encouraged to travel and work abroad, but that can be controversial. In this context, "abroad" usually refers to psychiatrists from richer, more developed countries traveling to and working in countries where the mental healthcare is less well developed. Critics condemn the approach of developed countries "teaching" developing countries what to do. The reality is that in a true exchange, there is not a "teacher and learner." Both parts, the exchange participant and the host, learn and share knowledge. The exchange continues when the participant returns home and shares what they have learnt.

Local and global health are intricately connected, and to understand health and illness of populations as the world rapidly changes, doctors need to be equipped (Drain et al. 2009; Casanova Dias et al. 2017). Global health training involves learning about health issues that transcend geographic borders and commonly present a greater burden to disadvantaged populations.

Hence, exchange programs take up a unique place within the psychiatry curriculum, providing an enriched learning experience that promotes a deeper understanding of professional practice issues through comparative experience of another mental health system, offering a broader perspective at both professional and personal levels and encouraging mobility among future mental health professionals.

When to Undertake an Exchange

Exchanges can take place at different periods in a student's curriculum, starting from before they enter higher education, until after participants have already taken their first steps into the workplace. Exchanges serve different needs at the various life stages, entailing different levels of theoretical versus practical experience at each stage.

Educational and Professional Exchanges in Medical Education

The European Union describes learning mobility (transnational mobility for the purpose of acquiring new knowledge, skills, and competences) as "*one of the fundamental ways in which young people can strengthen their future employability, as well as their intercultural awareness, personal development, creativity and active citizenship*" (Council of the European Union 2011b).

Since 1987, the EU developed several programs for transnational exchanges of university Masters and Doctoral students, which have over time gone by the names of the most important European philosophers and humanists (Socrates, Erasmus, Leonardo da Vinci). Celebrating its 30th anniversary in 2017, the Erasmus Program (***E**uropean **R**egion **A**ction **S**cheme for the **M**obility of **U**niversity **S**tudents*) is probably the most well-known and largest student exchange program, through which over 3 million students have been able to study abroad at one of the more than 4000 higher institutions across 37 participating countries. As a parallel program, the Erasmus Mundus cooperation and exchange program of the Education, Audiovisual and Culture Executive Agency (EACEA) of the European Union ran between 2004 and 2013. Erasmus Mundus was oriented toward globalizing European education through joint programs and partnerships between higher education institutions from the EU and elsewhere, as well as projects to enhance the visibility and attractiveness of European higher education in foreign countries. Whereas the regular Erasmus Program is open to citizens of the European Union, Erasmus Mundus was open to students from both EU and non-EU countries, having awarded almost 14,000 Masters students of largely non-European nationality and from over 150 different countries with a scholarship to undertake an exchange. (EACEA statistics 2004–2005 to 2013–2014).

As of 2014, the Erasmus+ Program is the umbrella framework program for education, training, youth, and sport, combining all the EU's current schemes for these target domains. It includes the Lifelong Learning Program which hosts the Erasmus exchanges, and several international cooperation programs, including Erasmus Mundus. Erasmus+ falls under the broader Europe 2020 Strategy and aims to tackle specific issues such as reducing unemployment among young people, promoting adult learning for new skills required by the labor market, encouraging young people to take part in European democracy, reducing early school leaving and supporting innovation, cooperation and reform. The Erasmus+ Program is projected to run until 2020 on a total budget of 14.7 billion euro, and aspires to create mobility opportunities for more than 4 million people (EC ERASMUS+ Statistics). The new

program targets a larger audience, offering mobility opportunities in higher education institutes not only for undergraduate students (e.g., medical students) but also for teaching staff. It also provides traineeships abroad for higher education students and recent graduates, and international volunteering opportunities for young people. In Erasmus+, participants from "Program Countries" (Member States of the European Union plus former Yugoslav Republic of Macedonia, Iceland, Liechtenstein, Norway and Turkey) are differentiated from those from all other countries, called "Partner Countries." Some of the program's modalities are only open to Program country participants, while others (including the option to study abroad) are open to all. A study period abroad can last from a minimum of 3 months (or 1 academic term or trimester) to a maximum of 12 months (or 2 years in the form of a Joint Master Degree), with grants available to help with travel and subsistence costs. Data from the most recent Erasmus+ Annual Report highlight the scale at which this program is run: in 2014, around 500,000 young people studied, were trained, volunteered, or participated in youth exchanges abroad (EC 2015). For the Erasmus+, students who went abroad in 2013–2014, the top five of destinations consisted of Spain (39,227 students), Germany (30,964), France (29,621), the United Kingdom (27,401), and Italy (20,204). Countries outside of the top five received less than half of these numbers. Countries where Erasmus students make up the largest proportion of the total graduate population are Finland (10.4%), Estonia (10.6%), Latvia (9.9%), and Slovenia (9.7%) (EC Erasmus+ Statistics).

Whereas educational exchanges allowing students to take courses at a foreign educational institute broaden horizons and offer many advantages to participants, clinical internships abroad go one step further. They expose students to another way of practicing medicine, and at the same time give them a better understanding of international healthcare. Participating in an international clinical rotation has been reported to "*provide educational benefits in knowledge (e.g., tropical diseases, cross-cultural issues, public health, alternative concepts of health and disease, and health care delivery), enhanced skills (e.g., problem solving, clinical examination, laboratory expertise and language), and fostering attitudes and values (e.g., idealism, community service, humanism, and interest in serving underserved populations*" (Thompson et al. 2003).

Founded in a post-World War II setting, the International Federation of Medical Students' Associations (IFMSA) was created to foster cooperation and collaboration among medical students by breaking down social barriers through promoting opportunities for dialogue and creating clinical exchanges (IFMSA Website). Its Professional Exchange program (Standing Committee on Professional Exchange, SCOPE) for undergraduate students offers clerkships to medical students who wish to explore health care delivery and health systems in different cultural and social settings and for whatever reason cannot or do not want to do so through their own university. SCOPE is endorsed by the World Federation of Medical Education (WFME), the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA), the Federation of European Neuroscience Societies (FENS), and the European Society for Emergency Medicine (EUSEM).

As early as 1952, a total of 463 students spent a period of practice abroad in eight participating European countries. Since then, SCOPE has grown into the largest student-run exchange program in the world, with more than 11,000 medical students participating every year from 98 National Member Organizations. This is achieved by providing a network of locally and internationally active students that globally facilitate access to research and clinical exchange projects, which usually last 4 weeks. Although the IFMSA exchanges consist of clinical internships in all fields of medicine, according to the IFMSA Exchanges Profile Book for the students enrolled in the academic year 2014–2015, 49 engaged in an internship in mental health care (46 in Psychiatry rotation, 2 in Addiction, and 1 in Psychotherapy), representing less than 0.5% of annual exchanges (IFMSA 2015). The reasons for this seemingly low interest for international rotations in mental health services remain yet to be defined. In view of the "recruitment crisis" of the psychiatric specialty observed in many countries, it would be of interest to take this phenomenon into consideration when studying potential reasons and solutions to improve recruitment (Katschnig 2010). In the UK, a recent recruitment campaign to encourage medical students to choose psychiatry ("Choose Psychiatry") has increased the exposure to psychiatry at undergraduate and postgraduate training (Royal College of Psychiatrists Website). It would also be relevant to study whether the availability of solid exchange programs increases recruitment figures.

Professional Exchanges in Postgraduate Medical Training

The European Parliament and the European Council adopted the Directive 2005/36/EC on the automatic recognition of professional qualifications, enabling freedom of movement for hundreds of professionals, including doctors and nurses (European Parliament and Council of the European Union 2005; Costigliola 2011). The increased mobility of patients and doctors that ensued raises the need for cross-cultural and public health training. For medical doctors who undertake several years of specialized postgraduate training, periods of training abroad have been vigorously advocated by both the trainees (i.e., those who are medically qualified and are pursuing postgraduate education, specializing in a specific medical specialty; also called residents or interns) themselves and organizations involved in the quality improvement and assurance of postgraduate medical education. However, not all medical specialties have considered periods of training abroad in the postgraduate curriculum, or made provisions for them (Drain et al. 2009; Lee et al. 2011; Casanova Dias et al. 2013).

To address this issue, and based on the successful experience of the above-mentioned undergraduate exchange programs, in 2011 the European Federation of Psychiatric Trainees (EFPT) initiated its own exchange program specifically targeting psychiatric trainees in Europe (Casanova Dias et al. 2012). The EFPT is an independent, nonprofit umbrella organization representing European national psychiatric trainees' associations. The organization currently represents psychiatric trainees from 39 European countries. The primary objective of EFPT is to enhance,

harmonize, and standardize the quality of psychiatric education and training across Europe by working in partnership with relevant international and/or national bodies. As a permanent member of the Section of Psychiatry of the Union Européenne de Médecins Spécialistes (UEMS), more commonly known as the European Union of Medical Specialists, the EFPT actively contributes to the development of the Section's position papers. In addition to this, the EFPT harbored for a long time the wish to create an opportunity for psychiatric trainees to take part in exchange programs. This leads to the establishment of the EFPT Exchange Program project (EFPT Exchange program Website). In this chapter, we provide some more extensive background information on this particular program as it is a prime example of how learners can set up and run their own collaborative Exchange program.

The EFPT Exchange program started with a pilot phase in 2012, including 14 trainees and seven host countries. Since then it has grown steadily both regarding the number of applicants and the number of offered places. In the first 5 years over 180 European trainees in psychiatry have taken part in the program, some several times. In 2016, the program received 108 applications from 17 countries, of which 84 were accepted. The highest number of applicants came from Turkey, Portugal, France, Romania, and Slovenia. Overall, the countries that have hosted the most trainees are UK, Croatia, Ireland, Portugal, and France (EFPT 2017). Testimonies of participants can be found in the EFPT seasonal Newsletter and detail how they discovered new ways of organizing mental health care (http://efpt.eu/efpt-ecxhange-testimonial-from-bristol-uk/) or how they were inspired to eventually take "the big leap" to move abroad for a career in a different country (http://efpt.eu/how-efpt-changed-my-view-on-training/). In 2017, the EFPT Exchange program included a total of 66 different programs in 16 countries covering all major fields of clinical psychiatry, including addiction psychiatry, child and adolescent psychiatry, eating disorders psychiatry, forensic psychiatry, general adult psychiatry, liaison psychiatry, old age psychiatry, perinatal psychiatry, psychiatry of learning disability, psychotherapy, rehabilitation and social psychiatry, as well as other specified fields of psychiatry like simulation training in psychiatry and sleeping disorders. The duration of the stay can be modified between a minimum of a 2-week and a maximum of a 6-week stay, in which the hosting department provides possibilities to get involved in clinical, research, and teaching activities, to learn about the mental health care system and the training program. The program may contain visits to different institutions, as well as the possibility to engage in a variety of social and cultural activities in the host country. To ensure the educational value of the exchanges, all trainees hand in an agreement to fulfill the requirements of the program prior to acceptance. The trainees are given an opportunity to present in the host clinic about their clinical experiences in their home country, areas of best practice, and their training program. After leaving the host clinic, participants fill in an online feedback form and write a report. The trainees are further encouraged to also make a presentation in their home clinic after the exchange and to engage in the exchange program locally, hosting participants. After the required steps are completed, trainees are issued an EFPT Exchange certificate for their CV. The program is coordinated by the EFPT Exchange Working Group (WG) consisting of the EFPT General Manager – Exchange Coordinator and

WG Chair, Co-Chair, IT manager, and new programs coordinator together with national and local coordinators from participating host countries. Altogether, 64 European trainees are involved in coordinating the exchange process. The national coordinators are chosen by or cooperating with the national trainee associations. National coordinators recruit and are responsible for the work of the local coordinators. New host countries are added on the initiative of locally engaged trainees within the EFPT network. Supported by the WG Chair and the new programs coordinator, programs are set up by national and local coordinators in collaboration with specialist colleagues and the head of the department. Information about available programs is collected and presented on the EFPT Exchange webpage. The program is open to applicants training in EFPT Member Countries, and they may apply to the program two times yearly for a period of 1 month with eventual unfilled placements made available for late application after selections have been completed. To take part in the program, trainees need to provide a reference letter from their head of department including current level of training, a motivation letter, and a CV detailing relevant experience for the program. Documents supporting the language proficiency are optional. Information about the applicants is sent to the respective national and local coordinators and the selection process is performed locally in agreement with the host departments. A standardized scoring scheme is used in the selection process. Some local coordinators make use of Skype interviews to assess the language level. Hence, the EFPT Exchange WG acts as a facilitator and the exchange agreement is established locally between the trainee, the trainee's home institution, and the host institution. As every coordinator is at the same time a fellow psychiatric trainee, who has excellent and extensive knowledge of the possibilities of the exchange program, this allows for maximal tailoring of an Exchange experience to an individual applicant's wishes and availability. The visiting trainee shadows another trainee of similar or higher experience and takes part in seminars and other learning activities.

Thanks to highly engaged and motivated trainees within the EFPT network and their voluntary work, the program has been able to be set up without structural financial resources. The ambition of the EFPT Exchange WG remains to make good quality international clinical experiences readily available to as many psychiatric trainees as possible. Effort is made to set the threshold in every step to what is minimally required to arrange an exchange experience that maximizes the outcome for all parties involved. As a consequence, the overall presentation and organization may look quite different between countries and cities involved. Some programs offer placements in specialized units with a well-described outline already available at the time of application, while other programs are more flexible, allowing tailoring according to individual wishes and availability with a wide range of possibilities. Hosting clinics may define local requirements and time periods available. The programs are searchable by country or by psychiatric field that can be covered. Once the trainee has been selected and set in contact with their local coordinator, agreements on the details are decided in dialogue.

A few years after the start of the EFPT Exchange Program, the Early Career Psychiatrists Committee of the European Psychiatric Association (EPA) launched a

similar program, called "Gaining Experience." It offers Early Career Psychiatrists (ECPs; psychiatrists under 40 years of age and/or 5 years after passing the specialist exam) who reside in a country included in the World Health Organization Europe region short observership placements (2 to 8 weeks) in various psychiatric institutions across Europe, supported by a travel grant. The first four exchanges took place in the year 2014–2015. Since then, the program has remained a solid part of EPA's activities supporting Early Career Psychiatrists.

Another example of this successful model of exchanges organized by healthcare professionals themselves is the Hippokrates exchange program for medical doctors specializing in General Practice/Family Medicine (GP/FM) and junior GP/FM Practitioners (within 5 years of completing specialty training). The program is supported by the WONCA Europe and by the European Academy of Teachers in General Practice (EURACT). Now thriving and well structured, the program was first presented at the 6th European Conference on GP/FM (WONCA Europe) in Vienna in 2000, under the auspices of the EURACT, which has always had an important role in shaping and enhancing medical education in Family Medicine throughout Europe. In 2008, the program was entrusted to the then established Vasco da Gama Movement (VdGM) which reviewed the scheme 2 years later and established a database along with a standardized framework to guarantee a beneficial and verifiable educational outcome for every exchange. The visitor is given a template where he/she is required to fill in his/her learning objectives for the exchange. These learning objectives are assessed by the host who then draws an educational program accordingly. At the end of the exchange, the visitor is expected to reflect on the learning outcomes and submit a report on his/her activities (Barara and Rigon 2015; Rigon et al. 2015). Over the years, the program has grown extensively, from an initial pilot phase of five participating countries; the Hippokrates Program today counts an extended network of hundreds of host practices in 28 European countries. The total number of participants and completed exchanges has also increased from 13 in 2010 to 105 in 2014 (WONCA Europe 2015).

As a global spin-off to this program, the seven WONCA regional Young Doctors' Movements (YDMs), namely, the AfriWon Renaissance (Africa), Al Razi (the Middle East region), Polaris (North America), Rajakumar Movement (the Asia-Pacific region), Spice Route Movement (the South Asia region), VdGM (Europe), and Waynakay (Central and South America), have been working together to create a global exchange scheme for young GPs/FM practitioners, leading to the establishment of the FM360° program in 2013. Its aim is to promote worldwide intercultural exchanges and allow young doctors learn from each other in different cultural and socioeconomic contexts. While it is built on a similar structural framework as the Hippokrates program, FM360° is organized as a 4-week program. During this period, the visitor shadows the host in their clinical practice or other community-oriented activities. In its first 2 year, the program has received 163 inquiries and organized close to 50 exchanges. Most of these inquiries have come from the European region (64%), followed by the Central and South American regions

(27%). Globally, the top three most popular destinations are Spain (15%), USA (14%), and Brazil (11%) (Barata et al. 2015).

Also in the US, the benefit and possibilities of exchange programs in higher education have remained of interest. Over 25% of graduating US medical students have international health experience before starting residency and the availability of international electives has been ranked as among the most important factors in their choice of residency program (Duncan et al. 2017). Although an increasing number of residency programs offer international rotations, (overall 59% of the training institutions do), it remains challenging and as few as 10% of residents actually participate. The most common challenges have been reported to be lack of funding, lack of international partnerships, lack of supervision, and scheduling. According to a 2015 literature review, survey-based studies found that the specialties with the highest percentage of residency programs offering global health training were preventive medicine (83%), emergency medicine (74%), and surgery (71%) (Duncan et al. 2017). A web-based study of the 183 accredited US psychiatry residency programs showed that global health training was offered in 17 of them (9.3%). International elective-based rotations were offered in 10 of the 183 psychiatry residency programs. Most global health training opportunities were not departmental initiatives for psychiatry residents but rather externally administrated, institution-wide initiatives available to residents from different clinical specialties (Tsai et al. 2014).

One example of a US exchange program in psychiatry that has been very well received, both by the trainees and their institutions, is the DC – Valparaiso Connection. The University of Valparaiso in Chile (UV) opened their first training program in child psychiatry in 2008. Four years later, exchange programs were formed with two child and adolescent training programs in Washington, DC, USA, Children's National Medical Center (CNMC) and Georgetown University (GU) School of Medicine. During the first 4 years, seven trainees and three faculty members from UV traveled to Washington, DC for an average period of 6 weeks. The trainees rotated through inpatient units, consult-liaison programs, outpatient services, and specific programs targeting immigrant populations, autism, ADHD, and gender variance at several institutions. Traveling in the opposite direction, five trainees and four faculty members went from Washington DC to Valparaiso for an average of 2 weeks. Faculty from Washington DC and Valparaiso visited their counterparts and presented in conferences. The participating training programs in Washington, DC support the learning objectives to help develop global perspective, improve Spanish skills, and observe mental health interventions applicable to immigrants and Hispanic populations in Washington, DC (Table 1). By building up a program with a formal agreement and including both residents and faculty, strong relationships have been built between the participating institutions. The program has allowed trainees from Valparaiso to meet leading researchers and experience care models in centers with greater resources and technologies. For the participants, the exchanges broaden their view toward an integral understanding of the patients and their environment (Parada 2017; Cohen and Ortega 2017).

Table 1 Exchange programs, scope and participants

Program	Scope	Region	Participants annually
Erasmus+	Masters and PhD students	Worldwide	Over 50,000[a]
IFMSA	Medical students	Worldwide	Over 10.000
EFPT	Psychiatry trainees	Europe to Europe	84[b]
EPA gaining experience	Recently specialized psychiatrists	Europe to Europe	5[b]
Hippokrates/ FM360°	Trainees/ recently specialized GP/FM	Europe to Europe/ global	Not available
DC-Valparaiso connection	Psychiatry trainees and faculty	US to Chile Chile to US	2–3[c]

[a]Data from 2014
[b]Data from 2016
[c]Approximation

Practical Aspects of Undertaking an Exchange

Exchange experiences can vary widely in terms of their duration, with short-term programs of 1 week up to 3 months, and long-term stays for 6 months up to 1 year. The wide range of flexibility allows applicants to organize their stay abroad in the way best suited to their living and working conditions. Typically, short periods of training abroad are preferable during postgraduate training in order to overcome difficulties with funding, and obtaining time off, both from family and professional responsibilities. There is currently no evidence available if these longer duration stays result in higher benefits than the shorter "sniffing periods." One may imagine that a longer stay will possibly lead to better mastery of the foreign language or specific skills. Besides the duration, the nature of the exchange experience may also have a significant influence. In some cases, the time abroad consists of pure theoretical courses. For other participants, it may concern clinical work, either as an active observing companion to a local clinician without directly interacting with a patient or even actual residency/internship. Most of the larger existing exchange programs focus on the more readily mobile undergraduate students. Exchange programs less frequently appoint postgraduates, already involved in clinical work, though potentially more beneficial for their professional development. It allows participants to get a true grasp of the reality of the foreign healthcare system.

A frequently heard comment, limiting taking part in an exchange is the amount of work one has to put in to adequately prepare everything. Indeed, there are big differences in the support offered by different programs. Sometimes the whole exchange organization depends on the participant's own initiative, from establishing contacts to set up practical arrangements. Previously, potential applicants were largely dependent on existing bilateral agreements between theirs and a second institution. Current international communication facilities and access to information make it easier for interested applicants to organize and shape their own exchanges.

Furthermore, within the European Union, visa-free travel and automatic recognition of qualifications have greatly reduced the administrative burden for those wishing to organize their exchange.

At an undergraduate level, elective rotations abroad are very attractive. Accreditation for mobility programs of 6–12 months duration is common and well established. Participants of the Erasmus Program are guaranteed recognition of their time spent abroad by their own university. However, at the postgraduate level, there is no international accreditation system yet. The WFME states within its global standards for postgraduate medical education that as a basic standard, training program providers must "*formulate and implement a policy on accessibility of individual trainees to education opportunities at alternative training settings within or outside the country.*" Training program providers should also "*facilitate regional and international exchange of trainers and trainees by providing appropriate resources*" and "*establish relations with corresponding national or international bodies with the purpose of facilitating exchange and mutual recognition of education elements*" (WFME 2015). Furthermore, the UEMS Section for Psychiatry wrote in its Charter on training of Medical Specialists in the EU: "*Trainees should have the opportunity to be trained in recognised training institutions in other EU member states during the training with the approval of their training program by the national authorities of their country of origin. National authorities can recognize training in non-EU countries*" (UEMS 2003).

Notwithstanding these standards and guidelines, to spend time abroad at a postgraduate level currently still mainly depends on bilateral agreements. Hence, there is a large variation in the way exchanges can be organized. Overall, training abroad in psychiatry seems optional at best and largely reliant on the own initiative of the trainee. In some countries, the time spent abroad can be integrated as a full part of an existing training program upon agreement with individual institutions and training program directors. However, because postgraduate curricula in most countries worldwide neither make provision for nor accredit training taken abroad, creativity, and goodwill among trainees and seniors are required to make an exchange experience a success (Casanova Dias et al. 2013). Organizing the exchange will have to fit in training requirements and clinical work responsibilities. This will ultimately limit the flexibility to arrange the exchange experience in the best possible way. Not surprisingly, many trainees end up using their annual leave allowance, ranging from 2 to 6+ weeks per year for the wished-for exchange.

Other major barriers may be some practical limitations such as having to obtain a visa, lack of transportation, finding affordable accommodation, and health issues that can occur during the stay in a foreign country. Many of the above-mentioned programs indeed are financially self-supported by participants who are expected to cover their travel and accommodation expenses. However, hosts are often very willing to assist participants in providing budget-friendly options for accommodation. Language requirements may vary depending on the program and country one wishes to visit. Most programs require the applicant to be fluent in English. Some knowledge of the local language is helpful but may not be compulsory. A certification of language skills upfront either through internationally validated and certified

language proficiency tests or through a skype assessment interview with the local hosts may be required.

Data gathered from 76 participants of the EFPT Exchange Program between 2013 and 2016 indicate that for 55.3% of participants, the language of the host country was one of the main reasons for participants to choose a specific destination country. Nevertheless, over one-third of respondents stated that they did not speak the language of the host country at all prior to the exchange experience. Questioned on the impact level of a possible language barrier on their exchange experience, only 5.3% of participants felt that this barrier was a relevant issue when relating to staff at the host site. However, 31.6% perceived language as problematic in the communication with patients, regardless of their level of fluency in the host language. Participants without prior knowledge of the language were significantly more likely to perceive the language barrier as a "big issue" during their exchange (see Table 2; EFPT Exchange unpublished data).

For many participants, the exchange program may be the first time they have to face living and studying in another country. Even with preparation and knowledge about the new environment, participants may still experience a significant *culture shock*, a term first used in the 1960s by Oberg to define an "*occupational disease suffered by those suddenly immersed in a culture very different to their own [. . .]*" (Oberg 1954) and could cause "feelings of helplessness, irritability, and fears of being cheated, contaminated, injured or disregarded" (Adler 1975). It was seen as an illness with "its own etiology, symptoms, and cure" (Oberg 1954). Several models were designed to describe the adaptation process, such as Oberg's four phase-model (identifying "Honeymoon," "Hostility," "Adjustment," and "Recovery" phases) (Oberg 1960); a "U-curve model"(Lysgaard 1955) and a "W-curve model" (Gullahorn and Gullahorn 1963) – a W-shaped seven-stage model which describes a traveler's rollercoaster of emotions when entering a new culture, as well as the re-entry shock experienced when returning home.

Since then, the term "culture shock" has become widely used in the popular vocabulary but may encompass a wide range of emotions. In some cases, "fatigue,"

Table 2 Pre-exchange fluency in language of host country and perceived language barrier in communication with staff and patients at the host site ($n = 76$)

Level of fluency in the language of the host country prior to exchange (self-indicated)?		Problematic language barrier perceived with host country staff	Problematic language barrier perceived with host country patients
Advanced (%)	40.8	0	6.5
Basic / intermediate (%)	27.6	9.5	28.6
Did not speak the language (%)	31.6	6.5	51.6

"stress," "homesickness," or frustration due to not being able to function effectively in a foreign language seem to be more appropriate terms. Such negative emotions can affect the learning curve abroad negatively. Attributing feelings of discomfort to cultural differences, appealing as it may be, may also prevent travelers from reflecting on the true causes of their discomfort. It may lead them to pay more attention to differences than similarities, to experience more hostility than openness, etc. Some studies conducted in the context of the Erasmus program have found that participants' discomfort varies strongly and cannot be automatically attributed to culture shock as expressed in the following conclusion: "*the individual journeys of the sojourners can be extremely varied, and are affected by a large number of internal and external factors, such as motivations, expectations, personality, coping strategies, skills, specific characteristics of the environment, and chance, among others*" (Beaven 2012).

Shortcomings of Exchange Programs

Some have argued that exchange programs solely benefit a small niche or elite of healthcare professionals who can afford to travel often. Even a seemingly highly democratic program such as the Erasmus Program, which waives participants' tuition fees at the university they visit and provides grants to help cover the expenses of living abroad or extraordinary expenses for students with disabilities, cannot escape this criticism (Ballatore and Ferede 2013). Despite its apparent numerical success – as of 2012, Erasmus students represented 5% of all European graduates – several studies have raised questions regarding the representativeness of the Erasmus participants and their selection process. Studies researching the socioeconomic background, level of study, and academic performance of Erasmus participants have found that although access to the program has progressively widened, financial issues and family background still count as important barriers to participation in the program (Otero 2008). Certainly, exchange programs should be aware of these potential selection biases, and efforts should be made to encourage students from diverse socioeconomic backgrounds to apply. Yet many initiatives aim at reducing expenses and increasing mobility and help to overcome financial barriers. Free websites offer students and young people opportunities to rent, sublet, offer, and swap accommodation. The successes of several independently run small exchange programs that currently cannot offer scholarships on a regular basis indicate that exchanges are possible even on a very low budget.

However, an aspect to consider is that the beneficiaries of an exchange are not limited to those who have the possibility of traveling. The exchange of skills and experiences takes place at a local level between the host team, their institution, and the exchange participant. Since many programs require the exchange participant to share learnt experiences upon return, reporting adds an international layer of beneficiaries belonging to the sending institution but unable to travel.

Another frequently heard criticism is that observerships abroad are not much more than tourism dressed up as work, or simply a means for participants to "add yet

another line to their CV." Countering this argument is the explicit importance given by every exchange program mentioned above to formal procedures enveloping the exchange experience, aimed at optimizing the learning outcomes. This can be in the form of formal evaluations, such as in the Erasmus programs, or in the case of clinical observerships, through requirements such as work place based assessment for the portfolio, or to prepare a presentation to be performed upon arrival at the host institution, containing information on the participant's country, the education and institution and areas of best practice, as well as to write a report and/or present about their experience to their colleagues at home upon return.

Finally, questions have been raised related to the societal costs of these programs, both in terms of the burden they place on the hosting and sending organizations, as well as the risks related to the promotion of mobility in a profession where skilled staff are a scarcely available resource – potentially adding to the negative consequences of brain drain in certain countries (Pinto da Costa et al. 2017). There are indications that short term mobility experiences such as those acquired through exchange programs can influence psychiatry trainees' attitudes in favor of migration later in life (Pinto da Costa et al. 2016). However, mobility of medical doctors can be demonstrated to have both positive and negative effects on healthcare systems. When staying abroad is temporary and with the purpose of achieving new experiences and additional training, followed by a return to the home country, the effects are usually beneficial for the country of origin. On the other hand, in the case of a long-term exchange, when the participant's home country is struggling with shortages of medical staff, the healthcare system will be affected in a negative way. And if the exchange leads to subsequent migration, next to losing a trained professional, this country will face the financial loss having paid for their education. Consequently, a lack of or misdistribution of medical staff will impact patients' access to care (Costigliola 2011). Still, although there are indications that short-term mobility experiences such as those acquired through exchange programs are positively correlated with future mobility and migratory experiences, it has never been proven that the availability of exchange programs adds to brain drain. On the contrary, healthcare professionals participating in an exchange early in their career have been reported to be more likely to opt for a career in public service, and to demonstrate increased awareness of resource use and of the impact a healthcare system has both on patients and staff (Mutchnick et al. 2003; Jeffrey et al. 2011). These features set them out as key players who can help to improve healthcare organization in their own country, thereby potentially reducing brain drain in the long term.

Implications and Recommendations

The UK's General Medical Council has acknowledged the need for medical professionals to be equipped to work in a globalized world by recognizing global health competencies as crucial to doctors' capabilities in health promotion and illness

prevention (GMC-uk.org). A recent consultation (Walpole et al. 2016) highlighted five core global health competencies for doctors.

They include being informed about different health systems, such as key differences between a private and a public healthcare system, how these differences impact on the life and task of a health professional. Core competencies also include the need for professionals to be aware of diversity, environmental, social, and economic determinants of health, to appraise disease epidemiology, and matters of health governance at a global scale. Participating in a hospital internship abroad is currently perceived as one of the best ways for a professional to effectively learn how a country's healthcare system impacts on a healthcare professional's practice.

Exchange participants will grow as professionals, having had the opportunity to further improve their professional skills in specialized fields of psychiatry, less developed or unavailable in their home country, and on occasions, apply reverse innovation. Participants have mentioned their intercultural awareness was enhanced by the exchange experience and value their increased knowledge in transcultural psychiatry specifically. They will learn to explore and reflect on differences in attitudes, in treatment recommendations, and in mental health care organization. The acquired competencies both in specific skills and knowledge of transcultural aspects, as well as the increased sense of initiative and level of self-empowerment, and improved foreign language competences governed through the exchange experience, will improve a participants' position on the labor market and career prospects both in their own country and abroad.

Furthermore, as acknowledged by the Council of the European Union in its recommendations on learning mobility, "*those who are mobile as young learners*" are more likely to be mobile as workers later in life, and demonstrate increased sharing of best practices and knowledge with colleagues both at home and abroad, for instance, in international networks. (Council of the European Union 2011b) As such, trainees that have the opportunity to work abroad at an early stage may benefit from this experience throughout their further careers, as from our own anecdotal experience we have witnessed these trainees as the ones who will continue to demonstrate a transnational perspective, taking on active engagement in international networks and organizations.

Remarkably, 35.5% of EFPT Exchange participants surveyed between 2013 and 2016 indicated they had already taken part in an Exchange or Mobility program before their application to EFPT Exchange. This contrasts with the 5% of the general higher education student population that make up the Erasmus participants, possibly highlighting a bias towards mobility fostering future mobility.

With the majority of exchange programs taking place in Europe, there is potential for development in other areas of the world. This will probably require different exchange formats to address local educational needs and fit in with existing training formats.

In its final conclusions on the matter of learning mobility, the Council of the European Union has convincingly chosen to support exchange programs, stating that "*providing the widest possible access to mobility for all, including disadvantaged groups, and reducing the remaining obstacles to mobility constitute one of the main*

strategic objectives [….] in the field of education and training" (Council of the European Union 2011a). Further research on the impact of exchange programs during mental health professionals' training is needed to determine the actual educational value and outcomes of international rotations. It is our hope that the continuous gathering of data on the contribution of exchange programs might not only contribute to the personal and professional development of individual participants, but also to a greater collective professional identity of specialists in psychiatry and lower the stigma. These data also might deliver strong evidence for the implementation of exchange programs in the curricula of all mental health professionals.

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Training in Telepsychiatry

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Davor Mucic and Donald M. Hilty

Contents

Abstract

Telepsychiatry (TP) is an effective, well-received, and a standard way to practice mental health care provision on distance. Both residents and young practitioners

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have significant interest and there is a growing demand for telepsychiatrists. Many are making strides towards addressing some of these needs and gaps in services for patients and trainees around the world. Traditionally, too, there was emphasis placed on knowledge acquisition, and more focus is needed on TP skill competencies for clinicians to practice effectively and achieve good clinical outcomes with their patients. TP competencies have been published and structured at novice or advanced beginner, competent/proficient, and expert levels. Curricula include seminar, rotations, and supervision, with accompanying feedback. Continuing education/medical education events may also help clinicians, programs, agencies, and other institutions. Both residents and young practitioners have significant interest, and there is a growing demand for telepsychiatrist. Many are making strides towards addressing some of these needs and gaps in services for patients around the world, but fewer are focused on competencies related to TP. This chapter will attempt to move forward the emphasis on skills (e.g., interviewing, assessment), attitudes that ensure quality care and knowledge (e.g., appropriate model, legal standards, privacy) by reviewing the history and scope of practice related to TP and other e-mental health (eMH) technologies. Readers will be encouraged to reflect, self-assess, and evaluate strengths and weaknesses, then consider clinical and curricular methods for improving. TP will also be explored on a spectrum of other eMH technologies used for clinical care, for which additional competencies may also be indicated.

Keywords
Competencies · TP · Education · Training · Resident · Policy makers · e-Mental health

Introduction

Cecil Wittson started tele-education and a TP program in the Psychiatric Institute in Nebraska (USA) back in 1959. However, the term "TP" was first used in a report from Massachusetts General Hospital in Boston, MA, USA, in 1973 (Dwyer 1973). The field grew slowly until the 1990s when improved technology paved the way for further growth and development. The primary impetus has the capacity to provide services to rural and underserved communities with further expansion to other underserved populations. Slowly but undoubtedly, TP in form of videoconferencing became a well-documented modality, developed in order to provide psychiatric services from a distance. It allows the patient and clinician to see and hear each other and interact in real-time despite distance. In its sixth decade, TP has increased access to care in urban, suburban, and rural settings – with patient, clinicians, and healthcare systems very satisfied with it for a wide variety of services and cultures (Hilty et al. 2013; Yellowlees et al. 2013; Mucic 2010).

There is now a substantial body of evidence to support the feasibility and effectiveness of TP (Hilty et al. 2013). TP has been shown effective for diagnosis and assessment across many populations (e.g., adult, child, geriatric, and ethnic), for

psychiatric disorders in many settings (e.g., emergency, home health), and been found to be comparable to in-person care. It has been used with a variety of models of care (i.e., collaborative care, asynchronous, mobile, telemonitoring) with equally positive outcomes (Hilty et al. 2013).

There are two models of TP in use nowadays: "real-time" synchronous TP (STP or videoconferencing) and asynchronous TP (ATP, formerly store-and-forward). TP may include direct assessment of a patient; "indirect care" of patients, such as through case consultation and supervision; education for healthcare learners, physicians, and/or interprofessional healthcare providers; and program development (Myers and Turvey 2013; Sargeant et al. 2010; Hilty et al. 2004; Volpe et al. 2013; Shore 2013).

Cross-cultural TP may be defined as delivery of cultural appropriate mental healthcare from a distance, preferably via a patient's respective mother tongue or in a language shared by the doctor and patient (Mucic et al. 2016a). The current refugee crisis within the European Union (EU) challenges mental health care systems throughout. There is a number of research describing difficulties in dealing with cross-cultural patients. An international TP service developed in Denmark is a role model for others in serving underserved cross-cultural patient populations and has been successful by using bilingual clinicians across national borders (Mucic 2009).

TP competencies for clinicians to practice effectively and achieve good clinical outcomes have been identified, outlined, and are beginning to be measured and evaluated (Hilty et al. 2015b). These are described at novice or advanced beginner, competent/proficient, and expert levels. For clinical care, feedback from patients, trainees, and faculty is useful. For continuing education/medical education events, pre- and postassessment and interactive feedback methods are suggested. TP skill competencies can be developed in training programs, seminars for agencies, local/regional/national continuing education/medical education events, and through leading organizations (e.g., American Telemedicine Association). Andragogical methods are suggested for use in clinical care, seminar, and other educational contexts; cross-sectional and longitudinal evaluation employs both quantitative and qualitative measures. Individual clinicians, programs, agencies, and other institutions may need to consider adjusted approaches to patient care, education, faculty development, and funding.

With the availability of increasingly sophisticated technology, TP's applications for education and supervision are continuously growing. In order to develop a successful TP training program, the focus is on increasing clinicians' competencies with patient care. Without formal exposure and education, psychiatrists may be hesitant to adopt TP into their practice, particularly if they view TP as an unfamiliar modality requiring specific technical and clinical skills (Sunderji et al. 2015). As with most other trainees, psychiatry residents are introduced to TP services delivery anecdotally during their clinical rotations, but actual training may lay a foundation that stimulates interest in TP as a mode of practice and provide the confidence and skills necessary to incorporate TP into future practice (Volpe et al. 2013; Glover et al. 2013).

To date, there are clinical guidelines, policies, and other developments across the world, but to our knowledge, this is the first chapter addressing TP training, based on

international research and contextualized experience. The first clinical guidelines were published in the United States, but the American Telemedicine Association is an international organization (Yellowlees et al. 2010). Policies and guidelines for the practice of TP have also been published in Australia (RANZCP 2013), South Africa (Chipps et al. 2012), and Canada (CPA 2013). On the other hand, development of TP in Europe has been much slower, and training programs are very limited or almost nonexistent. To our knowledge, this is the first chapter offering ideas and suggestions related to training in TP in European context, based on international research and European TP-related experiences.

This chapter will attempt to move forward the emphasis on skills in a variety of ways (e.g., interviewing, assessment) while attending to key attitudes that ensure quality care (e.g., appropriate model, legal standards, privacy). The objectives will help the learner to

1. Be aware of the history and scope of practice related to TP and other e-mental health (eMH) technologies
2. Self-assess and evaluate strengths and weaknesses in alignment with pre-competencies, (core) competencies, and advanced TP competencies
3. Consider clinical and curricular methods for TP skill development (e.g., bedside, continuing education/medical education training)
4. Begin to explore other eMH technologies within a broader context of care and consider additional competencies that are indicated

A TP Service, Its Components, and How to Set It Up

But before speaking more about important aspects of training in TP, it may be useful to briefly outline the basics of what a TP service is and how to set one up (Jones et al. 2006; Myers et al. 2008; Mucic and Hilty 2016). Principles for establishing of such a service are in Table 1 (Myers et al. 2008).

Equipment

The main requirements are a room equipped with a computer, a camera, a screen, a microphone, and speakers and a method of conveying the information between the respective TP stations. It is also useful to have a telephone in each TP station so that a contact can be made in the event of rare failure of the video equipment. Occasionally, too, this is used to add in an interpreter if a common language is not available and an interpreter is not available on site.

There are a number of considerations when choosing equipment. In the past, cost was likely to be a limiting factor for many services, but now so many low cost systems are available. Many services use computers with a built-in video camera, videoconferencing software (e.g., Skype Business, Vi-Vu, Lifesize softphone), a

Table 1 Principles for establishing a TP service

1. The need for services and whether TP is an option should be determined
2. The sustainability of the service should be determined
3. The patient population, model of health service delivery, and services to be offered should be determined
4. The required infrastructure should be determined
5. Legal and regulatory issues should be reviewed
6. Management strategies for the service should be established
7. Appropriate equipment and technological specifications should be determined
8. Quality and clinical outcome indicators should be developed
9. Rapport, confidence, and collaboration with staff at the patient site should be fostered
10. Informed consent and assent procedures should be established
11. The physical setting should be arranged and the virtual relationship should be established to produce an optimal clinical encounter
12. Method of conducting the assessment should be determined including who, if anyone, should be present with the patient
13. Procedures for prescribing medications should be established
14. Patients and families should be informed about procedures for care between TP sessions, including procedures for emergency or urgent care

remote control camera, and encryption safeguards. Additional options preferred by professionals are a mobile laptop computer with an external camera and microphone that can go from site to site or home to home. This also enables a healthcare professional to have consultation with a senior colleague. Nowadays, it is most common to use iPad in such situations or even iPhone via "Face-Time" function if it maintains privacy standards.

The model that is most expensive, but in the exchange offers many more options without compromising with the quality, is the use of so called "stand alone" video cameras. These are more expensive, but on the other hand do not require additional use of computers and are more safe and stable. Stand-alone camera shall be connected to the TV screen and to the Internet. Typically, stand-alone video cameras may also be remote controlled. This enables the doctor to move the patient's video camera (e.g., zoom-in and zoom-out in order to observe the body language or check for a tremor) during the consultation. In the EU with refugees and other underserved populations, such opportunities are typically limited with "built-in" video camera.

The mode of conveying the sound and pictures between the TP stations is one of the most important considerations. The main issues are bandwidth, cost, and security. Earlier, and for many decades, it was usual to use a T1 line (i.e., 6 ISDN telephone lines) in order to "transport" the sound and the picture on distance in real-time. Nowadays, internet broadband enables transmission of highest quality for usually very low cost. The "security" issues are to be solved by simple use of encryption when using the computers. However, some professionals prefer the use of "stand alone" model as the risk for security/safety errors is lower compared to the use of computers.

Positioning of Camera Relative to the Screen

It is commonplace for the TP user to naturally look at the image of the person they are communicating with on the screen rather than directly into the camera (i.e., if the camera may be on top of the unit or elsewhere). This can give the impression to the remote viewer that the individual is not making eye contact. This happens even with laptop built-in cameras. In addition, a camera placed below the screen gives the remote viewer the sense that they are being "looked down on." It is common practice for the camera to be placed on top of the screen, and if the users sit a little farther away from the camera (approximately 2–4 m), this reduces the angle between eye, camera, and screen; this improves the impression of eye contact. The camera should be set up to capture a head and shoulders view for most interactions.

A small version of the outgoing video picture in the corner of the clinician's screen ("picture-in-picture") is useful for the clinician to check their own position relative to the camera to make sure that the patient's view of the clinician is good. The picture-in-picture should be turned off on the patient's screen as this may be distracting and can make the patient self-conscious.

The Room and Appearance

The size and layout of the room is very important and influences the user's perception of the system. The room should appear as much as possible like a normal consulting room. It should preferably have windows for natural light, be quiet/soundproofed, and have adequate heating or air conditioning. Above all it should be pleasant to use, as negative attitudes towards TP can develop based on experience of the working environment rather than on the quality of the interaction. This is particularly important for practitioners who spend a good part of the day or nearly full-time TP.

The background should be plain and uncluttered. It is unwise to set up a camera facing either a window or a door. Too much backlight from a window will silhouette the appearance of the individual on camera, and background movement seen through a window or glass pane in a door will be distracting. The color of the background should be neutral although some still suggest blue-colored background, which is considered to allow better viewing of individuals with different complexions.

The clinician's appearance should be professional as usual. This is part of the work routine, which is important – even if practicing from home. Similar to television broadcasts, clothes with solid colors and for gentlemen ties without striking patterns may be best. Overall, telepsychiatrists may "need" to be an additional 15–20% more active and attentive – clinically, administratively, and in overall efforts to connect at a distance (Hilty et al. 2004).

The room should be large enough for at least one to two adults to attend and be included on screen. If more individuals will typically interact with the youth and provider at one time, such as team-based assessments or group therapy, a larger room should be considered. For care with children, for example, the room should allow the child to move around, both for the child's comfort and to allow an appropriate

examination of his/her skill, particularly for younger children whose motor skills and exploratory abilities may be compromised.

Development of a Protocol

As for the general telemental health guidelines, there are no established indications or contraindications for telemental health services with young people, other than the youth or parent refusing services. A brief discussion about the care, use of technology, and a few nuances is part of the informed consent process by the clinician or one of his/her designees. Most programs have written information about the service prior to exposure of the patient to TP, with attention to clinical care, legal, privacy, and other issues. It is key to assure patients that the sessions are not going to be recorded and that the Internet connection is encrypted/safe. Written consent should be obtained, documenting that the patient is voluntarily involved with TP, as well as he/she may stop with TP whenever during the course of treatment.

At the very beginning of the each session, the patient should be introduced to everyone that is at the distant TP station and giving a view of the entire room will reassure them that no one else is observing the interaction. Further, the patient should be told that the microphone is sensitive and the patient does not need to shout. Most community-based settings utilize a presenter (often also the telemedicine coordinator) in the telemental health encounters for both quality care and reimbursement requirements. The provider should determine the scope of the presenter's assistance before the session (with scheduling, paperwork, and socialization to the behavioral health system) and after the session (with implementing recommendations, facilitating referrals, and coordinating with the system of care).

If care is delivered in a traditional clinic setting, the provider shall alert staff to any risks to the youth's safety so that they can be aware of need to assist or notify security or other resources. If care is delivered outside of a traditional clinic setting, such as a school, additional planning may be necessary. On occasion, a presenter may be needed during the session (with technical and clinical support, including taking vital signs and assisting in emergency situations). The provider may decide when to include the presenter in the session. If the presenter remains outside of the room, the provider should determine how he/she will contact the presenter to join the sessions should there be a need for assistance.

Involved clinicians should receive preliminary training in the operation of the equipment. They should be aware of local policy regarding the actions that should be taken in the event of accidental equipment failure. In such case the clinicians should have the option to use the telephone and speak to the patient while the Internet connection is about to be fixed. More detailed aspects of necessary clinician-competencies will be reviewed later in this chapter.

Finally, after the TP session, the clinician dictates the statement that may be electronically transferred to respective authorities and/or the respective clinic where the patient is located/belongs (e.g., general practice, psychiatric department, outpatient clinic, asylum center).

Factors That May Affect Willingness to Learn About TP

There is very little research on training clinicians to optimize patient encounters when utilizing video conferencing. It is important that such training be provided, because maximizing the use of TP requires experience and an appropriate understanding of the unique challenges associated with this technology. It is not simply a matter of doing the same things that one does in a face-to-face session via video conferencing. As already mentioned, the literature on TP training is sparse, heterogeneous, and primarily descriptive. Even brief learning experiences may increase the likelihood that residents will incorporate TP into their future practice (Hilty et al. 2015a). Nevertheless, certain factors were found to be associated with trainees' interest in TP.

The majority of trainees in recent survey were interested in TP and believed clinical exposure is an important aspect of training (Glover et al. 2013). Despite trainees' high interest levels, only 21% reported that didactic exposure was offered and only 18% had direct patient care experiences via TP. In addition, only 29% of trainees planned to use TP upon completion of training. These results suggest that training programs may want to include TP experiences into the curriculum. A majority of trainees with clinical exposure reported that their experience increased their interest. Therefore, increased exposure during training may ultimately increase the number of psychiatrists practicing TP and improve access to care (Glover et al. 2013).

That information led to a broad call for more work in telepsychiatric education (Balon et al. 2015) related to a significant gap identified in the literature (Sunderji et al. 2015). A survey of 46 programs revealed only 21 have a curriculum or informal experience and 12 have only a curriculum (Hoffman and Kane 2015). A key issue, though, is whether our learners – the residents and fellows – and those teaching them have kept up with the growing evidence base of TP. The outcomes, satisfaction, and range of clinical services should be well known, but are they aware that many of these above concerns about TP have been widely discounted?

A survey of 270 participants in psychiatric training programs throughout the USA, including 123 residents and fellows, was completed (Hilty et al. 2015d). This included general psychiatry (54%), child and adolescent (33%), and other fellowships (13%; forensic, geriatric, psychosomatic and substance). In terms of geography, 76% of responders were practicing in an urban setting, 5% practiced in a rural setting, and 19% were from both settings. Residents and fellows reported practicing in urban setting (81%) and 66% were interested or very interested in TP and 10% were very uninterested or uninterested.

Overall the top ten most common concerns and reasons that the participants viewed TP as hard, daunting, and/or difficult to implement were that one cannot perform a physical exam (54%), poor Internet connection is a roadblock to implementing TP (52%), liability risks involved with TP are unknown (47%), certain cultures will be less accepting (39%), nonverbal cues are missed (36%), privacy is an issue (33%), TP is not as effective as to face to face psychiatry (32%), one cannot manage emergencies related to safety with TP (30%), residency is insufficient for

one to become competent in TP (30%), and paranoid patients do not like TP (26%). Other concerns were at a rate of less than 5%. R/F specifically had concerns about: one cannot perform a physical examination 67% (up from 54% overall), poor Internet connection 57% (same), liability risks 52% (higher than 47% overall), certain cultures will be less accepting 52% (much higher than 39%), and paranoid patients using it 42% (much higher than 26%).

The findings of this survey are in three distinct areas. First, interest in TP is high and increases with exposure. Second, education/training is not seen as adequate, but now with TP competencies and methods delineated, programs may subcontract out clinical experiences and perhaps utilize online modules. Third, concerns of R/F, program directors, and faculty appear to relate to the effectiveness of clinical care, including nonverbal cues, managing emergencies, dealing with patients' paranoia and cultural acceptability; the question about doing a physical exam may have been interpreted in too many ways. The exposure/experience increases interest and reduces concerns about effectiveness (e.g., nonverbal cues, engagement).

TP Competencies

Overview

Specific questions in the development of competencies remain unanswered: (1) how do skills required for the practice of TP compare to in-person care? (2) are skills required for TP part of a broader set of e-mental health (eMH) competencies (including use of telephones/e-mail, social media, electronic health records (EHRs), mobile apps, and Internet-based interventions)? and (3) what are the optimal andragogical methods for teaching trainees TP? Therefore, a competency-informed approach is needed to answer these questions and to contend with other barriers to TP implementation.

Competencies have also been organized in medical education at different levels:

- Level 1 – novice (medical student)
- Level 2 – advanced beginner (first-year resident)
- Level 3 – competent (senior resident)
- Level 4 – proficient (graduating resident)
- Level 5 – expert (expert in TP) (Dreyfus and Dreyfus 1980)

For the TP competencies published (Table 2; Hilty et al. 2015b), this was simplified to three levels and this stratification fits better across disciplines and learner levels:

- Novice or advanced beginner (e.g., advanced medical student, early resident, or other trainees)
- Competent/proficient (e.g., advanced resident, graduating resident, faculty, attending, or interdisciplinary team member)
- Expert (e.g., advanced faculty, attending, or interdisciplinary team member)

Table 2 An ACGME framework for social media/networking competencies for psychiatric assessment and treatment

Area/topic	Guiding questions	Novice/advanced beginner (ACGME milestone level 1–2)	Competent/proficient (ACGME milestone level 3–4)
Patient care			
History-taking	Does informed consent change? What is the best way to screen for what technologies used?	Document if patient is using SM/N and for what reasons Standard history, with questions such as: • Are you using SM/N and for what? • Are you using SM/N for healthcare?	Reflect on the pros/cons of the use of SM/N versus other technologies, discuss options within treatment (if applicable), and include in informed consent Screen more systematically with questions such as: • Which SM/N do you use: Facebook, Google+, LinkedIn, Twitter, Tumblr, Instagram, and Pinterest? • Do you use SM/N more or less than other technologies (e-mail/text, apps)? • Do you use SM/N for healthcare? • Do you use SM/N to share/discuss mental health (MH) issues in a forum where you expect others to respond? • Are you aware of risks (e.g., privacy, self-disclosure, cyber-bullying)?
Engagement and interpersonal skills	How do we engage them and support their initiative? How do we help the patients reflect, self-assess on the pros/cons of SM/N? How does SM/N affect the therapeutic relationship?	Discuss impact of SM/N use with others if it arises Incorporate SM/N impact on personal and professional life into care	Ask preferences with SM/N and how it has influenced relationships with family, peers, and professional colleagues How is SM/N versus in-person or other technologies for communicating with others? Help patient reflect on link between SM/N use and MH Consider how SM/N affects processes of intimacy, emotion, and perception; (how) does it affect boundaries (see Professionalism)?

Mental status (MS) examination	What can use of SM/N tell us about MS at one point in time or longitudinally?	Use SM/N as a parameter of the MS	Compare MS via SM/N to in-person Contact patient with technology or in-person care to check MS? Assess what MS can and cannot be realistically assessed with SM/N
Assessment	How do we include SM/N in our overall assessment? Is SM/N being used healthily or does it predict problems (i.e., personality) or overuse (e.g., impulsivity)?	Assess if SM/N use is a relevant issue in personal life and/or healthcare Assess if SM/N "should" be used by a patient and in what manner	Assess SM/N's role in personal life and healthcare: healthy and/or unhealthy? Consider the need for collateral info from in-person care or others Include SM/N components into in-person evaluation Demonstrate flexibility and decide with the patient the role of SM/N in patient's needs and preferences
Management and treatment planning	What treatment model(s) is(are) best and/or conducive with SM/N? In what ways might SM/N affect the therapeutic alliance? Are there patient-clinician differences in use, fluency, and communication?	Integrate SM/N into biopsychosocial (BPS) approach Monitor ongoing SM/N use Identify and document memorable and problematic events as they occur If reasonable, focus part of a visit on the use of SM/N and other technologies to talk in-depth	Integrate SM/N into the BPS outline with depth Focus the use of SM/N on one treatment goal to monitor and engage Blend SM/N as a topic in with regular clinical discussions and consider if it affects the therapeutic alliance and/or facilitates reflection between visits Identify safety and risk factors of using SM/N Consider pros/cons of giving advice via SM/N re-medication issues Triage complex, urgent/emergent issues to in-person care
Patient and family education	Do patients understand the pros/cons of SM/N use, options, and privacy matters? What is "appropriate" on SM/N and what is not?	Understand reliable/healthy and unreliable/unhealthy SM/N options Value of using SM/N in healthcare and when to use it	Recommend how to use SM/N in healthcare (e.g., tips on how to do so, if/when to post emotional/mental issues, and what should be posted and what should not) Offer "good" choices for SM/N use in personal life and healthcare

(*continued*)

Table 2 (continued)

Area/topic	Guiding questions	Novice/advanced beginner (ACGME milestone level 1–2)	Competent/proficient (ACGME milestone level 3–4)
Administration and documentation	Is SM/N in policies/ procedures? What are the clinic, health system, and professional standards related to asynchronous technology? Are there business, financial, and legal angles to SM/N?	Adhere to clinic, health system, and professional requirements for in-person care for documentation and consider amendments for SM/N and other technologies use Seek supervision/advice for non-routine events, if needed	Adhere to policies/procedures and adapt "best practices" in administration for both in-person and SM/N care Develop standard language for consent form, ongoing care and sentinel events on the pros/cons of SM/N use, inclusion in treatment plan and management of sentinel events Consider development of policies/procedures for SM/N and other non-routine telepractice; seek advice in advance to document longitudinally Consider/attend to business and financial issues
Medico-legal issues[CM]: privacy, confidentiality, safety, data protection/integrity, and security	How do we maintain privacy and security of data for all parties? Is it appropriate to search public information on others, and if so, when? See Professionalism	Identify and adhere to relevant laws and regulations in the jurisdiction(s) of practice and of that of the patient Clarify if SM/N site is public, private, or within EHR Is aware that others search for information about him/her	Apply in-person relevant laws and regulations in any/all jurisdiction(s) to SM/N, and if necessary, adjust clinical care Educate patient about SM/N and adapt existing laws if none exist for SM/N and other telepractice Obtain clinical and/or legal advice, as applicable Adjusts content and settings of professional (and personal) information available on public sites
Interpersonal and communication skills[MS-IPSC]			
Communication	What do we communicate, how, and when? What are the best ways to be clear using asynchronous methods in order to avoid/prevent miscommunication?	Be flexible in discussing SM/N use, attempts at communication with provider and understand it Discuss problems if they arise with asynchronous options and arrange alternative options Seek advice on merit and method of responses, if any, to patient's communication	Discuss scope of communication with SM/N use, clarify expectations, and anticipate problems Educate patient about pros/cons of asynchronous options: scope, timing, and agreed upon plan(s) Make brief, clear SM/N communications to acknowledge, clarify, and/or triage to in-person care Clarify potential ambiguous (i.e., multiple) meanings of statements/behaviors

Evaluation and feedback	How do we adjust and/or add to regular methods (e.g., faculty, 360 degree, patient survey)?	Use evaluation parameter(s) as a starting point for decision-making and care Review examples with learner/supervisor	Adjust regular evaluation parameter(s) to incorporate real-time examples Co-review of in situ examples of communication with patients with learner/supervisor
Cultural, diversity, and social determinants of health	How do these affect asynchronous methods? What is the impact of: • Technology fluency? • Idioms, "shorthand" expressions, and acronyms? • Generational differences?	Show interest and flexibility in discussing diversity and technology issues Be aware of how social determinants affect in-person care and apply this information to use of SM/N	Ask about the impact of culture and diversity on preferences related to SM/N and other technology use Promote reflection, discussion, and awareness of how social determinants affect interest in, use of, and experience with technology Ask about immigrant/assimilation, generational and other cultural factors that impact family
Language issues	How does this affect asynchronous communication?	Identify communication issues that may affect in-person care and these methods	Anticipate issues, make adjustments, and manage language impact on in-person and asynchronous technology
Special populations	Are there differences, and if so, what are they for SM/N?	Notices positive and negative trends in patient populations (e.g., generation Y or Z, autism spectrum)	Proactively **read**, more assertively **screen**, and **routinely engage** about SM/N use or preference for intensive use (e.g., adolescent, veteran with posttraumatic stress disorder Be aware of trends across asynchronous technologies (e.g., e-mail/text, apps)
Professionalism [MS-P]			
Attitude	Are we open to including technology, specifically SM/N, in practice? How does patient use of SM/N affect the provider's impressions of patient?	Flexible and open to learning about patient's use of SM/N Demonstrate capacity for self-reflection Consider all sources of information in sizing up patient, including technology	Understand, educate, and participate on how SM/N impacts care: communication, relationship building, and spontaneity Role model willingness to engage, if appropriate safeguards are in place

(*continued*)

Table 2 (continued)

Area/topic	Guiding questions	Novice/advanced beginner (ACGME milestone level 1–2)	Competent/proficient (ACGME milestone level 3–4)
Integrity and ethical behavior	What are the pros/cons of interacting with patients via SM/N? How is the therapeutic relationship (e.g., engagement, boundaries) be affected by SM/N?	Maintain integrity by adhering to professional and governmental guidelines Recognize boundary issues with SM/N communication and searching sites Attend to privacy, confidentiality, and professional boundaries associated with SM/N use	Uses clinical judgment and ethical principles to consider the pros/cons of searching for patient information (i.e., does so for emergent situations, but not just out of curiosity). Encourage reflection about personal versus professional contexts and potential micro- and macro-boundary violations Recognize that personal information (e.g., SM/N, property ownership, political activism) is accessible and regularly monitors and adjusts personal and professional corridors of information
Scope and therapeutic objective(s)	How does SM/N use change (expand) the scope of practice? What use of SM/N is appropriate to include and not include?	Attend to in-person scope issues and observe for how SM/N may alter Keep focus on shared primary objective of care	Practice within scope(s) Provide education/feedback to patient on scope issues Trouble-shoot problems Offer services with components like SM/N included (or not), as licensed, avoid fraudulent statements/practices and market within regulations (e.g., Federal Trade Commission substantiation rule)
Systems-based practice			
Interprofessional[MS-IPSC,CM] education (IPE) and team work	What are the educational needs of the team, its members, and/or the system? If we work as a team, who does what?	Learn about SM/N and other technologies, participate in defined role, and share information with others	Discuss SM/N issues for patients with other team members to enhance care and communication Work within the team and outline who takes initiative with SM/N (e.g., a care coordinator monitors a Facebook site)

Care models	What, if any, technology is used in what model and how? Can SM/N be embedded into the EHR?	If SM/N is part of the treatment plan, incorporate data into care	Give input to administration on (in)efficiencies and opportunities What part, if any, of the "therapeutic hour" is allocated for staff to attend to SM/N, e-mail/text, and other technologies as part of care?
Safety (see Patient Care and Professionalism)	How does SM/N interface with safety? How do we ensure patients reach out appropriately for emergencies? How do we reduce errors?	Educate patient to call and/or set up additional appointment for emergencies Seek advice/consultation, when needed	Prevent, identify, and risk stratify potential problems based on past history in order to proactively not include SM/N from treatment plan Educate patient to use in-person or synchronous (e.g., video, telephone) communication for emergencies If SM/N is part of the treatment plan, develop regular plan to check sites
Practice-based learning[MS-PrBLI]			
Evaluation approach	In addition to in-person standards, what additions are needed for SM/N? How can structure and process be enhanced?	Learn from/participate in global evaluations from interdisciplinary team about in-person and technology-based care	Be aware that in-person, SM/N, and other technology-based care have similarities and differences; customize approach Develop/promote attitudes and skills for consistency, quality/specificity, and stability of evaluation
Quality improvement (QI)	What in-person (and new) standards need to be monitored? What methods of assessment/review inform participants?	Participate in chart review, case/M&M conference, and other activities related to in-person and technology-based care	Apply/adapt in-person QI principles to SM/N in order to adjust assessment and/or care Educate participants on technology-specific principles and measures
Learning, feedback, and teaching practices	How do evidence-based guidelines (if any) and QI inform clinical, curricula, rotation, supervisory, and continuing education options?	Add technology-based learning opportunities to regular activities	Continue lifelong learning via seminars, cases, and system discussions Seek out technology-specific education Develop additional technology-specific education short- and/or long-term

(*continued*)

Table 2 (continued)

Area/topic	Guiding questions	Novice/advanced beginner (ACGME milestone level 1–2)	Competent/proficient (ACGME milestone level 3–4)
Technology			
Adapt to technology	What skill(s) are needed for SM/N? What "little" things can be helpful/add value when using SM/N (e.g., smiley face)?	Use basic etiquette Identify differences between in-person, TP, and SM/N care Clarify/spell out brief communications Keep SM/N contact proportioned to treatment plan	Acknowledge and/or engage the patient after his/her initiation; initiate (e.g., benign post) if clinically indicated (e.g., for a depressed patient) Expect and plan for differences between participants Prevent, identify, and manage barriers, obstacles, and miscommunications Clarify expectations in-person rather than asynchronously Adjust how to "project" self and express empathy
Technology operation[CM]	What technology knowledge, skill, and experience is needed?	Pilot 1 or 2 SM/N sites with peers to learn communication options	Gain experience with multiple sites and technologies (e.g., Facebook, Google+, LinkedIn, Twitter, Tumblr, Instagram, and Pinterest) Navigate options, if needed, and advise patients
Knowledge	**Guiding questions**	**Novice/ advanced beginner**	**Competent/Proficient**
Definition of SM/N	What do providers need to know about the definitions and forms of SM/N?	Recall definition of SM/N Name 2 or 3 SM/N platforms with pros/cons	Describe SM/N definitions and various applications, uses, and risks/benefits to patients Professionally familiar with 2–3 SM/N platforms, in addition to personal use Knows standard principles and apply them to different settings Serve as resource for others
Evidence-base	What evidence is there that SM/N use is helpful or harmful to patient care and professional identity?	Know basic "do's or don'ts" of SM/N for clinical care, as adapted from in-person care	Knows the data, concepts, and principles of SM/N protocol from national evidence-based guidelines (if any) and summative/advisory statements

Problem-solving and prevention	What capability is needed to prevent problems, solve them, and triage issues?	Recognize and report problems Perform basic diagnostic work Explain how to use product	Evaluate new products/options Assess performance issues of current systems or products Assess user requirements and determine best match for patients and other participants with technology options Diagnose complex problems and/or resolve non-routine problems that affect team Serve as a resource to others Knows where/when to request technical assistance
Patient care	What are the approach, procedures, therapeutic relationship, treatment plan, and other foundational principles?	Ability to answer questions, discuss and adjust SM/N in comparison to in-person care, including consent, privacy, data protection/integrity and security, safety, and documentation	Ability to answer questions/teach, discuss/clarify, and adjust/develop options for SM/N in comparison to in-person care in additional areas of scope of practice, communication, culture and diversity, ethics, and care models
Risks of using SM/N	Is the provider aware of HIPPA and clinical/therapeutic risks of SM/N use by providers and patients?	Identify 1 potential patient risk of SM/N use (i.e., privacy violation) Identify 1 potential provider risk of SM/N use (i.e., boundary or privacy violation)	Identify 2–3 potential patient risks of SM/N use and advise how to prevent, mitigate, or eliminate them (e.g., use privacy settings; avoid self-disclosure; manage cyber-bullying) Identify 2–3 potential provider risks of SM/N use and prevent, mitigate, or eliminate them (e.g., use privacy settings)

Abbreviations: *TP* Telepsychiatry, *SM/N* Social media/Networking, *PA* Psychiatric apps, *e-BH* e-Mental health, *CM* based on submission for CanMEDS TP competencies, *MS* US milestones; consistent with non-TP, regular competencies of the Accreditation Council of Graduate Medical Education (ACGME), *PC* patient care, *K* medical knowledge, *PrBLI* practice based learning and improvement, *SBP* systems based practice, *P* professionalism, and *IPSC* interpersonal skills and communication, *Example is MS-PC* milestones patient care, *PE* physical examination

While competencies are the consensus for moving forward with education, there are different ways to organize them. At the level of medical students, the American Association of Medical Colleges (AAMC) outcomes are evidence-based, including the domains of medical knowledge, patient care skills and attitudes, interpersonal and communication skills and attitudes, ethical judgment, professionalism, lifelong learning and experience-based improvement, and community and systems-based practice (American Association of Medical Colleges 2015).

Perhaps the best approaches TP competencies for all clinicians and those in training is the milestone approach from the Accreditation Council on Graduate Medical Education (ACGME 2013) and the evidence-based CanMEDS framework (Royal College of Physicians and Surgeons of Canada 2005). The ACGME specifies patient care, medical knowledge, practice-based learning and improvement, systems- based practice, professionalism, and interpersonal skills and communication domains. The CanMEDS framework describes the knowledge, skills, and abilities that specialist physicians need for better patient outcomes, based on the seven roles that all physicians play: medical expert, communicator, collaborator, manager, health advocate, scholar, and professional.

The most important area described in the TP competencies is patient care. It is divided into two parts: (1) clinical – history, interviewing, assessment, and treatment and (2) administrative-based issues related to care – documentation, electronic health record (EHR), medico-legal, billing, and privacy/confidentiality. Systems-based practice includes outreach, interprofessional education (IPE), providers at the medicine-psychiatric interface, geography, models of care, and safety. Attitude, integrity, ethics, scope of practice, and cultural and diversity issues were grouped within professionalism. An additional domain, technology, was added to include some behavioral, communication, and operational aspects. Communication, knowledge, and practice-based learning are included for completeness, although many skills in this domain are similar to skills needed for in-person care.

Expert TP Competencies and Additional Considerations

Expert-level competencies for TP have been distilled into three main areas: (1) TP-specific complexity, (2) clinical, reasoning, and other patient-based skill issues (whether in-person or TP care), and (3) complexity based on system-based practice. Examples illustrate the complexity of integrating regular assessment, adapting to a setting, and working by TP:

- Completion of a Mini-Mental Status Examination (MMSE) (Folstein et al. 1975) by TP. This involves efforts to preserve the MMSE testing integrity and ensure optimal communication, and other clinical reasoning is used to determine whether, for the sake of convenience with TP, a substitute item can be used without altering test integrity.
- A child/adolescent patient evaluation includes the patient and parent, sibs, and teacher who may telephone in. This requires extra time management, toys on-site, the sequencing participation, and technology combinations.

- For an evaluation of a Latino teenager, a parent and a pediatrician may be needed in a rural setting. This involves management of language (e.g., teenager fluent in English and a parent who needs an interpreter), cultural, and primary care/pediatrician needs. Ideally, a culturally competent bilingual clinician would be available if the patient has limited language proficiency.

Training programs should consider incorporation of a brief TP experience to fulfill both trainees' interest and the growing demand for psychiatrists. Such training should address competencies that are (1) technical, (2) collaborative/interprofessional, and (3) administrative (Sunderji et al. 2015).

The above description shows that settings in which TP is used partly shift participants' roles and the competency goals. A key dimension is the primary care provider (PCP) specialist relationship, that is, developing trust, a working relationship, and availability of the specialist by telephone, pager, or e-mail (Hilty et al. 2004, 2006, 2015c). Collaboration at a distance requires a systems perspective, with heightened awareness of the available resources and attention to using them efficiently. The needs and abilities of referring and other providers in distant communities need to be clarified, rather than making assumptions; joint negotiation of the type of assistance is useful. Timely, precise, relevant, and useful documentation is especially important when TP is the predominant means of interacting with distal providers. Careful listening is needed to recognize team formation and dynamics at a distance.

A variety of models have been used. For in-person work, a consultation care model to primary care provides patient education, case-based PCP education, and technical assistance to aid the PCPs' prescribing medication (Katon et al. 1995). A randomized trial of disease management for depression by TP was successful (Hilty et al. 2007). The collaborative care model uses a long-term approach to build relationships with PCPs through continuing education and medication co-management (Katon et al. 1995); trials for PTSD and depression by TP have also been successful (Fortney et al. 2013, 2015).

Integrated care models are increasingly being adopted (Gilbody et al. 2006; Kates et al. 2011; Archer et al. 2012; Fortney et al. 2013; Woltmann et al. 2012), and competencies have been spelled out for residents and the psychiatric consultant for communication, training/supervision, collaboration, and leadership (Cowley et al. 2014; Hoge et al. 2014; Ratzliff et al. 2015). In addition, greater attention is suggested regarding roles in care coordination, system navigation, longitudinal training/mentoring, balancing the "leadership" and "equal team partner" roles, and providing mental health care outside of health care settings (e.g., residential settings and community agencies) (Sunderji et al. 2015).

Teaching and Assessment Methods for TP Competencies

TP competencies add complexity to regular teaching plans and for curricular program directors, training directors, and staff. A combination of methods is suggested to address the many factors involved, with adjustments to facilitate skill development over time (Table 3). These methods may be used in curricula, continuing

Table 3 Teaching and assessment methods for telepsychiatric (tp) education in relationship to competencies

Teaching/method	Context	Competencies addressed	Learner assessment methods
Didactic teaching			
Brief didactic	Classroom or clinical setting in person, by TP, or web-based	Patient care, systems-based practice, primarily at the pre-competency and competency levels of knowledge about technology To provide overview of research, trends, and relevance of TP; correct misconceptions To engage/interest learners in further educational opportunities Provides content knowledge but less effective for developing attitudes and skills	Written tests: multiple-choice questions, short-answer questions
Grand rounds or longer didactic	Classroom in person, by TP, or webinar		
Case-based learning			
Brief vignettes	Individual learning (in-person or web-based) or in small groups	Patient care, system-based practice, Technology – knowledge for all levels of competency, depending on the complexity of the case Deepens content knowledge and begins to apply and generalize knowledge to real-life examples In-depth cases are a good way to scaffold pre-competency to competency level Good for developing treatment/management plans Effective for highlighting key competencies that may not clearly emerge in live clinical consults due to time and foci	Case-based written tests: multiple-choice questions, short-answer questions
Complex, multi-step cases			

Patient interviews			
Observing faculty	Live in TP suite; by distance; or previously recorded	Patient care, communication, technology – primarily at the pre-competency level Useful for pre-competency level introduction Can also be used to demonstrate more complex skills (e.g., coordinating a physical exam at a distance)	Reflection journal
Group observed or co-interviewing	Group all in TP suite; learners take turns with assessment; group and supervisor feedback Can use separate room or 2-way mirror	Patient care, communication, professionalism, technology – primarily at the pre-competency and competency levels Systems-based practice – primarily pre-competency level Good context to adapt to technology Can focus on engagement, interpersonal, and communication skills Allows for group/discussion and reflection so can be used to explicitly address elements of professionalism; and also to reflect on cultural and social factors Builds consensus on pros and cons of TP	Mini-CEX (Clinical Evaluation Exercise) completed by faculty on each learner and direct verbal feedback
Observed	Supervisor observes in-time live or via distance	Patient care, communication, systems-based practice, professionalism, technology – all competency levels Good across range of competencies Particularly good for all skills related to patient care Exposure to multiple cases ensures learning to work with various populations Supervisor may identify challenges with communication and professionalism Obtain patient feedback as part of the 360 degree evaluation, if possible with interdisciplinary team	Mini-CEX completed by faculty and direct verbal feedback Review of completed report

(*continued*)

Table 3 (continued)

Teaching/method	Context	Competencies addressed	Learner assessment methods
Independent with review and/or distance supervision	Learner conducts interview on own with later review of video or case presentation	Patient care, communication, systems-based practice, professionalism, technology – primarily competency to advanced competency levels Good to practice and solidify competencies once achieved under observation Development and review of management plans Independence/autonomy can aid development of roles of manager, collaborator, and administrator – necessary for establishing own practice patterns	Mini-CEX (if video is viewed) or case-based discussions (CbD) Review of completed report
Simulation – with video or standardized patients	Use of standardized patients or pre-taped video clips	Patient care, communication, systems-based practice – primarily competency to advanced competency levels Ability to watch/reflect on own performance and style Ideal for more advanced skills that require start-stop and in-action reflection and feedback (e.g., administering tools; challenges with safety/risk; practicing use of interpreter; trouble-shooting communication problems)	Feedback in real time OSCE
Research and quality improvement			
Case write-ups Literature reviews Quality improvement projects	By trainee with mentorship. Can be for individual feedback or submission for conference presentation or publication	Systems-based practice, practice-based learning – all levels of competency Synthesis of complex cases Awareness of policy-oriented factors or areas of more advanced knowledge gaps Good introduction to administration and use of evaluation and outcome metrics Systems-level thinking and health planning and resource allocation	Written or verbal discussion and feedback Feedback through peer-review process

Role as educator – learning through providing education using TP			
Program consultations via TP	Learner observes/participates/leads with distal primary care teams (e.g., review cases)	Systems-based practice, practice-based learning – pre-competency level for observation, other levels for direct participation Learning to consult to interprofessional teams across distance Systems-based practice skills Collaborative care models	Reflection journal for observation Mini-CEX for direct participation in consultation Feedback solicited from distal primary care team
Provide didactic sessions via TP	Learner observes/participates/leads with distal primary care teams	Systems-based practice, practice-based learning – pre-competency level for observation, other levels for direct participation Learning to work with an interprofessional team Adapting communication to multiple people For more advanced skills, such as enhancing capacity and competencies in distance staff (e.g., teaching to use technology, or assessment tools, or in physical exam)	Reflection journal for observation Evaluation forms completed by distal participants Mini-CEX adapted for provision of teaching
Group and interprofessional learning (e.g., journal club)	Live or via web/social media	Systems-based practice, practice-based learning – pre-competency level for observation, other levels for direct participation Can enhance interprofessional and collaborative skills Build professionalism skills Can establish community of practice and outreach relationships	Evaluation forms completed by distal participants Mini-CEX adapted for provision of teaching

education/medical education programs and in other contexts. Some mainstream program evaluation methods can also be used in (Tekian et al. 2015).

Assessment

There is no shortcut for observation, feedback, and evaluation in measuring the progressive acquisition of skills. The evaluation process includes adopting standardized measures, use of measures with specificity, timely, accurate and brief completion, and collection of data prospectively rather than retrospectively (Hilty et al. 2014). Kirkpatrick stresses that evaluation should include four different levels: (1) reaction, (2) learning, (3) behavior, and (4) results (Kirkpatrick and Kirkpatrick 2009). Level one evaluation assesses a participant's reactions to setting, materials, and learning activities, ensuring learning and subsequent application of program content (Rouse 2011), and can be captured through satisfaction ratings. Level two of evaluation involves determining the extent to which learning has occurred, often employing performance testing, simulations, case studies, plays, and knowledge exercises (e.g., pre- and posttest). Level three attempts to determine the extent to which new skills and knowledge have been applied "on the job," such as in the healthcare setting. Level four of evaluation involves measuring system-wide or organizational impact of training.

Assessment of TP clinical outcomes can inform program evaluation, particularly at Kirkpatrick's levels 3 and 4 (Shore et al. 2013; Hilty et al. 2014).

As is obvious, these evaluations have moved beyond general satisfaction – to the issues of feasibility, validity, reliability, cost/economics, and clinical outcomes. In addition, effectiveness is favored above efficacy-only approaches (Hilty et al. 2013). Learners' skills can be gauged through these program and systems-level variables, and simultaneously, learning to incorporate quality assurance and evaluation as an important TP competency.

TP Education via Relationship Building by eMH (e.g., TP Consultation to Primary Care)

TP is part of a much broader e-health and eMH movement. Since traditional in-person care may be costly, unavailable to many, and insufficient alone, many patients and caregivers are seeking e-health information and eMH services from non-traditional sources. The Internet provides all of us education, resources, social connections, and other meaningful activities – even for those with obstacles (e.g., geographic distance, physical immobility or agoraphobia) and generational preferences (i.e., teenagers who prefer technology-based communication) (Hilty et al. 2015a, e).

With regard to primary care, three levels of intervention are possible:

- *Low-intensity* patient services include materials for psychoeducation, with tips for self-assessment (e.g., diabetes, depression, and self-help and support groups).
- *Mid-intensity* options are informal online provider consultation, formal education programs, and asynchronous communication with providers (Odor et al. 2011).
- *High-intensity* options are TP, Internet-based cognitive-behavioral therapy (ICBT) or in-person MH services with professionals (Celio et al. 2000; Clarke et al. 2005; Andersson et al. 2006; Christensen et al. 2006; Ritterband and Thorndike 2006; Ljotsson et al. 2007; Mucic et al. 2016a).

Institutional Learning and Progress

This level of intervention requires a look at leadership, change management, and other factors. The main current barriers to TP are human factors related to providers, healthcare leaders, and other decision-makers. There are five categories of technology adopters: innovators (2.5%), early adopters (13.5%), early majority (34%), late majority (34%), and laggards (16%). Innovators and early adopters are more likely to make a leap of faith and thereby believe in a new technology or innovative process. This contrasts with the early majority, which has to be convinced by evidence that an innovation works well before they will use it (Nadler et al. 1999; Luo et al. 2006). Leaders in TP clinical care and education should consider how ready repetitive stakeholders are, in terms of adopting specific clinical, educational, and administrative aspects related to TP.

As a result, there are two approaches needed to implement TP widely within any health system. First, leaders need to acknowledge the generational leadership change that is starting to occur in healthcare providers, with younger providers being early adopters who should be included in leadership roles in these programs as clinical champions. The increasing body of evidence on the effectiveness of TP may be used to convince others of the necessity of TP adoption to move from theory to practice. Institutional competencies for TP may include: Patient-centered Care; Measurable Outcomes; Trainee/Student Needs/Roles; Faculty Clinical and Teaching Roles; Faculty Leadership Skills; Institutions and Institutions Within; Finance, Organizational Structure, and Funding; Change Management; and academic health center–community partnerships (Hilty et al. 2015b). From a technological perspective, there are relatively few barriers to the implementation of TP programs between clinics and health systems or to patients' homes in the community. Such a platform could also facilitate e-curricula and TP training for programs, departments, and institutions, under a broader distance education approach.

A number of federal resources in the USA could be adapted to assist with telemedicine adoption, including telemental health with youth. This includes the Office for the Advancement of Telehealth (OAT)-funded Telehealth Resource

Centers (TRCs). The TRCs span all states and provide assistance, education, and information to organizations and individuals who are providing, or interested in providing, healthcare at a distance. The TRCs also provide resources related to program development and evaluation, operations, reimbursement, legal and regulatory questions, marketing, training, and other concerns. The Center for Connected Health Policy (http://www.cchpca.org/) specifically addresses telehealth policy for the 50 states. The Substance Abuse and Mental Health Services Administration (SAMHSA)-HRSA Center for Integrated Health Solutions also has telebehavioral health training resources (https://www.samhsa.gov/).

Discussion

TP competencies related to skills, attitudes, and knowledge, which are stratified across levels, might help trainees, faculty, and other interdisciplinary clinicians across the world. Behaviors that reflect core competencies help with measurement and evaluation. An approach is needed to select, align, and contextualize teaching and assessment methods to achieve the desired outcomes. Development and use of competencies is an ongoing process, though (Harden et al. 1999; Holmboe et al. 2010). The first steps involve discussion, needs assessment, implementation, and evaluation from champions across administrative levels (Capobianco and Schultz 2007). Such TP competencies may help us to better meet access to care, trainees' interests, and support patients' rapid uptake of technology for care. Advanced competencies are suggested, but need further review and analysis. Faculty development for teaching, supervision, and evaluation is also needed (Litzelman et al. 1998; Skeff et al. 2007; McLean et al. 2008; Srinivasan et al. 2011).

The institutional context is critical to the uptake of technology-mediated healthcare. Stakeholders have to be convinced that technology significantly contributes to patient care and population health in order to gain buy-in. If only one group champions the value of TP, adaptation of new competencies is unlikely (Fairchild et al. 2004). Leaders adapting to changes related to eMH care may need to consider a change management plan to streamline clinical service delivery (Armstrong et al. 2004; Hatem et al. 2006) and consider building/upgrading an integrated e-platform. Such a course considers current and emerging infrastructure like wireless options. Start-up, ongoing, and context-specific funding is crucial and the use of TP could leverage clinical resources (i.e., specialists, interpreters, social workers) and offset costs.

Conclusion

TP is effective and it is moving into mainstream medical education due to its clinical relevance, many additional technologies that are shaping clinical care and increased interest from the current generation of psychiatry residents. Indeed, since TP is only part of a larger spectrum of clinical care based on how technology is now being used

(the eMH care spectrum), competencies will grow in importance. TP competencies for trainees and clinicians grounded in healthcare, business, and andragogy will help learner objectives align with patient-based evaluation. Cross-sectional and longitudinal evaluation of nearly all participants is needed iteratively to improve the process. Exposure to TP care in training and opportunities for clinicians to train at the bedside or in interactive continuing education/medical education programs may yield a greater impact. Outcome, learner, and program evaluation that drives the training – rather than is tacked on to it – is needed.

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Psychiatry in General Practice

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Abstract

Mental illnesses and substance use disorders are responsible for an enormous amount of disability and mortality on their own, but even more so indirectly through poor health decision-making. In the Western world, much of the health burden stems from chronic conditions including obesity, hypertension, diabetes, and heart disease. These primarily result from chronic behaviors including unhealthy diet, lack of exercise, poor sleep habits, and substance use. Behind these are often depression and anxiety. These problems exist despite ready access for most people to medical, and to a lesser extent, mental health care. In the rest of the world, access to mental health education and resources can be much more limited, or even absent. Globally, only a small fraction of general practice patients are properly identified, diagnosed, or treated for mental health conditions. Due to the vast shortage of specialty mental health providers worldwide, primary care providers have become the de facto mental health providers for the last several decades, despite lacking the education or support needed to properly do so. It has been agreed upon for decades that in order to improve patient care, decrease cost, and increase patient satisfaction, a total system redesign is needed. The system needs to shift toward whole person or patient-centered care. The principles of collaborative and integrated mental health care have been crafted over many years in order to specifically solve for these problems. Multiple international organizations have demonstrated that these new care delivery systems can be adapted to, and effective in, just about any location in the world. In order to apply these innovations, though, primary care providers across the world need more training in psychiatry, and psychiatry providers, in general medicine. Through a growing body of innovative programs in general practice, there is now the opportunity to do so. Highlighted training programs in the United State include the University of Washington, Yale, and the Universities of California at Davis and San Francisco. Organizations include the Agency for Health Research and Quality, the Institute of Medicine, the American Academy of Psychiatry Residency Training Directors, and the Association for Medicine and Psychiatry in America. Internationally, work by the World Health Organization, the World Organization of Family Doctors, the Programme for Improvement of Mental Health Care, and the Emerging mental health systems in low and middle-income countries research consortium are examined.

Keywords

Integrated mental health · Primary care psychiatry · Collaborative care · Whole person care · Evidence-based · Measurement-based · Patient-centered · Care manager · IMPACT · AIMS Center

Introduction

It is necessary to look back at delivery in decades past in order to understand the current state of psychiatry in general practice. During that time, articles and research can be found intermittently, separated over time and location, most frequently from

the United States, Britain, the Netherlands, and Australia. The overwhelming theme of these publications is that primary care providers needed more training in mental health, in all locations, to better manage the symptoms of the patients they were seeing every day. More recently, textbooks and other training material have begun to be published with increasing frequency in these same countries, with increasing contributions by India and Asia. Training programs have also begun to arise internationally, although the vast majority of the publishing and educational innovation has occurred in the United States most recently. Although the Journal of the American Medical Association published articles on the subject as early as 1935, in 1978 a major event in organizational healthcare took place which would pave the way for the expansion of collaborative and integrated care worldwide. At that time, in Kazakhstan, the leaders of the International Conference on Primary Health Care made the Alma Alta Declaration. This stated:

> Health, which is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity, is a fundamental human right and . . . the attainment of the highest possible level of health is a most important world-wide social goal.

As physicians, their focus was to find a path to well-being for patients by whatever means necessary. They agreed to focus care on the person and not the disease. This approach highlights the idea that not only are all aspects of health important, but that they are necessary building blocks of a healthy world. It goes on to call for all governments, regardless of politics or conflicts, to work together in the goal of global mental and physical health. The authors who ratified the declaration hoped that it would be the first step toward achieving health for all by the year 2000. In 2008, the World Health Organization (WHO) revisited this topic and assessed what progress had been made. The focus of the WHO is the health of all people, and their responsibility is to highlight methods by which this might be achieved:

> Our common humanity compels us to respect people's universal aspiration for a better life, and to support their attainment of a state of complete physical, mental and social well-being. With integrated primary care, the substantial global burden of untreated mental disorders can be reduced, thereby improving the quality of life for hundreds of millions of patients and their families.

At that time, they released a 200-page report on the various applications of the integrated care model in a study of vastly different populations across the globe. These results were very positive and increased the number of patients successfully treated by orders of magnitude in the very areas with the most desperate need. The WHO describes in increasing detail the recipe for successful whole person care delivery in involving integrated care (Lardieri et al. 2014).

> [Integrated care] results from a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population. This care may address mental health and substance abuse conditions, health behaviors (including their contribution

to chronic medical illnesses), life stressors and crises, stress-related physical symptoms, and ineffective patterns of health care utilization.

In much of the Western world, the growing health burden stems from chronic diseases such as diabetes and heart disease which are worsened by health characteristics like obesity and hypertension. These are directly linked to ongoing health behaviors such as unhealthy diet, lack of exercise, poor sleep habits, and nicotine and alcohol use. In 2013, the Agency for Healthcare Research and Quality (AHRQ) began to describe specific new goals of care but also an outline of how these might be achieved (Peek and the National Integration Academy Council 2013). The focus was on data and systems redesign. Concepts now familiar to many began to come to light, including the collaboration of mental and physical health providers, systemization of care, cost control, and the focus on the patient and not the illness. This statement also highlights the absolute interdependency of the different aspects of health and the futility of attempting to address them separately. In the 2014 Psychiatric News article "Which Flavor of Integrated Care?" Jürgen Unützer of the Advancing Integrated Mental Health Solutions (AIMS) center restates and elaborates on these concepts into a lean recipe for care delivery (Unützer 2014): "Based on principles of effective chronic illness care, collaborative care focuses on defined patient populations tracked in a registry, measurement-based practice and treatment to target."

One of the cornerstones of this work is the Improving Mood and Providing Access to Collaborative Treatment (IMPACT) studies (https://uwimpact.org). In this now landmark study, the University of Washington (UW) demonstrated the results of decades of work in integrated and collaborative care. From 1998 to 2003, in a randomized, controlled trial, including 450 primary care providers and eight healthcare organizations across five USA states enrolled 1801 older adults with depression and followed them for 2 years (Unützer et al. 2001). They were offered usual care including referral and antidepressants, the control arm, or the IMPACT model of care. This included universal screening for depression, stepped care, behavioral care management, and a consulting psychiatrist. The program demonstrated early and sustained reductions in depression by up to 50% in study participants, in addition to greater patient and provider satisfaction, medical and pain improvements, and reduction in cost. Unützer goes on to say that "as researchers, we are reminded to think not only about the 'numerator,' the patients who come to see us, but also the 'denominator,' those who do not engage in care." Rather than treating only the presenting complaints of patients, this approach suggests looking deeper to the underlying causes. Now, with most citizens of the USA receiving at least some medical care, there is the unique opportunity to identify them in a less vulnerable state. Maybe this is a depressed woman coming in for her annual pelvic exam, the commercial truck driver presenting for his workplace physical examination, or the patient with alcohol abuse presenting with symptoms of a heart attack. Patients must first be identified in order to properly diagnose and treat them effectively. This requires universal screening of common health issues, including depression, as well as routine measurement of clinical outcomes. To this approach is added the use of evidenced-based treatments.

When held up next to the current, unequal, nonadherent, nonengaged, inaccurate, nonmetric, nonevidence-based system, it is clear that there was much work to be done. At the core of this divide is the concept of "whole-person" care. All providers need to consider the population, not only the individual person, the single illness, the organ, or vital sign. A marriage of services is needed, with the mental health system focusing more on the physical, and the physical health system more on the mental. The Substance Abuse and Mental Health Services Administration (SAMHSA) in the USA frequently refers to collaborative care as "rediscovering the neck" of medicine, connecting the long-divorced head and body.

Part 1: The Evolution of Whole Person Care

Health Behavior, Workforce Shortages, and Collaborative Care

In the population, there is a 5–10% prevalence of major depression, with up to three times that having significant sub-syndromal symptoms. In hospitalized patients, this number is as high as 25% (Barkin et al. 2000). Patients who have chronic medical illnesses have even higher risks of mental illnesses and their complications, including depression and suicidal ideation (Druss and Pincus 2000). In addition, mental illnesses, substance use disorders, and psychosocial factors can significantly complicate other medical illnesses. Seventy percent of all health care visits are generated by psychosocial factors (Lurie 2009). Mental illnesses, such as major depressive disorder, are associated with increased disability, reduced adherence to medical treatments, and worsened medical outcomes (Katon 1996). And, 75% of patients with depression present physical complaints as the reason they seek care (Unutzer et al. 2006). Medical outcome studies reveal that depression results in more functional impairment than chronic diseases such as diabetes, arthritis, and angina. Seven of 10 of leading causes of death have a psychological and/or behavioral component, including heart disease, cancer, stroke, chronic lower respiratory disease, accidents, diabetes, and suicide (Lurie 2009). Patients with schizophrenia die up to 10 years earlier than matched controls, and those with all forms of severe mental illness die up to 25 years earlier (Parks et al. 2018). Early identification and effective treatment of mental disorders and other psychological factors affecting medical illness can dramatically reduce the costs, disability, and suffering associated with medical illnesses.

However, many people who suffer from mental illnesses and substance use disorders are not properly diagnosed and never receive effective treatment. There are many factors that contribute to this unfortunate reality, including lack of awareness of mental illness, limited availability of effective treatments, ineffective screening, inadequate access to treatment, and the stigma against mental illness. New systems like collaborative care, medical and health homes, and integrated mental health services are designed to address these problems. The educational gaps are being filled by teaching preventive medicine to psychiatric physicians, as

well as primary care psychiatry to medical providers. Furthermore, a large number of thought and education leaders are now being trained in a number of combined dual-degree residency programs such as internal medicine- or family medicine-psychiatry.

Due to the vast shortage of specialty mental health providers, the primary care doctors have become the "de facto" mental health providers in much of the world, in decades past. Unfortunately, in the USA, only around 50% of patients with depression are recognized in the primary care setting. And, only 20–40% of these patients demonstrate recovery after 12 months. This is despite the fact that these services are providing 70–90% of the prescription medications for depression, and 10–30% of all Americans are on these medications.

Escalating workforce shortages are another component in this failing health equation. The world population is growing rapidly, and with a geriatric population outpacing all other demographics, there will be nearly one in five residents aged 65 and older by 2030 in the USA alone. Between 2010 and 2050, the US population is projected to grow from 310 million to 439 million, an increase of 42% (U.S. Department of Commerce Economics and Statistics Administration 2010). With this growth comes an expanding need for care with a diminishing set of resources. And, despite the reputation for innovation, the USA is currently ranked last in quality of care outcomes in nearly every category of health delivery in the developed world, despite care being ranked as one of the most expensive globally (Davis et al. 2014). The largest current danger is the increase in population with the reciprocal drop in medical workforce. Fewer and fewer new college students attend medical school, and only around 5% specialize in psychiatry. In the USA, about 1000 new doctors begin psychiatry residencies each year (Hauer 2015). The current provider network is rapidly aging with 48% of psychiatrists in 2015 already over 60 years of age. The Department of Health and Human Services has identified roughly 4000 health professional shortage areas for mental health. As of September of 2016, the Henry J. Kaiser Foundation reported that there were 4454 shortage areas in the USA, with an average of 48% needs met. They calculate that 2772 providers were needed to shore up the deficits to a minimally staffed level.

A shortage in mental health providers is a global issue as well, exacerbated by maldistribution and unequal access to services affecting people in all income levels. The WHO's Mental Health Atlas 2014 reports that nearly half of the world's population lives in a country where there is less than one psychiatrist per 100,000 people (Robeznieks 2015). In high-income countries, this number is closer to one per 2000. A major factor is that global spending on mental health is still very low. Low and middle-income countries spend less than two dollars per capita per year on mental health, whereas high-income countries spend more than 50 (Robeznieks 2015). And, the majority of spending is going to mental hospitals, which serve only a small proportion of those who need care. Although greater in absolute numbers, the number of social workers, therapists, and clinical psychologists show similar trends. These numbers are no more attractive in other parts of the world. Training more mental health providers in the traditional method will neither satisfy the current need nor keep pace with growing needs of population growth.

Table 1 History of collaborative care advances

Year	Organization	Advance
1960s	American Academy of Pediatrics	Centralized records
1978	World Health Organization at Alma Ata	Primary provider centered care
1996	Institute of Medicine	Named "medical home"
2001	Institute of Medicine – "Crossing the Quality Chasm"	Focus on measure of care quality
2003	World Health Organization – "Achieving the Promise"	Increase collaboration between medical and mental health providers
2006	Institute of Medicine	Increase collaboration between organized medicine and government
2008	World Health Organization – Report on Integrated Care	Study of planning, implementation, and success
2010	Patient Protection & Affordable Care Act	Federal funds promised

Adapted from Amiel and Pincus (2011)

For decades, collaborative and integrated cares have been proposed as solutions to many of these diverse problems. Although only gaining widespread acceptance recently, there has been a long and systematic movement toward these new modes since the 1960s, in the USA (Table 1). There is a broad language used in medical literature to expresses the concepts of collaborative care. This includes terms such as medical-mental health integration, collaborative care, shared care, co-located care, primary care behavioral health, integrated primary care, primary care psychiatry, and behavioral medicine. It has increasingly been agreed upon that collaborative care is that which involves mental and physical health teams sharing information and/or location, and that integrated care involves a deeper and more complete sharing of data, responsibility, and workflow.

The Patient Centered Medical Home and Chronic Disease Health Home

It has become necessary to develop a new strategy for patient care that redefines the used goals, methods, and solutions. For this, a more deliberate and sound organizational framework must be constructed (Table 2). The five principles of collaborative care have been crafted over many years in order to conceptualize solving the problems of limits in funding, manpower, and education (Amiel and Pincus 2011). If the first problem is patient needs not being met, a patient-centered focus can be applied. Rather than trying to connect geographically, economically, and philosophically siloed services, they can be brought to the patient in the care environment in which they are already seen. To cope with limited resources, a population focus can be used, applying ongoing data tracking to allow for more targeted use of resources. Unclear treatment goals can be avoided by using agreed upon terminology

Table 2 Five principles of collaborative care

Problem	Principle of care	Solution
1. Patient treatment needs not met	Patient-centered	Collaboration
2. Resources limited	Population-based	Data tracking
3. Unclear treatment goals	Measurement-based	Concrete goals
4. Ineffective treatment	Evidence-based	Data and research driven
5. Inconsistent quality	Accountable	Tracked and reimbursed

Adapted from AIMS (2014)

and measurement-based goals. The problem of ineffective and outdated treatments can be addressed with a focus on evidence-based research. Inconsistent quality can be better achieved with accountability of the providers and organizations through treatment and outcomes data with agreed upon reimbursement strategies based on care quality.

Effective patient identification can be achieved by systematic screening, diagnosis, assessment, and documentation using validated tools. This screening should include both physical and mental metrics including vital signs, depression, and labs such as blood sugar, lipids, and medication blood levels. Engagement in the integrated care program can be done by introducing patients to the concept of the care team, and to the individual team members when needed. Evidence-based treatment can be provided through a problem specific treatment plan, including patient and family education, primary care prescribed psychotropic medications, and use of time-limited evidence-based counseling. Frequent reassessment with changes or adjustments to treatment plan at least every 30 days is necessary to avoid the pitfalls of inadequate treatment response. Systematic follow-up is necessary to monitor treatment responses and side effects. This, again, can be supported by a case management team using a population-based registry, reaching out proactively to patients who are non-adherent or disconnected from care. Relapse prevention plans are used when care has been both completed. Case management teams engage and support family members, coordinate providers, and to track screenings, labs, imaging, and referrals. Systematic case review and consultation is needed to identify those patients most in need of intervention. Through weekly psychiatric caseload review, patients can be discussed and treatment plans can be rewritten. Program oversight and quality improvement is the final component of the system. More often than not, the incentives that have been proposed are shared financial risk and reward for improved patient care and outcomes. When discussing collaborative and integrated care, it is important to understand that the concepts can be applied in many different ways. The conventional siloed model includes geographically and functionally separate primary care, specialty medicine, and mental health care. These teams are often in different locations, with different policies and procedures, and refer to each other only when necessary, or not at all. A key new model of care is the Patient Centered Medical Home (PCMH), which includes the primary care team as well as a case management component (Table 3). This case management team helps to assess, follow, and link the primary care patient to specialty medical or mental

Table 3 Comparing models of collaborative care in the United States

Care type	Standard	Patient centered medical home	Chronic disease health home
Organization	Siloed/fragmented	Enhanced primary care	Enhanced disease care
Population	All patients at all ages	All patients at all ages	Specific chronic conditions
Home	Any	Based in primary care	Based in condition home
Support	None	Case management	Case management
Coordination	Referral	Specialists coming in/coordinated	Primary care or another specialist coming in/coordinated
Financing	Many payers	Many payers if accredited	Federal (Medicaid) only

health care, either on site or through off-site collaboration. A related model is the Chronic Disease Health Home (CDHH) or Specialty Medical Health Home (SMHH), which focuses care on a medical specialty population (e.g., chronic lung disease, diabetes, or heart failure) and includes the same case management team (Table 3). In this case, the collaboration is with primary care as well as other specialty care. Of note, the specialty care at the center of the SMHH/CDHH can, in some circumstances, be a psychiatric specialty clinic. An example of this could be the community health center serving the chronic severely mentally ill. In both examples, the primary or specialty care is augmented by the principles of collaborative care including the addition of the case managers who perform outreach, social work, and patient education.

With all of these diverse and overlapping care systems, one might ask "where my home should be?" The answer is: "wherever you are." Wherever the most central and frequent treatment takes place is where the patient should be seen. This could include a primary, specialty medical, or psychiatric clinic. If the health needs are very basic, then likely the best place to receive care would be in the primary care setting. If the physical and mental health needs are few, a standard model of care may be adequate. Here is where primary prevention takes place for higher functioning patients. If the patient has additional mental health needs then they can either be referred "out," or even better, referred "in" if the office has integrated mental health. If the health needs are chronic and at least moderately complex, a PCMH may be a better option, bringing collaborative specialty and mental health care into the office. This way referrals and transfers can be done with the assistance of a case or care manger. This is secondary prevention where illness may have already taken hold, but prompt treatment can limit the damage. If the health needs are chronic, severe, or highly complex, a SMHH/CDHH might be more appropriate for care. This is a system more in line with tertiary prevention, which is designed to limit morbidity and mortality. This model might be best for patients with chronic and persisting organ disease, like heart, liver, lung, or kidney failure. In these cases, mental health can either be collaborative (on or off-site) or integrated (on-site). The Four Quadrant Clinical

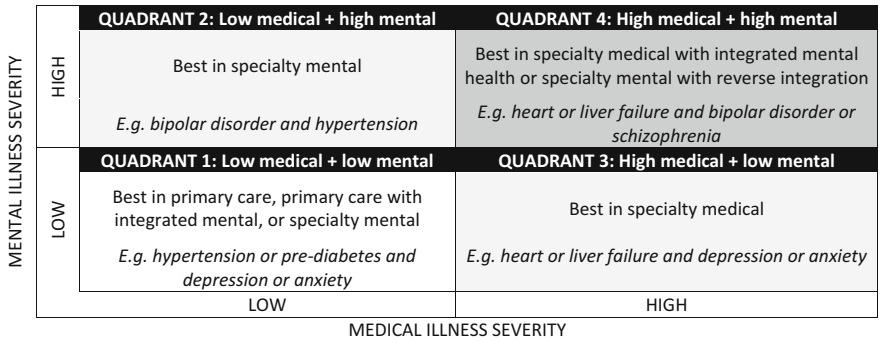

Fig. 1 The four quadrant clinical integration model. (Adapted from Behavioral Health/Primary Care Integration and the Person-Centered Healthcare Home 2009)

Integration Model can be an excellent reference to how this system fits together (Fig. 1).

One excellent example of a PCMH is the TEAMcare model (https://aims.uw.edu/teamcare), which, like the IMPACT program, was developed at the UW (McGregor et al. 2011). This trial is the culmination of more than 25 years of collaboration between the UW and Group Health, a subsidiary of Kaiser Permanente, to improve care for patients with chronic diseases in the primary care setting. The project provided a model for comprehensive, cost-effective services designed to treat the whole person by breaking down costly care silos in addressing multiple medical and behavioral health conditions. It has already successfully implemented in over 30 health settings throughout North America and serves as a "ready-to-implement" model for PCMH and Accountable Care Organization (ACO) programs. Within 10–15 sessions TEAMcare care managers, backed by a case review team, can make lasting changes in patient health behaviors.

The TEAMcare focus is on patients with chronic illnesses. This approach was founded on the basis that 48% of population has chronic condition, including 87% of federally insured (Medicare) beneficiaries (McGregor et al. 2011). And, almost half of these people with chronic conditions have more than one. Disease management interventions that focus on single conditions including diabetes, coronary artery disease, or depression have been shown to improve control of that individual condition, but are often ineffective in overall health and quality of life improvements. By taking into account the most chronic, disabling, and interdependent problems in an organized fashion, the whole patient can be treated more effectively (Shojania et al. 2006). One way to do this is to focus on enhancing management of patients with natural clusters of diseases. Coronary heart disease and diabetes have similar guideline-level recommendations and often co-occur. Additionally, both these disorders are associated with a high prevalence of coexisting depression, which adversely affects disease control and outcomes.

This patient-centered intervention is integrated into primary care by applying one treatment approach across all three chronic illnesses. Disease-specific treatment

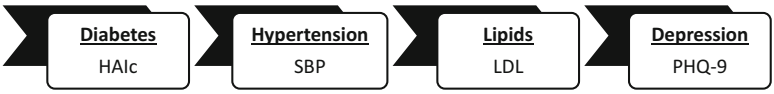

Fig. 2 Patient-centered medical home sample dashboard. *HAIc* hemoglobin A1c, *SBP* systolic blood pressure, *LDL* low density lipoprotein, *PHQ-9* patient health questionnaire-9 question

recommendations combined Group Health evidence-based guidelines with the treat-to-target program for diabetes from the Kaiser Care Management Institute (McGregor et al. 2011). This multispecialty treatment team was made up of a diverse variety of members. The primary care providers lead the care, prioritize treatment goals, and direct overall treatment. The specially trained nurse care managers educated and coached patients in management of both medical and mental health. Specialist consultants, including psychiatry and medical specialties like cardiology and endocrinology, provided weekly caseload review. Monitoring is organized around a symptom dashboard, which is used to track diabetes, hypertension, lipids, and depression (Fig. 2). The assessment of depression included liberal use of the Patient Health Questionnaire (PHQ-9) and initial depression history. Antidepressant treatment was based on a simple sequence of medications commonly used in primary care. Tailored approaches to enhancing self-care strategies, medication adherence, pain, smoking cessation, physical activity, healthy eating, and insomnia were employed. Building on the prior IMPACT studies, brief counseling interventions like Behavioral Activation and pleasurable activity scheduling were also used.

At one year, patients with the TEAMcare intervention were significantly less depressed than controls and also had improved levels of blood glucose, low-density lipoprotein cholesterol, and systolic blood pressure. The team estimated that the 2-year intervention saved $1224 per patient, on average. This is for patients whose medical care costs health care systems approximately $10,000 per year, said Katon et al. (2012).

Part 2: Integrated Mental Health

Another augmentation that can be brought into these health centers is the idea of Integrated Mental Health (IMH), which can be added to basic care or to the enhanced PCMH or CDHH models (Table 4). This is defined as not only the addition of a collaborative team but one that adds both colocation and shared workflow for mental health. In this case, there are no referrals to mental health, because mental health is already involved one way or another with the care of all patients. This includes the stepped-care concept where patients doing well will likely not come into contact with the mental health component of the team but will still be screened and followed as a part of the population. If there are escalated needs, the primary care provider can reach out directly to a case or mental health care manager for support, or directly to the psychiatrist for more acute needs (Fig. 3). In this way, all patients are

Table 4 Transforming basic primary and specialty care to collaborative and integrated care

Base care	Augmentation	New title	Care model
Primary care	Case manager	Patient-centered medical home	Collaborative
	Mental health care manager and consulting psychiatrist	Primary care with integrated mental health	Integrated
	Case manager, mental health care manager, and consulting psychiatrist	Patient-centered medical home with integrated mental health	Integrated
Specialty medical care	Case manager	Chronic disease health home	Collaborative
	Mental health care manager and consulting psychiatrist	Specialty medical care with integrated mental health	Integrated
	Case manager, mental health care manager, and consulting psychiatrist	Chronic disease health home with integrated mental health	Integrated

Case manager: usually a clinical social worker working in a medical setting that assesses, plans, implements, coordinates, monitors, and evaluates the options and services required to meet the client's health and human service needs
Mental health care manager: a counselor, clinical social worker, psychologist, or psychiatric nurse, working in primary care, who coordinates the medical and mental health care providers, performs brief case management, and administers brief psychotherapy
Consulting psychiatrist: on- or off-site psychiatry consultant who works with the medical team, principally through the mental health care manager, to provide consultation, education, direct patient care, and service oversight

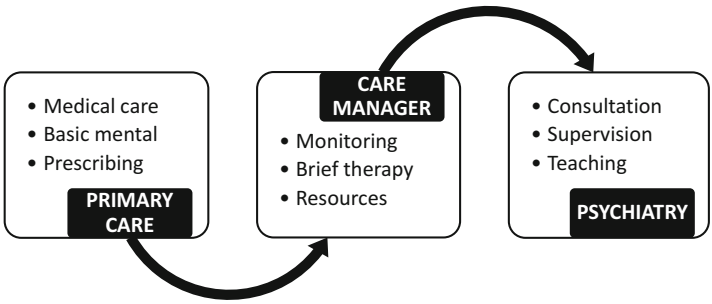

Fig. 3 Roles on the integrated team

shared, but their proportion of time with any component of the team is based on their particular mental, physical, and social needs (Table 5). The Mental health care manager (MHCM), also known as a behavioral health care manager or just "care manager," is a core concept in this model. This role can be taken by a medical assistant, counselor, social worker, psychologist, or psychiatric nurse. The care manager is embedded in the primary care clinic, where they coordinate the medical

Table 5 Roles on the integrated mental health/integrated care team

Primary care provider	*Complex biological problems, mild-moderate psychosocial*
Traditional primary care and prevention	
Focused mental health history from outlines	
Writing psychiatric meds from algorithms, and adjusting if not responding	
Providing basic medical and mental health education/resources	
Consulting care manager or psychiatrist if case is complex or initial treatment fails	
Mental health care manager	*Complex social problems, mild-moderate biopsychological*
Patient education/resources/linkage	
Supporting medications written by primary care	
Evidence-based brief counseling/therapy	
Tracking behavioral health symptoms	
Relapse prevention plan when patients have improved	
Reporting to provider when patients fail to improve	
Consulting psychiatrist	*Complex psychological problem, mild-moderate biosocial*
Program support, oversight, and evaluation	
Clinical supervision to care manager	
Ongoing training of primary care providers in psychiatry	
Consulting with primary care and care manager	
Consulting or co-following with primary care only after initial treatment attempts fail	
Direct patient consultation to most complex/difficult patients ($\leq$10%)	

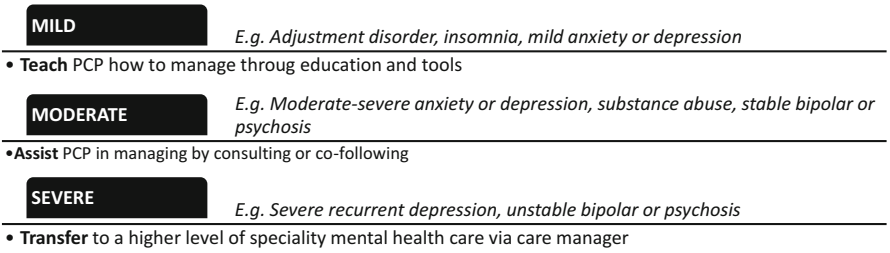

Fig. 4 Integrated team role by acuity

and mental health care providers, perform brief case management, and administer brief psychotherapy. As acuity increases, the IMH team takes an increasingly dominant role in patient care (Fig. 4). This allows for the PCP to continue seeing patients while the more complex, and time consuming, mental health needs are addressed.

Levels of Integration

While the AHRQ consensus panel provided much-needed agreement as to the functions and supports necessary for "true integration," the reality is that many attempts at integrated behavioral health care fall short of this ideal. In fact, most attempts at integration start as something less than full integration and only achieve

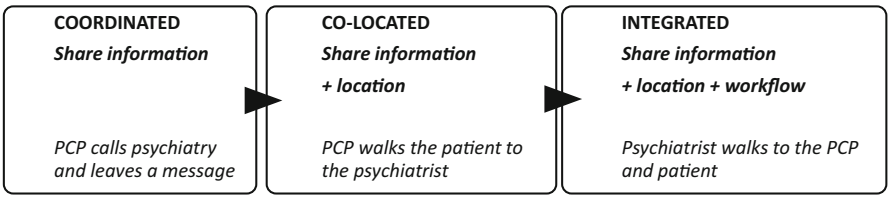

Fig. 5 Levels of mental health integration. *PCP* primary care provider

ideal integration with considerable time and effort. In a 1996 article, Doherty et al. (1996) proposed five levels of integration of mental health services into primary care. However, since that article, there have been many different adaptations that seem to conflict with each other to some extent. Heath et al. (2013) have proposed a standard framework for levels of integrated healthcare that realistically describe the continuum, recognize the merits of each level, and challenge health systems to aspire to higher levels of integration, whenever possible (Leigh and Streltzer 2015; Fig. 5).

Coordinated Care:

Level 1: *Minimal Collaboration*: Behavioral health and primary care providers work at separate facilities, have separate systems, and rarely communicate. When attempts at communication do occur, they are usually based on a particular provider's need for specific information about a mutual patient. Many referrals between practices are unsuccessful. This is the system historically, and currently, present in most private medical and psychiatric offices.

Level 2: *Basic Collaboration at a Distance*: Behavioral health and primary care providers maintain separate facilities and systems, but view each other as resources and communicate periodically about shared patients. Behavioral health is viewed as specialty care. Referrals between practices may or may not be routinely successful.

Colocated Care:

Level 3: *Basic Collaboration Onsite*: Behavioral health and primary care providers are colocated in the same facility but may or may not share the same practice space. Providers still use separate systems, but communication becomes more regular due to close proximity. Referrals usually still occur at this level but have a higher likelihood of success because of proximity. Providers may feel like they are part of a larger team, but the team and how it operates are not clearly defined, leaving most decisions about patient care to be done independently by individual providers. In some cases, this can lead to the illusion of integration, without many of the benefits. This is the system in place in some large organizations like Kaiser Permanente (https://healthy.kaiserpermanente.org), the Veteran's Administration (VA) (www.va.gov), and many teaching hospitals. Movement is steady towards at least this level of coordination in many large organizations.

Level 4: *Close Collaboration with Some System Integration*: There is closer collaboration among primary care and behavioral healthcare providers due to colocation, and there is the beginning of integration in care through some shared systems. A typical model may involve an embedded behavioral health practice, where the primary care front desk schedules all appointments and the behavioral health provider has access and enters notes in the medical record. As professionals have more opportunity to share patients, they have a better basic understanding of each other's roles. Some of the more progressive Kaiser and VA services are functioning at this level.

Integrated Care:

Level 5: *Close Collaboration Approaching an Integrated Practice*: There are high levels of collaboration and integration of behavioral and primary care providers. This system begins to function as a true team, with frequent personal communication. The team actively seeks system solutions as they recognize barriers to care integration for a broader range of patients. Some issues may not be readily resolved, but providers understand the different roles team members need to play and they have started to change their practice and the structure of care to better achieve patient goals.

Level 6: *Full Collaboration in a Transformed/Merged Practice*: The highest level of integration involves the greatest amount of practice change. Extensive collaboration between providers has allowed old system cultures to blur into a single merged practice. Providers and patients view the operation as a single health system treating the whole person, and this "whole person" principle is applied to all patients, not just targeted groups (Heath et al. 2013). This is the least common level of care and is seen in centers that have focused on improving health care delivery like Yale, UC Davis, UCSF-Fresno, the University of Washington, and the various sites involved in the IMPACT study.

Is Integrated Care Effective?

Integrated care has consistently demonstrated excellent results in a variety of settings in both the improvement of mental health and substance abuse outcomes, but also medical illnesses as well. An analysis of 37 randomized studies of integrated mental health in the United Kingdom found significantly improved outcomes at 6 months, and evidence of longer-term benefit for up to 5 years (Gilbody et al. 2006). Integrated and collaborative care has now been tested in more than 80 randomized, controlled trials. It leads to better patient outcomes, patient/provider satisfaction, and reduction in cost, achieving the "Triple Aim" of health care reform (Unützer 2014). The IMPACT model of depression care, described above, is one of the most cited successes for the integration of mental health care in to the primary care setting. In this 1998–2003 study, the care model is shown to more than double the effectiveness of depression treatment in primary care, with a decrease in cost by half. At 12 months,

Table 6 Seven components of integrated care

1. *Patient identification and diagnosis* Screen, diagnose, assess, and document using validated tools
2. *Engagement in integrated care program* Introduce collaborative team, and track patients using a registry
3. *Evidence-based treatment* Problem specific treatment, education, psychotropic medications, and therapy
4. *Systematic follow-up* Monitor response and side effects, reaching out to patients as needed
5. *Communication and care coordination* Engage family, coordinate providers, and facilitate referrals
6. *Systematic case review and consultation* Psychiatric caseload review, and increased care for challenging patients
7. *Program oversight and quality improvement* Administrative and clinical support, outcomes tracking, and incentivized pay

Adapted from AIMS (2014)

about half of the patients receiving IMPACT care reported at least a 50% reduction in depressive symptoms, compared with only 19% in the usual care. The IMPACT patients experienced more than 100 additional depression-free days over a 2-year period than those treated in usual care. Furthermore, even 1 year after the program was discontinued, benefits of the intervention persisted (Unützer et al. 2002). Additionally, adding integrated services added $250 per patient to overall costs but saved $500 in additional medical costs (Katon 1996). The integrated approach seems to work with patients of all ages. Results suggest that reductions in drinking can also be achieved (Table 6).

Other conditions, such as somatization, are earlier on the research trajectory. The potential for other mental health conditions, such as PTSD, have yet to be systematically studied, but early results appear promising (Butler et al. 2008). The new delivery method also shows benefits for severely depressed patients with suicidal ideation who are seen more quickly and delivered to more acute care in a timelier fashion (Kripalani et al. 2010). Another program was completed in 2006 in Texas through St. David's Community Health Foundation, at People's Community Clinic and Lone Star Circle of Care (Leigh and Streltzer 2015). Both clinics provide primary care to "safety-net" populations. Again, an improvement is seen in 58% of patients, who experienced a 50% or greater reduction in their depression scores. This outcome far exceeds the 28% estimates for what was expected with usual care alone and even exceeded the 40% goals for collaborative care. Additionally, emergency room and primary care provider visits declined significantly in the follow-up period, shifting integrated care patients from "heavy" to "average" utilizers. Globally, the patients report significantly better overall health, less pain, and more energy.

Whereas it has been amply demonstrated that integrated and collaborative care is effective, it must be demonstrated that each individual program is so. Intrinsic to this type of work is the need for personalization, evaluation, and quality improvement. In order to determine whether a particular program is effective, defined metrics are

Fig. 6 Overlap of skillsets in integrated care

required. For an IMPACT model integrated mental health service, there are a set of 57 different markers that can be evaluated. Many of these align with the agreed upon components of care required to define a true IMH service (Fig. 6). These fidelity measures are used to determine how close the program adheres to the original model as well as help create benchmarks to determine implementation and success in reaching goals:

Depression Screening: 75% of patients will have documentation of annual screening for depression with the PHQ-2 or similar screening measure

Diagnosis: 75% of patients who have a positive screen will receive a structured depression assessment (e.g., PHQ-9) to help confirm a diagnosis of depression within 4 weeks of screening

Initiation of Treatment: 75% of patients diagnosed with depression will have initiated treatment (antidepressant medication, psychotherapy, or ECT) or attended a mental health specialty visit within 4 weeks of initial diagnosis

Measurement of Treatment Outcomes: 75% of patients treated for depression will receive a structured clinical assessment (i.e., PHQ-9) of depression severity at:
Baseline: within 2 weeks prior or after treatment initiation
Follow-up: within 8–12 weeks following treatment initiation
Continuation: within 3–6 months following treatment initiation

Adjustment of Treatment Based on Outcomes: 75% of patients treated for depression with a PHQ-9 score of $\geq$10 at follow-up will receive an adjustment to their depression treatment (e.g., change in antidepressant medication or psychotherapy) or attend a mental health specialty consult within 8–12 weeks of initiating treatment

Symptom Reduction: 50% of patients treated for depression will have a decrease of >50% in depression symptom levels from baseline as measured by the PHQ-9 or similar quantifiable measure and a PHQ-9 score <10 within 6 months of initiating treatment

Part 3: Training the Physician Workforce

Educating our physician workforce has always been a struggle. There have never, and will never, be enough highly educated practitioners to care for the worlds ill. As discussed, there is nowhere where this is truer than in mental health and primary care. Although far more dramatic in developing nations, the shortages are present even in the wealthiest industrialized nations. Although, it is in countries like the

United States and Great Britain where many of the books are written with which the world is educated. The following is only a partial list of textbooks published on primary care psychiatry in the last 40 years by date, county, and publisher:

1981: Behavioral Problems in Childhood: A Primary Care Approach (Grune & Stratton/Australia)
1989: Patient, Physician, Psychiatrist: Assessment of Mental Health Problems in Primary Care (Drukkerij Van Denderen/Netherlands)
2003: Where There Is No Psychiatrist: A Mental Health Care Manual (RCPsych Publications/Great Britain)
2003: Massachusetts General Hospital Guide to Primary Care Psychiatry, Second Edition (McGraw-Hill Professional/U.S.A)
2004: Ten Minutes for the Family: Systemic Interventions in Primary Care 1st Edition (Routledge/Great Britain)
2004: WHO Guide to Mental and Neurological Health in Primary Care (CRC Press/Great Britain)
2004: Psychiatry for Primary Care Physicians 2nd Edition (American Medical Association Press/U.S.A)
2007: Psychiatry Essentials for Primary Care 1st Edition (American College of Physicians/U.S.A.)
2009: Primary Care Mental Health 1st Edition (RCPsych Publications/Great Britain)
2009: The Primary Care Toolkit: Practical Resources for the Integrated Behavioral Care Provider 2009th Edition (Springer/U.S.A.)
2009: Lippincott's Primary Care Psychiatry (LWW Publishing/US.A.)
2011: Psychiatry in Primary Care: A Concise Canadian Pocket Guide (Centre for Addiction and Mental Health/Canada)
2017: Integrating Behavioral Health and Primary Care 1st Edition (Oxford University Press/Great Britain)
2017: Mental Disorders in Primary Care: A Guide to Their Evaluation and Management (Oxford University Press/Great Britain)

Training Primary Care Residents in Psychiatry

For decades, the primary workforce for the most severely and chronically ill patients in the United States, and elsewhere, has been the medical trainees: medical students, residents, and fellows. These residents, so called because in yesteryear "resided" in the hospital, work long hours for 3–10 years with the most disadvantaged and afflicted populations while learning the trade of medicine. What this translates to is the residents managing the bulk of the medical and psychiatric care for the uninsured, undocumented, and government-funded populations. This patient population, more than any other, demonstrates the highest rates of physical, mental, and substance use disorders. They are large in number and often fundamentally lacking in inner/emotional, or external/economic, resources to support their general well-being and medical care.

Historically, the primary care and obstetrics and gynecology (OBGYN) trainee has been trained by organized organ and disease specific lectures, focusing on form, function, and dysfunction of each system. Where this works well for understanding the pathology of a particular organ, such as the kidney or heart, it does not address the more global issues around the higher order problems that might be at play. Just as an organ disease can be diagnosed and treated, so can diseases of the organism, society, and population be diagnosed and treated. And, by treating early, broadly, and equally, diseases at any level can be addressed. An educated, housed, supported, and productive member of society is less likely to abuse drugs and alcohol, ignore health-related behaviors, and will seek treatment early in the course of illness. What this means for primary care providers is that they need a much better education in prevention rooted in health behavior. They need more education in mental health and substance use disorders, as it is these that lead to the difficult to treat illnesses that plague Western society: obesity, diabetes, hypertension, heart attack, stroke, cancer, and suicide. The task is to teach primary care providers how to see their patients as more than a collection of diseased organs and to understand that managing their motivation, education, and cooperation is more important than waiting for their organs to fail. This is where the emerging field of primary care psychiatry fits in.

In order to move the health system forward, a new approach to care delivery must be put into place. An enhancement is needed of the already mandated training for family practice and pediatric physicians, and the establishment of a new educational requirement in internal medicine and OBGYN. The Accreditation Counsel for Graduate Medical Education (ACGME), which guides medical resident training, is currently revising requirements in psychiatry to better address these discrepancies, but this has not yet been embraced as robustly by other specialties. That being said, several governing organizational bodies, like the American Psychiatric Association (APA) and Association for Medicine and Psychiatry (AMP), have begun work in earnest to develop mass training for these new modes of care delivery and integration of skills. Although there are many dual-degree programs currently in the United States, to be discussed later, there are only a small handful of academic centers at the forefront of integrated mental health and collaborative care skills training.

In 2006, Dr. Hoyle Leigh surveyed 1365 directors of accredited residency training programs in a broad range of medical specialties (Leigh et al. 2006). A majority of the programs were very dissatisfied with the quality of their behavioral health training. The dissatisfaction rates for OBGYN, Internal Medicine, Pediatrics, and Family Medicine were 92%, 71%, 85%, and 41%, respectively. In 2014, a group from Michigan State University (MSU) proposed a possible model for training medical residents in mental health (Smith 2014). They described that a "quantum change" was necessary in the way doctors are educated. The idea was to find a way to educate medical residents in mental health during all 4 years of their education so that they would be adequately prepared to address the psychosocial needs of their patients after graduation. Their program began with a 1-month psychosocial rotation focused almost exclusively on interviewing techniques. The program was expanded by teaching learners to triage the psychosocial needs of patients ranging from "non-distressed" to "moderately to severely stressed." These ideas cover the broad range

from normal treatment adherence and health concerns to major depression, panic disorder, and psychosis. The team sites the rich literature collected by the Society of Teachers of Family Medicine (STFM) and The World Organization of Family Doctors (WONCA). The expanded curriculum builds on a successful program in Germany where residents spend up to 80 hours per year focused on mental health training. The subjects from the German study were cognitive-behavioral treatment, personal awareness, medically unexplained symptoms, and mental health conditions. The four-step model used at MSU involved diagnosis and doctor-patient relationship, basic treatment principles, mental health care, and personal awareness. These skills are learned and practiced both in a classroom setting, but also in special mental health clinics in the same primary care sites where the learners see their regular patients.

Two interrelated training programs in primary care psychiatry currently exist at the University of California at Davis (UCD) (www.ucdmc.ucdavis.edu/psychiatry/), in Sacramento, and the affiliated University of California at San Francisco Fresno Medical Education Program (UCSF Fresno) (www.fresno.ucsf.edu/psychiatry/) in Central California. At Davis, the Train New Trainers (TNT) Primary Care Psychiatry Fellowship was begun, and in Fresno, an IMPACT model clinic paired with a TNT training program for family medicine residents. In the last few years, the AIMS center has also allied with the APA and several academic institutions to begin training a generation of providers in this new and effective methodology. The University of Washington offers the first ever integrated mental health fellowship for psychiatrists.

Advanced Mental Health Training in Family Medicine Residency

Many family medicine residents have specific training programs allowing for enhanced training in certain areas of interest within the breadth of family medicine. This can be done in one of three ways: area of concentration, specialty track, or fellowship. These are of increasing intensity and organizational formality. An Areas of Concentration (AOC) provides a common framework around which residents, program directors, and faculty may design additional training that is above and beyond the core training in family medicine. An AOC is a program designed for an individual resident and should not be confused with a "Focused Program" or "Track." An example of a university that offers multiple AOCs is the University of Pittsburg (http://stmargarets.familymedicine.pitt.edu/). There they offer an AOC program in sports medicine, geriatrics, international health, academic leadership, OB/women's health, hospitalist medicine, and behavioral health. UCSF Fresno (www.frenso.ucsf.edu) began offering a 200-hour AOC in primary care psychiatry in 2017, in conjunction with the Davis TNT Fellowship. The participants follow the fellowship curriculum, but with additional weekly supervision, a scholarly project, and at least one 1-month long elective in primary care psychiatry. Each AOC is, by definition, individually designed to fit the needs of the particular resident.

Middlesex Hospital Family Medicine Residency Program (http://middlesexfmrp.org/about-the-program/tracks-of-excellence) in Middletown, Connecticut, offers what they title "Tracks of Excellence." These are offered in maternal/child, palliative medicine/geriatric, global and community health, integrative medicine, academic and leadership, hospitalist, and behavioral medicine tracks. The Medical University of South Carolina Department of Family Medicine (http://academicdepartments.musc.edu/family_medicine) offers seven unique training tracks including academic medicine, geriatrics, global health, hospitalists, sports medicine, women's health, and behavioral medicine. The University of Minnesota (http://familymedicine.umn.edu/education-training/fellowships) offers a unique primary care behavioral health fellowship, which provides 2 years of training on the integration of behavioral health and primary care. The fellowship prepares fellows to provide integrated behavioral health services within primary care setting.

UCSF Fresno Training Program

The UCSF Fresno Departments of Psychiatry (www.fresno.ucsf.edu/psychiatry) and Family Medicine (www.fresno.ucsf.edu/family-and-community-medicine/) now offer extensive training in mental health with an intensive AOC program in primary care psychiatry. This program began in 2013 with the creation of the integrated mental health service. The care delivery was modelled on the IMPACT program from UW, including the use of screening, stepped care, and the addition of a care manager and consulting psychiatrist. The primary care psychiatry training program was based loosely on the Lippincott text of the same name, and then later modified to include components of the TNT program. In the first 18 months of the program PHQ-9 scores decreased by 36% in all clinics (family, medicine, pediatrics, and OBGYN), and by 62% in family medicine (Hersevoort 2015). After 3 years, the family medicine residents saw a 50% increase in their examination scores in behavioral health (Hersevoort 2016).

The content of the program mirrors the UC Davis TNT program and is composed of a combination of didactic trainings, tailored texts and treatment tools, and scheduled supervision to discuss clinical material. Whereas the Fresno program has less didactic time, it is a much larger experiential clinical experience which is spread across the medical student, primary care, and psychiatry resident training. In addition to the teaching and mentorship, the residents have the opportunity to call (in real time) on the consulting psychiatrist and care manager. They also rotate formally through the integrated mental health clinic within their department. This means that the residents in family medicine, internal medicine, pediatrics, and OBGYN can actually phone the mental health team and receive advice during their routine care of patients. Simpler cases can be managed on the phone, but more complex cases may need an immediate consultation for safety, medication, psychotherapy, or case management.

The formal rotation includes patients that are being co-followed by the integrated mental health service and have either been referred from a brief encounter or have

been evaluated in clinic prior. These patients have mental health needs that have been deemed to be too difficult to manage from a distance or by phone and yet not so severe that that they cannot be managed in a primary care setting. These training teams typically consist of one psychiatry attending, one senior level psychiatry resident, a medical student, and one or two primary care residents in their first or second year of training. The trainees use a structured interview tool to prepare the case for brief formal presentation before seeing the patient on their own. During pre-rounds, the team can make recommendations on aspects of the interview to focus on and consider possible obstacles, as well as directions for possible treatment based on the chart review. The trainees will then see the patient on their own, or with another more senior trainee, and present their findings to the team. After another brief discussion and highlighting what was learned, the plan is enacted and the attending and trainee provide the patient with prescriptions, educational handouts, therapy referrals, and often other medical referrals.

The result of this collaboration is better care with better outcomes. Illnesses that were thought to be psychological by the primary care doctor can sometimes turn out to be medical. Major overlap in symptoms such as pain, sleep, and daytime sedation are treated. Streamlining of medications is also a possibility when you have experts from two fields actively involved. "Many birds with one stone" is a motto of the service. With a fragmented system involving multiple specialties, a patient might be on a sleep aide, an antihypertensive, and an anxiolytic for PTSD, whereas an alpha blocker like prazosin might treat all three. Another important collaborative care strategy is for the treatment of chronic pain. A medication like gabapentin can be used for not only neuropathic pain but also for anxiety, sleep, restless legs, tremor, and alcohol craving. Under the right circumstances, a medication like venlafaxine can treat anxiety, depression, neuropathic pain, hot flashes, ADHD, and migraines. Unfortunately, there is the dark side of this principle where something like a tricyclic antidepressant (e.g., amitriptyline) can be used for anxiety, depression, pain, and sleep but with the possibility of daytime sedation, constipation, weight gain, arrhythmia, and even death in overdose. Thus, not only the training, but also the supervision is needed.

Another emergent property that occurs in the integrated primary care clinic setting is that of cultural enrichment. Primary care residents trained in these settings begin their practice of outpatient medicine in a context where they are not only familiar with, but skilled in, this model. They gain mastery over the use of mental health screening tools, care managers, and psychiatry in situ rather than at the other end of a blind referral. These providers will move into practice better trained and expecting a system of better and more complete care than in generations past. They will be less willing to tolerate the fragmented practice of medicine and become champions of improved care delivery and training. Even more powerful is the experience of the medical student. For them, their first experience of care will be from a multispecialty/multidisciplinary team, all working together to monitor and manage the patient's complete care. The UCSF Fresno program hosts two innovative longitudinal teaching programs including the Longitudinal Integrated Fresno Experience (LIFE) program (http://www.fresno.ucsf.edu/medical-student-programs/life-program/) with

UC San Francisco, and the UC Merced San Joaquin Valley Programs in Medical Education (PRIME) (www.ucdmc.ucdavis.edu/mdprogram/sjvprime/) in collaboration with UC Davis. These students may, in the same week, see the same patient through the four different lenses of family medicine, internal medicine, neurology, and psychiatry.

LIFE and PRIME Programs

The LIFE program is a fully integrated 6 month clinical clerkship provided for UCSF medical students in their third year. The goal of the program is to provide medical students with educational experiences which adapt to the changing healthcare delivery systems, underserved populations, evolving health information systems, and increase focus on patient-centered illness models. This clerkship was designed to address the core competencies for family and community medicine, internal medicine, neurology, and psychiatry. The overarching goal of the program is to expose students to the unique blend of rural and urban underserved patient population that exists in the Central Valley of California. The students will be expected to gain an appreciation of the socioeconomic diversity of the area and the impact this can have on health care delivery.

The San Joaquin Valley PRIME initiative is a collaboration between UC Davis School of Medicine, UCSF Fresno, and UC Merced, to train the next generation of San Joaquin Valley physicians. It is the latest addition to the University of California's innovative programs to increase the diversity of the medical profession and remedy the uneven distribution of physicians in California. PRIME focuses on meeting the needs of distinct regions or populations through specialized coursework, structured clinical experiences and clinical training under the supervision of experienced local practitioners. Graduates of PRIME gain the knowledge and understanding needed to effectively guide health policies and become community leaders. They will go on to become important patient advocates, technologically adept clinicians and life-long learners. Graduates also will enhance the health of their communities by increasing access to clinical care and improving quality of care. Other PRIME programs are in place at Universities of California at Irvine, Los Angeles, and San Diego.

Train New Trainers Primary Care Psychiatry Fellowship

The TNT program began in 2016 at UCD and expanded in 2017 to UC Irvine (UCI). The goal of the program is to train providers already in practice, who may not have benefited by the recent advances in educational curriculum. The program is an intensive year-long clinical education certificate program for primary care trainees and providers (e.g., internal medicine, family medicine, emergency medicine, neurology, physician assistant, nurse practitioner, psychiatric nursing) who wish to receive advanced training in psychiatry. The primary goal of the fellowship is to

provide teaching and mentorship in the area of primary care psychiatry. Trainees will learn how to complete an efficient psychiatric interview in the busy primary care or medical setting. They will also be trained to effectively diagnose and treat commonly encountered psychiatric conditions such as: mood, anxiety, psychotic, and substance use disorders. Most importantly, these trainees will learn how to teach these principles to their primary care colleagues.

The fellowship is the first in the world to provide intensive, yearlong training in primary care psychiatry. It fits well with UC Davis' strong tradition of linking psychiatry and primary care in medical education, including two combined residency programs: one in internal medicine and psychiatry and the other in family medicine and psychiatry. The program offers a recipe to follow for medical schools and residencies throughout the USA and the world. The faculty is uniquely and completely composed of either dual-boarded physicians, or psychiatrists who work full time at the interface of medicine in psychiatry in integrated, collaborative care, or in psychosomatic medicine services.

Through more than 50 hours of individualized case-based mentorship and classroom teaching and discussions, dozens of physicians, nurse practitioners, and physician assistants are learning to conduct psychiatric interviews and then diagnose and treat mood, anxiety, psychotic, and substance misuse disorders. They also gain insight for knowing when to proceed with treatment and when a psychiatric referral is essential, such as a case of schizophrenia or high suicide risk. The curriculum includes:

- Two multi-day conferences
- Twice per month (live) case-based discussions and patient interviews with a focus on integrated primary care psychiatry
- At least 1 hour per month of individualized (in person or teleconferenced) mentoring sessions with a faculty member
- A minimum of 40 hours of continuing medical education will be included as part of the fellowship tuition

Classes begin in January and coincide with the first weekend conference. The second weekend learning session will take place in the early fall. The first weekend session is held concurrently with a Primary Care Psychiatry Update CME conference, which is open to the public and co-sponsored by the California Psychiatric Association. Registration for both learning sessions is covered as part of the fellowship tuition. TNT fellows takes part in some of this larger conference but will also use meeting space to have small group supervision with faculty. The first conference is a crash course in mental health skills and the second conference is a mid-year augmentation of skills already learned that includes motivational interviewing, behavioral activation, and brief cognitive behavioral therapy as applied to the primary care setting. The second conference is mostly interactive giving the fellows larger roles in the teaching and learning process.

The TNT curriculum was developed by the UC Davis family medicine, internal medicine, and psychiatry faculty. The primary text for the fellowship and conference

is Lippincott's Primary Care Psychiatry. This text, which is part of the Primary Care Series, helps family practitioners, internists, nurse practitioners, physician assistants, and mental health practitioners understand, diagnose, and effectively treat the most common psychiatric problems seen in the primary care office setting. The text contains chapters on depression, anxiety, psychosis, substance disorders, eating disorders, personality disorders, and unexplained physical symptoms. Other special topics such as geriatric psychiatry, sleep disorders, suicide, and violence risk assessment, and cultural considerations are also included. Pre, midpoint, and post-testing will be used to measure changes in practice patterns and general knowledge in primary care psychiatry. Upon completion of this training, fellows will receive a certificate of completion from the UC Davis Department of Psychiatry and Behavioral Science. To date, the fellowship and conferences, the TNT program has trained more than 300 primary care providers in the fundamentals of primary care psychiatry and it continues to grow.

Training Psychiatry Residents in Collaborative and Primary Care Skills

Collaborative Care Skills

Like the training of primary care residents in collaborative care, the training of psychiatry residents is also in early stages. A report by the APA in 2015 discussed the state of training for medical students and psychiatry residents and recognized that there is little direct experience for medical students in this emerging field (APA 2015). Some notable exceptions are the longitudinal training programs discussed above, which will follow patients through many different specialties but not always in fully integrated clinics. Other programs offer brief electives. Psychiatry residencies, on the other hand, are further along. According to the study, there are high rates of integrated care rotations available, although primary as electives for senior residents. Many of these rotations are located with The Veteran's Administration (VA) and Federally Qualified Health Centers (FQHCs). Less than half of the respondents offered didactics (Reardon et al. 2015).

A study by Anna Ratzliff and Jurgen Unützer examines the educational needs of the integrated care psychiatrist in teaching the skills they practice. They describe three primary roles of these providers: clinical consultant, clinical educator, and a clinical team leader. This education primarily includes teaching during clinical consultations but can also include handouts, scheduled trainings, and educational meetings (Ratzliff et al. 2015). This highlights the need for both formal didactics in medical and primary care education and clinical training experiences for psychiatry residents. There also appears to be a divide in how different subjects are covered based on the overlap of skills involved (Fig. 6). For instance, common mental disorders like depression and anxiety can be addressed by all integrated team members including the primary care provider, psychiatric consultant, and care manager. More specialized issues like dementia, traumatic brain injury, and medical monitoring of risk factors are better managed by the physician teams. More specialty

mental health disorders like bipolar, psychosis, and personality disorders are better managed by the mental health providers.

Two somewhat different training programs in primary and collaborative care skills for the psychiatrist currently exist. These are the UW Integrated Mental Health Fellowship and the UC Davis Integrated Medicine and Psychiatry (IMAP) curriculum. Washington has the distinction of hosting the Advancing Integrated Mental Health Solutions (AIMS) center, where the IMPACT study was done. Due to the current overwhelming need to train physicians in the leadership and development of the system of care, this fellowship is focused on research and systems development. "The Integrated Care Fellowship offered at the University of Washington Department of Psychiatry and Behavioral Sciences is a unique opportunity to learn how to provide integrated care through the delivery of consultation to non-mental health settings (such as primary care), provision of tele-psychiatry, and leadership to improve systems of care" (Integrated Care Fellowship 2016).

This fellowship offers five positions per year, including a combination of clinical experiences, training in integrated care implementation, and integrated care scholarship. The fellowship is focused on developing both clinical and leadership skills to deliver population mental health, in contrast to the classic individual approach of medicine. Furthermore, there is an emphasis on how to leverage psychiatric expertise through working with other providers in both multilevel and specialty teams. Fellows will have the opportunity to develop integrated mental health services and also work in community mental health settings, delivering and/or developing systems to provide primary medical care. The 1-year fellowship includes a combination of clinical experiences, training in integrated care implementation, and integrated care scholarship.

Another extremely forward-thinking program has been developed at Yale University, by Doctors Barkil-Oteo and Huang. Their report titled "Teaching Collaborative Care in Non-Collaborative Settings" outlines a detailed didactic curriculum which is now available on the AADPRT website (Barkil-Oteo et al. 2015). This curriculum has been paired with the collaborative care education program from UW to create an even more robust package. This combination is especially useful for programs without integrated care clinics yet available. To help further define the educational goals in the field, the faculty from the AIMS Center highlighted the new integrated mental health and collaborative care milestones at the 2015 AADPRT meeting. These include:

- Devises individualized treatment plan for complex presentations
- Integrates multiple modalities and providers in comprehensive approach
- Supervises treatment planning of other learners and multidisciplinary providers
- Shows knowledge sufficient to identify and treat a wide range of psychiatric conditions in patients with medical disorders
- Demonstrates sufficient knowledge to systematically screen for, evaluate, and diagnose common medical conditions in psychiatric patients and to ensure appropriate further evaluation and treatment of these conditions in collaboration with other medical providers

- Discusses methods for integrating mental health and medical care in treatment planning
- Provides integrated care for psychiatric patients through collaboration with other physicians
- Leads a multidisciplinary care team
- Demonstrates effective verbal communication with patients, families, colleagues, and other health care providers that is appropriate, efficient, concise, and pertinent
- Demonstrates written communication with patients, families, colleagues, and other health care providers that is appropriate, efficient, concise, and pertinent

Primary Care Skills

Several different large programs have taken steps to strengthen the primary care skills of their psychiatric physicians. One notable example is the VA Psychiatry Primary Care Education (PsyPCE) program which embeds primary care teams in the psychiatric services in order to consult and teach (Badre et al. 2015). Another program in development is through thought leaders in the Association of Medicine and Psychiatry (AMP) at the Universities of California at Davis, San Francisco, and San Diego, with Washington, Rush, and Duke. This is made up of the IMAP curriculum and the Preventive Medical Care in Psychiatry text (McCarron et al. 2014). This program was developed in order to address the severe medical risks in patients who are identified as having mental health problems. Both a published sample curriculum and a text and study guide in preventive medicine for psychiatrists have been developed. The reasoning behind this training is the increased morbidity of patients with psychiatric illness by non-psychiatric illness. In a 17-years study of over 80,000 patients, it was found that patients with any mental illness died 8.2 years earlier that those without, and 20–30 years earlier with severe mental illness, particularly those with comorbid substance use disorders (Parks et al. 2018). These factors were determined to be primarily due to socioeconomic factors including a higher proportion of chronic health conditions and poorer access to preventive medical services.

There is clear and convincing evidence of metabolic risk in antipsychotic use and agreed upon guidelines for monitoring, yet few providers are consistently screening. Although there is some evidence that electronic solutions, like best practice prompts, may improve rates, a deeper solution is needed. This involves maintaining at least a minimum of primary care skills in psychiatric providers and moving some of the monitoring of preventable chronic illness into the mental health practice and hospital. If vital signs are taken consistently and labs ordered promptly, we will need providers that feel comfortable interpreting them and intervening. This type of care is part of "reverse integration" and focuses on the delivery medical care to psychiatry patients and is suggested to cover all 4 years of residency. This IMAP curriculum, designed in large part at UC Davis, builds from the idea that psychiatry residents do not have adequate training in general medicine to care for the needs of their patients if they arise (McCarron et al. 2015, Table 7). With the host of medical issues in

Table 7 Suggested IMAP curriculum

PGY-2
Overview of preventive medicine aspects of psychiatric care
Cardiopulmonary disorders
Endocrine/metabolic disorders
Infectious disorders
Oncologic disorders
Geriatrics
Pain medicine
PGY-3
Overview of mental health disparities and increased morbidity
Learn how to provide patient-centered care
Introduction to integrated and collaborative mental health care
Motivational interviewing in a collaborative setting
Brief psychotherapies: cognitive behavioral therapy, problem solving therapy, and supportive psychotherapy
PGY-4
Longitudinal learning in preventive medicine
Teaching and providing consultation to colleagues
Team-based learning (case-based)
Fundamentals of health behavioral change
Learning skills in advocacy for those with mental illness and comorbid health conditions

Adapted from McCarron et al. (2015)
PGY postgraduate year

mental health patients, this is less than ideal for patients that are less likely to seek out medical care on their own. Basic concepts of medical screening, behavioral change with motivational interviewing (MI), and basic chronic disease management are greatly needed. Just as a collaborative care clinic might expect the primary care doctor to screen for and treat depression, the same might be said for a psychiatrist in reverse. Initial management of hypertension, diabetes, high cholesterol, or smoking or alcohol cessation should not be outside the abilities of mental health providers. A psychiatrist should, of course, not be expected to manage persistent or severe medical illness, just as an internist would not be expected to manage persistent severe depression, bipolar, or schizophrenia. The authors propose the following recommendations for IMAP faculty development when combined-trained faculty members are not available:

- Encourage the incorporation of brief psychotherapies and motivational interviewing with most of the didactics
- Consider inviting non-psychiatry faculty members from internal medicine, family medicine, pediatrics, and obstetrics-gynecology to discuss general medical topics
- When possible, co-presenting cases with non-psychiatry faculty is ideal

- Choose course organizers with a high level of familiarity about the IMAP curriculum and mentor other faculty who wish to learn this content
- Use existing curriculum, as outlined in this article, as an educational supplement

The text to accompany the curriculum is Preventive Medical Care in Psychiatry. This is a practical guide for clinicians written for psychiatrists in training and in clinical practice, as well as other health care providers who wish to learn an evidence-based and user-friendly approach to prevent commonly encountered illnesses in their patients. The book is easy to use, with sections devoted to general principles of preventive psychiatry, cardiovascular and pulmonary, endocrine and metabolic, infectious, and oncologic disorders. It provides evidence-based approaches to care across the prevention spectrum, from primary prevention (how to keep people healthy) to secondary prevention (how to detect early signs of common illnesses), through tertiary prevention (how to prevent disability and adverse outcomes once patients develop medical problems). An example is below for diabetes mellitus screening and treatment:

- **Screen**: Yearly hemoglobin A1c (HAIc) after 45, or with body mass index of >25 and risk factors
- **Target**: Ideal = HA1c < 6, treatment goal = <7
- **Behavior**: Structured program in diet and exercise
- **Medications**: Metformin 500 twice daily for 1 week then 1000 twice daily
- **Side effects and risks**: Diarrhea or nausea (mostly in first week), do not use in renal disease or pregnancy

Training Dual-Degree Residents in Education and Leadership

Developing faculty to teach the IMAP curriculum can be challenging because of the overlap between general medicine and psychiatry. Combined-trained, double-board, or triple-board certified physicians in family medicine-psychiatry, internal medicine-psychiatry, neurology-psychiatry, or pediatrics-psychiatry-child psychiatry represent a unique and highly trained physician force (McCarron 2016). Unfortunately, there is a very limited number of combined-training programs and graduates to meet this need. Thankfully, a multi-year moratorium on the creation of new combined-specialty residencies has now ended, allowing for more of these uniquely important programs. In the last year, several new programs have begun, while others have closed. Although 95% of collaborative care is currently taught by categorical psychiatrists, there are clear roles for other physicians as well. Up to 18% of supervision was being done by dually-trained physicians in 2015 according to Barkil-Oteo presenting at AADPRT. This role is ideal for them, as they are literally boarded in both specialties and can teach and see patients in both capacities.

UC Davis Combined Internal Medicine-Psychiatry Residency Training Program

There are currently 13 combined medicine-psychiatry residency training programs in the United States which can be assessed through the AMP website (http://assocmedpsych.org/studentstrainees/residency-programs/):

- Charleston Area Medical Center/West Virginia University
- Duke University Medical Center
- Emory University
- Medical University of South Carolina
- Southern Illinois University
- National Capital Consortium Program – Walter Reed National Southern Illinois University
- Texas Tech University
- Tulane University
- University of California at Davis
- University of Iowa
- University of Kansas
- Vidant Medical Center/East Carolina University at the Brody School of Medicine
- University of Texas – Southwestern

The primary objective of the UC Davis Combined Internal Medicine/Psychiatry Residency Program is to train physicians with broad-based skills in both internal medicine and psychiatry (Table 8). Graduates from the program have expertise in areas that combine the skills and knowledge of both disciplines to effectively treat common medical conditions relating to overlap syndromes like substance abuse, somatic symptom disorders, delirium, eating disorders, mood/anxiety disorders, chronic pain, AIDS/HIV, diabetes management, and palliative and geriatric care. A strong emphasis is placed on providing comprehensive medical/psychiatric care to

Table 8 UC Davis medicine-psychiatry sample curriculum

Year	Internal medicine	Psychiatry
PGY-1	ER, GMF, ambulatory, CCU/ICU, continuity	Inpatient, forensic, emergency, PSM/ECT, addiction
PGY-2	ER CCU/ICU, GMF, neurology, continuity	Inpatient, community
PGY-3	GMF, elective, ambulatory, medicine/psychiatry, research, continuity	Outpatient, research, continuity
PGY-4	Elective, GMF, continuity	Outpatient, continuity
PGY-5	Women's health, GMF, geriatric medicine/psychiatry, medicine/psychiatry, elective, continuity	PSM, inpatient, neurology, research, elective, continuity

Adapted from McCarron (2016)
PGY postgraduate year, *CCU/ICU* cardiac care unit/intensive care unit, *ER* emergency room, *GMF* general medical floor (wards), *PSM* psychosomatic medicine (formerly consultation/liaison psychiatry), *ECT* electro-convulsive therapy

underserved patients who are often the most in need of complex care. Trainees are motivated to develop their professional interests as most graduates from the program will become experts in a subspecialized niche. Each resident will pursue a scholarly activity at the interface between their two training areas. A mentor will be assigned to each resident early in the second year of training and at least 4 weeks of protected time will be allocated for study.

Residents will have a sizeable role in the overall direction of the program. They will be encouraged to assume leadership roles internally and externally in the training program. They will have ample opportunity to participate in the development of the curriculum development and mentoring of medical students, particularly those interested in psychiatry, internal medicine, or combined training (UC Davis Combined Internal Medicine/Psychiatry Residency Program 2016). As these residents are expected to be leaders in both the fields of medicine and psychiatry, the expectations are that they will leave the program with not only treatment skills but also organizational and administrative capabilities.

Interactive Lectures:

- **1st Monday of each month: Med Psych Residency Journal Review**
  Combined residents present a recent article at the interface of general medicine and psychiatry to students, residents, and faculty
- **2nd Monday of each month: Med Psych Case Conference**
  Combined residents (excluding interns) present a grand rounds style, interactive, case-based lecture to students, residents, and faculty
- **3rd Monday of each month: Integrated Med Psych Integrated Learning Session (IMPuLSe)**
  Usually faculty driven group interviews with patients who have complex medical/psychiatric conditions
- **4th Monday of each month: Med Psych Residency Administrative Meeting**
  Core faculty and residents meet monthly for "check-in" and to discuss resident-related residency matters

UC Davis Combined Family Medicine-Psychiatry Residency Training Program

There are currently six combined family medicine-psychiatry residency training programs in the United States (https://assocmedpsych.org/studentstrainees/residency-programs/):

- University of California at Davis
- University of California at San Diego
- University of Cincinnati Medical Center
- University of Iowa
- University of Pittsburgh
- Boston Medical Center/Boston University School of Medicine

The Combined Family Medicine/Psychiatry Residency Training Program at UC Davis is one of the first in the nation. Starting in 1995, the goal of the program has been to develop a unique training experience for residents who are interested in dual board certification. The curriculum of the 5-year program follows guidelines published jointly by the American Board of Family Practice and the American Board of Psychiatry and Neurology but also includes a unique curriculum that integrates the two fields (Table 9). The objective of the program is to produce physicians with broad-based training in both specialties and also to accommodate individual residents' specific interests within these fields. As such, residents focus on outpatient community-based care of acute and chronic primary care and psychiatric illnesses from postpartum depression and attention deficit disorder to diabetes mellitus and somatoform disorders. They also become comfortable with inpatient medical care, inpatient psychiatric care, and emergency care in both fields. Graduates are eligible to sit for the board examinations of family and community medicine as well as psychiatry. Roles of graduates range from consultants in liaison psychiatry or family practice, international or rural medicine, addiction medicine or research or administration in family medicine and psychiatry (Han and Nelsen 2016).

The combined program is a 60-month (5-year) experience coordinated jointly by the Departments of Family and Community Medicine and Psychiatry and Behavioral Sciences. Didactics for the resident mirror the categorical family medicine and psychiatry programs as well as case conferences specifically developed for combined residents. During the first 2 years of internship, the combined resident will be exposed to training in neurology, cultural psychiatry, religion and spirituality, legal

Table 9 UC Davis family-psychiatry sample curriculum

Year	Family medicine	Psychiatry
PGY-1	FM block time, cardiology, FM wards, Mather VA, medicine ICU, surgery	Chemical dependency, PSM, forensic psychiatry (inpatient), neurology (inpatient)
PGY-2	ENT, gynecology, Mather VA, newborn nursery, obstetrics, pediatric ER/AC, pediatric wards	Crisis unit, psychiatry (inpatient)
PGY-3	Emergency medicine, FM clinic, pediatrics clinic, maternal/infant care, Mather VA, night float, obstetrics	Psychiatry (outpatient)
PGY-4	Specialty clinic, FM wards, Mather VA, night float, orthopedics, family medicine/psychiatry elective, practice management	Psychiatry (outpatient)
PGY-5	Dermatology, family medicine/psychiatry elective, FM clinic, ophthalmology, practice management, sports medicine, surgery, urology, women's health	Family medicine/psychiatry elective, neurology (outpatient), PSM, psychiatry (inpatient)

Adapted from Han and Nelsen (2016)
PGY postgraduate year, *FM* family medicine, *ENT* ear, nose, and throat, *ICU* intensive care unit, *VA* Veteran's Administration, *PSM* psychosomatic medicine

issues in psychiatry, ethics, milieu therapy, empathic interviewing, psychopharmacology, and psychosomatic medicine seminars. Two 2-week blocks are spent in family medicine educational seminars where topics vary from diabetes management to mental health groups to splinting and casting.

The third and fourth year residents participates in family medicine didactics on Tuesday afternoons while on family medicine rotations and participate in psychiatry didactics while on psychiatry rotations. During the year-long psychiatry continuity rotation, the combined resident is exposed to topics such as adult case conference, cognitive therapy, cultural psychiatry, ethics, psychotherapy structure of the mind, psychotherapy supervision, behavioral therapy, geriatrics, psychodynamics of personality disorders, attention deficit/hyperactivity disorder, pervasive developmental disorders, advanced psychopharmacology, self- psychology, psychoanalytic psychotherapy, child psychiatry seminars, and child case conference.

The fifth year resident participates in family medicine didactics on Tuesday afternoons while on family medicine rotations and participate in psychiatry didactics a half day per week while on psychiatry rotations. Didactics in psychiatry include outside supervision, cultural psychiatry, gender identity, spirituality, Gestalt, neuroscience and psychiatry, literature and psychiatry, Jungian, and psychotherapy supervision. Over the 5 years of training, the combined resident is able to capture the educational experiences offered throughout the full 3 and 4 year regular curriculums in family medicine and psychiatry respectively.

Primary Care Psychiatry on the World Stage

In 2008, the World Health Organization and World Organization of Family Doctors released a 206-page report on their integration efforts, highlighting the models of education and care delivery developed across the globe (WHO 2008). They began the document by stating that integrating mental health into primary care facilitates person-centered and holistic services, both which are central to the values and principles of the Alma Ata Declaration in 1978. These projects included Argentina, Australia, Belize, Brazil, Chile, India, Iran, Saudi Arabia, South Africa, Uganda, Great Britain, and Northern Ireland. Although diverse in their locations and models of care, what these 12 projects shared were the partnering of primary care and mental health providers, collaboration during patient care, and ongoing education of the medical workforce. These models not only ensure good-quality primary and mental health care but also provide training and supervision to primary care practitioners enabling increasing competence and autonomy in managing mental disorders. Over time, primary care practitioners have become more confident, proficient, and independent, lessening the need for specialty mental health support. The report goes on to say that adequate training of primary care workers is a key requirement for these endeavors to be successful. Pre-service and/or in-service training on mental health issues is an essential prerequisite. This should include basic education on the epidemiology, diagnosis, and treatment of common mental disorders. The intimate relationship between mental and physical health and illness is also key. Training

should also include rapport building and how to speak with and educate patients and families. These skills include active listening, empathy, use of open and closed questioning techniques, and understanding nonverbal communication. Frequent practice of new skills as well as ongoing support and supervision are also essential to solidify and maintain these new skills. It should be pointed out that training non-physicians, and even non-medical personnel, are necessary in order to make up for limitations in skilled providers.

Also released in 2008, The Mental Health Gap Action Programme (mhGAP) identifies strategies to scale up mental health coverage in resource-constrained settings (WHO 2008). This report includes detailed information on an "intervention package," which includes evidence-based methods to identify and treat mental health and other neurological conditions. The report highlights that education of the workforce, the patients, and their families and communities are also essential to care. In 2013, the WHO released their "Mental health action plan 2013–2020." This included four major objectives: (1) more effective leadership and governance for mental health, (2) provision of comprehensive, integrated mental health, and social care services in community-based settings, (3) implementation of strategies for promotion and prevention, (4) strengthened information systems, evidence, and research (WHO 2013). The action plan relies on six cross-cutting principles and approaches which include: (1) universal health coverage, (2) human rights, (3) evidence-based practice, (4) life course approach, (5) multisectorial approach, and (6) empowerment of persons with mental disorders and psychosocial disabilities. This plan focuses on the development of policy, funding, and infrastructure that would allow them to happen in a broad way.

In 2015, a multi-part series talked about the tremendous economic and human cost of mental illness and described methods to improve mental health research, diagnosis, and treatment in Canada (Anderssen 2015). The series focuses on providing public coverage for psychotherapy, leveraging innovation and technology, and making sure to educate the young about mental health. Training non-physicians in psychotherapy and integrating them into primary care is one of the recommendations. The article references Britain and Australia as having both made huge investments and advances in these areas. Some of these innovations include directing primary care patients to either a form of structured self-therapy or phone or online therapy. This first tier of psychotherapy could be triggered by family doctors using routine screenings for depression and anxiety to identify need. This system could also monitor progress and direct them to more intensive care if needed.

In a 2015 Article, the World Bank described poor mental health as a major obstacle to economic development in Latin America. In response, the World Bank promoted a paired educational approach for stigma reduction and primary care access as workable solutions (Cruz 2015). By strengthening mental health care in primary care, services are made available near the people, and in their own familiar communities. It describes how the primary care team can resolve many common mental health problems, and through coordination with specialists, more complex cases can be addressed or referred out. In the last few decades in Latin America, there has been a major shift away from hospital care and increasingly toward psychosocial

service centers and the integration of mental health in primary and general health care. The key to this working, again, is by assuring that general medical staff are trained to recognize mental illnesses.

A 2011, World Psychiatry report summarizes community mental health services in the European Region consisting of 53 countries and over 886 million people (Semrau et al. 2011). It talks about the slow and uneven trend towards an increase in community-based mental health services and a decrease in institutional care. Although up to 85% of countries now report having mental health day care, access to such services varies greatly. It is described as "very limited" within some countries, especially in the Eastern parts of the region. One crucial factor in making services accessible to whole populations is the continued integration of mental health services into primary health care. This requires sufficient numbers of primary care staff, regulating their training, and organizing supervision by mental health professionals. While all countries in the European Region increasingly have these services, the extent of this varies widely. Mental health training for primary care staff is available in less than two thirds of countries and is often insufficient. The most fundamental failure is the lack of identification of the mental health symptoms through lack of screening and education of front line staff.

In 2007 in China, a broad reaching community mental health training program was collaboratively developed by the Peking University Institute of Mental Health, the University of Melbourne, and the Chinese University of Hong Kong (Liu et al. 2011). The goal was to train up multi-skilled case workers using best practice principles and education in basic knowledge and skills. By the end of 2009, 96.88 million general population in 112 cities were covered by this program, and a total of 161,800 patients were registered.

In 2014, the PRogramme for Improvement of Mental health carE (PRIME) released a report on five Low- and Middle-Income Countries (LMICs) including Ethiopia, India, Nepal, South Africa, and Uganda (Hanlon et al. 2014). The report describes the needs assessment, an implementation, and scale-up plans of mental health care in primary care and maternal health care settings. In each PRIME country, a comprehensive mental health care plan was developed, implemented, evaluated, and scaled-up. The mental health care plans were multi-faceted and targeted at health service organizations, health facilities, and the community. The WHO educational packages were used for education. A 2017 study evaluated the capabilities of implementing integration of mental health into primary health care in Ethiopia, India, Nepal, Nigeria, South Africa, and Uganda (Mugisha et al. 2017). A checklist guided by the WHO Assessment Instrument for Mental Health Systems (WHO-AIMS) was developed and was used by the Emerging mental health systems in low and middle-income countries (Emerald) research consortium. South Africa and India were ahead of the other countries. Ethiopia, Nepal, Nigeria, and Uganda were working towards developing legislation. Regarding national funding for mental health services, South Africa was the highest at 5%, and Nepal the lowest, at 0.17%. Other vital resources such as human resources and health facilities, and monitoring and evaluation systems, were also found to be inadequate in all countries.

Conclusion

Whenever a new system of care emerges, both obstacles and opportunities arise. Although the concept of collaborative care is not a new one, it has recently returned to the world of medicine with renewed vigor. It arrives supported by the strongest evidence of efficacy as well as improved patient satisfaction and cost savings. With the health systems of the world in an unprecedented state of flux, the time seems to have finally come for this approach to take hold. The world health community will need to continue to focus the limited resources and energy on the care and well-being of the whole person, through screening, education, technology, legislation, and finance. This can be done through rebuilding the care culture and training approaches. Providers need to communicate and teach each other across specialties both formally, through consultation, and informally, through curbsides, shared didactics, and case conferences. A new culture of patient-centered care needs to continue to develop through working collaboratively across specialty and organizational boundaries. The use of technology needs to be further advanced, and more effective financial redesign must be worked toward and legislated. The use of universal screening for depression, shared electronic records, and the use of telephonic or video conferencing technology all show great promise. In the United States, the Affordable Care Act of 2010 extended health insurance coverage but also aimed to improve both the quality and cost of care. The next step will be sustainability through billing and payment reform. Across the globe, organizations like the WHO have worked tirelessly to develop economic, political, and medical solutions to these same problems. Innovative care programs across the planet have demonstrated the effectiveness and feasibility of this new approach to training and care delivery. Although the struggles of developed and developing countries are quite different, they overlap in their shared limitations in access to quality mental health care for their populations. Likewise, the solutions may vary based on economic strength of different regions. Primary care mental health skills may be taught to providers of any level of training, even in a remote or rural region. Expensive residency, fellowship, and dual-degree training programs may only be accessible in places like the United States and Western Europe. What is true for all nations is that with greater collaboration, education, and organization, the people of the world will have much greater access to the fundamental human right of health.

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Talking Cure and Related Forms of Psychotherapies in Psychodynamic Psychiatry

22

Michel Botbol

Contents

Abstract

The talking cure as conceived by Freud has developed from its original concepts to various other formats applied within many psychotherapeutic settings.

This chapter, after addressing the basic psychoanalytic concepts as proposed by its founder, addresses different modifications and adaptations that this model underwent being faced with its limitations. The author describes aspects of psychoanalytic psychotherapy, individual psychoanalytic psychodrama, and psychoanalytically informed milieu-therapy.

Next, he also discusses issues of effectiveness and the scientific foundations, issues that have been questioned in the past and have put application of psychoanalytically inspired therapies under pressure. Recent neuroscientific research seems to offer some evidence to foster Freud's old dream to find neuroscientific evidence for psychoanalytic concepts.

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Psychoanalysis In Psychiatry · Psychotherapy · Talking Cure · Psychodynamic Psychiatry

"Talking cure" is the name given by Sigmund Freud, then a Viennese Neurologist, to the specific psychotherapeutic technique on which he based his invention of psychoanalysis in the late eighteenth and the beginning of the nineteenth century. The talking cure model is grounded on three well-known seminal ideas he discovered when, working on hysteria, he wanted to explain scientifically seemingly neurological symptoms with neither apparent organic causes nor relevant neurological systematization:

1. The idea that these symptoms were due to the expression of unconscious psychic tensions related to repressed memories of real or fantasied traumatic experiences.
2. The idea that the best way to treat these symptoms was to release these tensions through the approach of the patient's unconscious psychic functioning.
3. The idea that the best way to approach the patient's unconscious psychic functioning was to – what he calls – *work through* when associating freely, in a psychotherapeutic setting (couch/chair classical setting or face to face sessions) favoring a state of psychoanalytical regression and an associative dream-like state.

In Freud's views, psychoanalysis is then more than a psychotherapeutic technique. The technique is the base of what he wanted psychoanalysis to become. He saw it not only as a theory of the psychopathological processes involved in the various psychiatric conditions to which he extended the concepts of neurosis, psychosis, and perversions but also as a tool to describe and understand these processes (Freud 1901). Talking cure is then both the clinical base on which the psychoanalytical theoretical assumptions and the psychotherapeutic technique derived from these theoretical assumptions were created.

In both functions, the patient is asked to word their thoughts, during frequent (several weekly) and regular 40–60 mins sessions, by expressing freely – associating – whatever comes to their mind, with as limited as possible judgement and repression. The therapist listens to what the patient says, in a neutral and benevolent attitude, limiting as much as possible his concrete influence and his suggestive power on the patient. This implies that the main aim of the therapist's interventions is not to sooth the patient's sorrow through compassion or pity but rather to help the patient

- Notice his associations or contradictions
- Recognize his inner conflicts
- Give meaning to his psychic moves, associations, and symptoms

The therapist takes into account that this process requests the patient to overcome their resistance to do so.

Based on the idea we just mentioned, the main aim of a psychoanalytic cure is to increase the patient's awareness of their inner conflicts related to (imaginary or real) traumatic experiences from the past (including early childhood), in spite of the fact that these conflicts are actively repressed in the patient's unconscious. Psychoanalysts are trained to keep in mind that the repression of these conflicts is a defense mechanism meant to protect the patient from the violence of traumatism or other overwhelming experience threatening his psychic homeostasis. But a psychoanalyst is also trained to recognize that these mechanisms are actively inducing the patient's pathological symptoms and repetitive mental and behavioral patterns of functioning. These symptoms are then closely related to a process that brings psychic (primary) benefits to the patient and, therefore, cannot be addressed without activating the patient's resistance to change.

In his systematic attempt to refine the talking cure technique and improve its theoretical and clinical functions, Freud discovered two unexpected but crucial effects: the transference and the countertransference (Freud 1895, 1900). Freud observed indeed that in their relation with their therapist, the patient repeats, generally unconsciously, patterns of his past relations with significant others in significant situations. It is what he calls the *transference*. This repetition is expressed and activated by the talking cure itself through the cathartic narcissistic and figurative effects of the narrations on which the talking cure process is based, "here and now as elsewhere and then." These effects are favored by the regressive intimacy induced by the therapeutic expectations of the patient and the therapeutic setting in which it takes place (the regular repetition of the sessions, their neutral and benevolent context, etc.).

Freud noticed also that the transference of the patient has, on the therapist themself, the effect of activating memories of one's own previous affective and relational experiences. It is what he called the countertransference. The therapist has to recognize this phenomenon consciously, first because it challenges his benevolent neutrality in listening to the patient narratives and second because it is a powerful lever to access untold or unconscious patient's feeling and inner conflicts. This is possible only if therapists know enough about themselves and their inner processes to recognize them consciously and work them through to tame them and make them more accessible and familiar to their conscience. In the classical psychoanalytic setting, this is achieved through the own "didactic" psychoanalysis of the therapist, at least to train these crucial skills. In that sense, the psychoanalytic training is a long, difficult, and costly process involving much more than a transmission of specialized knowledge about psychoanalytic concepts. It constitutes an experience of transference and countertransference and their influence on the psychoanalytic process.

Through its transference-countertransference effects, a talking cure is then much more than a verbal exchange. It aims not only at increasing the patient's awareness of their unconscious repressed conflicts through the verbalization of their free associations but also at making them relive past experiences, through imaginary interactions, allowing them to revisit and transform old affective experiences. Psychoanalysis gives indeed to the therapist more than words to understand the

patient's inner life. The evoked countertransference, the own feelings about the own present and past problematic issues that the psychotherapist has been trained to recognize and work through in his own psychanalysis. For that purpose, he uses the knowledge about himself and thoughts and feelings (and sometimes actions) triggered by the interaction with the patient through his psychanalytically informed empathy, seen as a narrative (Hochmann 1984) or a metaphorizing (Lebovici 1999) process. In this metaphorizing or narrative empathic process, the therapist transforms feelings and emotions induced by this intense contact with the patient, into a narrative that offers a therapist access to something of the patient's more or less unconscious conflicts and feelings. In the talking cure process, a therapist can choose to word or not his understanding, depending of his assessment of the availability of the patient to receive and process this feedback. If he decides to word it, he will do it through an "interpretation" or "a construction" he proposes to the patients, being aware that this understanding is only partial and uncertain. In his assessment, he has to take into account, as well, the effect of such interventions on the transference of the patient and on his inner homeostasis.

This process is generally considered now as the most important part of the psychoanalytic process in the talking cure. Indeed, most psychoanalysts consider nowadays that this transference and countertransference interaction is a crucial lever of the talking cure at large. In this perspective, it gives to this technique its therapeutic effectiveness beyond the archaeological research of patients' "truth" that is seen as always relative and never fully reachable. The main psychotherapeutic goal is now to restore the richness of the patient's psychological functioning. This hopefully reduces their impairment due to the way patients use their defense mechanisms to deal with their internal or external reality (Jeammet 1980). Its aim is also *to reconsolidate deeply automatized unconscious action plans* (Solms 2018) through the analysis of repetitive behavioral, emotional, and relational patterns derived from them.

Rather than "the truth," today's talking cure looks for the improvement of "a truth tracking insight", through the repetition of these patterns in the transference. When successful, this improves a patients' capacity to work through his conflicting desires, and his narcissistic and relational needs.

The condition to benefit from a classical talking cure is then closely related to the meeting of two criteria. First the availability and accessibility of therapists trained to deal with counter-transference and use it adequately for the benefit of the patient and next the capacity of a patient to engage into transference (and also tolerate it) in a long-term psychotherapeutic process.

The limitations imposed by these contextual and psychological requirements, the difficulties to meet the conditions they involve in clinical practices, are among the main criticisms made to the psychoanalytic talking cure. It leads to the reduced influence of this model in psychiatry. Following its great success in Western post-World-War II psychiatry, the psychoanalytical model is now triggering converging criticisms around three main issues. In the following paragraphs, we will address these aspects of critique: the limitation of its **applicability** to mental health patients,

the questions around the therapeutic **effectiveness** of this psychotherapeutic technique, and the alleged limitations of nowadays **scientific evidence**.

Challenging these criticisms can be considered one of the most crucial tasks of today's psychoanalysis. Its recent commitment to address seriously these issues can be seen as one of its most promising current advances.

The Limitations of Its Applicability to Mental Health Patients

These limitations are both contextual, the availability and accessibility of trained professionals, and clinical, the patient's capacity to engage and tolerate transference in a long-term psychotherapeutic process.

The contextual condition is related to the many external limitations of the talking cure model. Particularly those due to the cost and the sustainability of a model involving more or less numerous weekly sessions with highly specialized professionals, expensive to educate train and hire, and the need for the patients to be highly invested, with a free and flexible enough agenda to engage in this highly time-consuming type of treatment. Various attempts are currently been made to reduce these limitations through the use of new information and communication techniques to reduce some of these limitations (Winter 2014).

The clinical condition is directly related to the psychic or psychopathological functioning of the patient. In the talking cure model, if a therapist is neutral and benevolent enough, a patient's engagement into transference is spontaneously activated when their psychic functioning is neurotic or close to this psychological model. In these cases, a patient's psyche is irresistibly infiltrated by the past, for the best or the worst. The best appears in the narcissistic security they get from the reactivation of memories of previous satisfactory experiences. The worst appears in their symptoms they present with.

But this is not the case for all psychiatric patients and in every setting. For example, with patients who are not secure enough to be able to take the therapist for somebody of their past – even unconsciously – because their lack of imaginary availability forces them to grab onto concrete reality, i.e., patients suffering from an autism spectrum disorder, borderline personality disorder, or psychosomatic patients.

It is not the case either for those who, on the opposite, cannot delude themselves into thinking about the therapist without taking their transferential delusion for their reality, like psychotic patients or borderline patients during psychotic moments in their evolution.

Finally, some patients are too narcissistically insecure to expose themselves to affective interactions with others because they feel threatened by the dependency these interactions could trigger in them like one can experience facing patients with a narcissistic personality disorder, addiction disorders, or borderline personality disorders.

Adaptations to the original model to take into account these contextual and clinical conditions have been elaborated. We propose here three commonly applied models.

(a) Psychoanalytic Psychotherapies:
Under various denominations and models, it is the most frequently operational adaptation of the talking cure principle in psychiatry. It takes into account the two types of conditions already mentioned without losing the psychoanalytic core concept which the classical talking cure has been built on. Glass (2008) defined it as a psychoanalytically enlightened psychotherapy. It allows for working through the transference and countertransference processes, the repetition of significant relations of the past within the therapeutic relation, using the representations of the therapist to help the patient's understanding of his own representations.

Two models of such psychoanalytic psychotherapies have been recently operationalized to treat patients with borderline personality disorder: the Mentalization Based Treatment (MBT) (Bateman and Fonagy 2016) and the Transference Focused Psychotherapy (TFP) (Clarkin et al. 2015). MBT focuses on mentalization in relation with attachment and reflexive capacities with the aim to promote the development of mentalizing capacities. TFP focuses on identity integration resulting from a lack of coherence in the person's experience and understanding of themselves and others. It aims at improving the behavioral control and at increasing the affect regulation with the goal of increasing identity integration (Gonzales-Torres 2018).

Both have developed structured training programs with the hypothesis that this structuration – sometimes manualized – will be more effective and more feasible than a classical psychoanalytic training in treating these types of non-neurotic patients. On this basis, both have provided evidence of their efficacy through randomized clinical trials (Fonagy et al. 2016; Kernberg 2015; Gonzales-Torres 2018).

Others have developed various patterns of brief psychoanalytic psychotherapies to overcome the length of the cure, seen as another of the psychoanalytic talking cure crucial limitations (Knauer et al. 2006) often in a perspective mixing systemic references to the psychoanalytic backbone of their model (Gilliéron 2004). Focusing on patient's symptoms, these patterns are more or less inspired by the concept of Therapeutic Consultation proposed by Winnicott with children (Winnicott 1972).

Lebovici (1999) proposes another model of therapeutic consultations he developed for his parents-babies brief therapeutic interventions. This model is particularly illustrative of this type of psychoanalytically enlightened approach, globally in line with what has been called the Psychotherapy of the Psychiatrist. This model's aim is to get access to the subjective aspects of the patient's psychopathological functioning in an ordinary psychiatric setting.

With the objective to describe, in this setting, a non-metaphysical way to approach subjectivity, considered the corner stone of *Person-Centered*

Psychiatry (Botbol and Lecic Tosevski 2016), this model gives a major role to empathy on three steps and at the same time levels of processes (Botbol et al. 2014).

(1) Affective or Emotional Empathy: Close to sympathy, it is the feeling induced by the contact with the patient through verbal and behavioral interactions. It makes up a first methodological step to go beyond the screen of the visible.

(2) Narratives Empathy: Narrative is an excellent way for the patient to trigger the therapist's empathy as long as the therapist gives enough attention to the patient's narratives. It is also an evenly excellent way, for the therapist, to access and give meaning to his own empathic subjective feelings related to the patient. Implied here is not the plain mirror empathy of the emotional empathy or sympathy. It is a narrative or metaphorizing empathy using the therapist's representations and affects to approach and understand the otherness of the patient's subjectivity.

(3) The Team-Work: When available, a therapist can use the idiosyncratic sensitivity of the team members or of the various professionals attending to the patient's needs. This can amplify different aspects of the patient's subjective life. Involving the subjectivity of the team members should thus not be seen as a negative side effect of the professionals-patients relation but as a crucial clinical leverage for the broadly conceived diagnosis and care of the patient. It needs to be properly analyzed and controlled by professionals trained to use their feelings and representations as a tool of their team work.

(b) Individual Psychoanalytic Psychodrama (IPP)

The crucial difference of this adaptation of the classical psychoanalytic cure is that the talking of the patient, as much as the therapeutic interventions, passes through scenarios and acting. It is particularly adapted to patients who cannot truly invest verbalization and language.

In weekly sessions, the patient is invited to propose an imagined or reminded scene to be played with four or more psychoanalysts, trained or in training. The whole scenario deploys under the supervision of a "play director," who has to be a trained psychoanalyst and does not take part in playing. The "play director" may interrupt the scenes or send a new actor to modify its course. After the end of the scene, he may also briefly comment it, but an interpretation through the play, in the scene itself, is preferred.

In spite of an abundant literature reporting the interest of such psychoanalytic approach in various monographic examples of difficult patients, we have not heard of a systematized study to support these clinical findings.

(c) Psychoanalytically Informed Milieu Therapy (PIMT)

This type of approach is proposed and has been developed in some countries. Generally one can find it in those countries where psychoanalysis had a strong enough influence in psychiatry and where it was originally designed to give a psychotherapeutic ambition to psychiatric institutions. In the countries in which it is still vivid enough, like Germany, Belgium, France, Turkey, and various other

European countries, it is seen as well adapted to patients for whom concrete acting in concrete daily reality appears as the patient's most illustrative way to express themselves to benefit from therapeutic interventions. The institutional team takes upon the patient to elaborate the affects and conflicts the patient is expressing in his environment through acting or delirium, symptoms that would hamper a classical talking cure. This type of treatment can become an extreme modification (or adaptation) of the psychoanalytic cure model. It can be seen as a "talking cure" through the institution, when it engages a psychoanalytically informed milieu therapy process involving the following steps

- Exposure of the team in an everyday concrete setting and expressive activities
- The team's empathic feelings and metaphoric representations of this feelings in which the team work through its conflicts in relation with the diversity of the representations of the team members
- The restitution of this elaboration to the patient through everyday concrete actions rather than through words (Botbol and Balkan 2006)

In its current version, this model of milieu therapy is more and more frequently based on integrative psychiatric programs including various therapeutic mediations generally focused on creativity and socialization in outpatient programs involving a multidisciplinary team.

Based on the team's working through, this model is not far from the "Psychotherapy of the Psychiatrist" model we discussed earlier when enlightened by psychoanalytic considerations. In such context, it can also be seen as a "Psychodrama in natural setting" (Hochmann 1984).

This model offers the advantages of its aim, namely, to give or maintain a psychotherapeutic ambition in psychiatric institutions and of its psychotherapeutic indications, namely, those psychiatric patients who have no other opportunity or psychic sophistication to benefit from another type of psychotherapeutic healing of their subjective suffering. As most of the other multiple and complex therapeutic settings, it has not been, to my knowledge, systematically assessed, particularly in consideration of its differences with the more common psychiatric institutional models, generally used in many psychiatric institutions all over the world.

The Effectiveness Issues

Effectiveness has been addressed by various well-disseminated studies. Among them, Hans Eysenck in the 1950s (Eysenck 1952) is well known for his radical doubts about the effectiveness of any particular type of psychotherapy by referring to RCT as the golden standard and seeing absence of evidence as evidence of absence. Lester Luborsky (1975) at the other side saw all forms of psychotherapies are equally effective, and more effective than a credible placebo (Smith et al. 1980).

Leichsenring (Leichsenring et al. 2008) did a Meta-Analysis including 23 studies (1053 cases) on Long-Term Psychodynamic Psychotherapies (LTPP). Both RCTs and Observational studies were included as long their duration was over 1 year and if

their technique was responding to a credible definition of Psychoanalytic Psychotherapy following Glass's definition (i.e., involvement of transference and countertransference issues in the psychotherapeutic process) (Glass 2008). The results were quite impressive:

- LTPP shows significantly better outcomes than any shorter forms of psychotherapy in: overall effectiveness, targeting problems, and personality functioning.
- LTPP patients with complex mental disorders are better off than 96% of the patients in the comparison group.
- LTPP yields significant, large, and stable within group effect sizes across various and particularly complex mental disorders.
- No significant difference in effect sizes where found when comparing observational studies with RCTs.

In their well-known 2004 paper, Laasonen-Balk et al. (2004) showed that Psychodynamic Psychotherapy induces significant alleviation of symptoms at follow-up, and, compared to control, a significantly greater level of midbrain SERT (Serotonin Transporter) binding in a sample of patients with major depression. These findings have been confirmed by other studies of the same team (Lehto et al. 2008) showing that, while decreased SERT binding at midbrain level is known to be associated with major depression (Gryglewski et al. 2014), this biomarker normalized after 1 year of psychodynamic psychotherapy without antidepressant medication; as highlighted by Guenole (Guenole and Botbol in press), in one of the studied cases, "alleviation of symptoms occurred only after 6 months normalization of SERT binding, suggesting that serotonin depletion and depressive symptoms may not be necessarily synchronized."

Wiswede et al. (2014) found that, compared to healthy controls, patients with recurrent depression showed at the fMRI, after 8 months of psychodynamic psychotherapy, enhanced activation in several limbic and subcortical regions, including amygdala and basal ganglia at baseline. The treated patient significantly improved in depression scores at follow-up, and no significant difference in brain activity persisted between them and controls at the end of the trial.

Other interesting studies reported follow up of fMRI imagery during the psychoanalytic psychotherapies of depressive patients suggesting a strong correlation between psychodynamic interventions and structural or functional modification of the brains.

As stated in Guenole's paper (Guenole and Botbol in press), some points may be brought in a preliminary synthesis:

(i) Alleviation of symptoms during psychodynamic therapy for depression seems to be associated with normalization of resting posterior insular hyperactivity (Roffman et al. 2014) – which hyperactivity is known to be associated with human pain (Segerdahl et al. 2015)
(ii) It seems to be associated also with normalization of brain hyperactivations during mobilization of psychic conflict (Buchheim et al. 2012; Wiswede et al. 2014).

As stated by Guenole et al. (Guenole and Botbol in press), "these hyperactivations concern different brain regions. . .which may correspond to emotional manifestations of depression (Drevets 2001; Davidson et al. 2003). . . or may reflect emotional control processes and defensive mechanisms (Drevets 2001; Ochsner and Gross 2005)".

(iii) Correction of a brain serotonin depletion seems to occur often during psychotherapy, sometimes before alleviation of symptoms" (Guenole and Botbol in press)

However, there are still a lot of unexplained data. "We still do not know what works for whom, how to explain the weight of the therapist factor that seems to account more than the type of therapy, and how all that works" concluded Fonagy at the end of his opening lecture at the Firenze WPA International Congress in 2009, an idea he developed in various papers (Fonagy et al. 2004, 2005). Does it mean that a general psychotherapeutic action would be the most important determinant underlying the effect measured by many existing studies? Or does it mean that, behind their branding, the psychotherapeutic techniques have much more in common than it is usually thought. In other words, is the work they do on the relational dimensions, explicitly or implicitly, independent of any theoretical justification given to support this kind of technique application? From a psychoanalytical viewpoint, transference and countertransference are present even if, in the used technique, a therapist does not consider it as a relevant aspect. In other words, it might well be that a therapist does not explicitly work on an aspect not conceptualized within his own theoretical framework, i.e., transference within a cognitive-behavioral therapy (CBT) approach. This transferential aspect will be implicitly addressed through the made interventions according to this theoretical framework. It is the case, whatever the explicit purposes of this intervention would be, i.e., cognitive-behavioral recommendations or suggestions. The patient will, willingly or not willingly, at least unconsciously, take it as something related to his past relations formed by infantile unconscious memories of early interactions with the parents. A recent French study comparing CBT to Psychoanalysis at the fine-grained level of local clinical sequences, from a therapist's intervention to its effect on the patient, and not at the level of their branding (Thurin et al. 2014), brought some arguments in favor of this second hypothesis. It puts the focus on the process rather than on its branding. The author showed indeed that psychoanalytic psychotherapies do not exclude CBT-like interventions and that the reverse is also true, at least in the context of this study's sample. It is important to know, however, that French CBT therapists working in psychiatry do so in a context in which psychodynamic psychotherapy is not systematically rejected or ignored.

The Scientific Nature of Psychoanalysis

The scientific nature of psychoanalysis has always been a very controversial issue. Although it was created by a neurologist with a scientific project aiming at to ***primarily*** explain "scientifically" neurological-like symptoms with neither apparent organic causes nor relevant neurological systematization, namely, hysteria, its

relation with neurology and biological sciences has always been conflictual. On the ground of what he discovered in his study of hysteria, Freud's work rapidly extended its scope to other types of non-neurological-like illnesses such as neurosis, melancholia, and later psychosis. It is often forgotten that, in each study of these illnesses or symptoms he tried to remain consistent with the scientific objectives and methodology that were becoming dominant at his time in medicine at large, i.e., to expose these theoretical assumptions to the clinical facts. In that sense, he can be seen as the first neuroscientist, the Christopher Colombus of neurosciences as a French modern neuroscientist called him (Naccache 2006). Even at that stage of his work, Freud aimed to remain scientific and to propose a scientific theory – he called metapsychology – on the psychological mechanisms underlying these nonorganic illnesses, to replace the previous metaphysical speculations concerning their causes and mechanisms. Freud expressed clearly his scientific ambition when he wrote that the main theoretical objective of his psychoanalytical project is "*to translate metaphysics into metapsychology*" (Freud 1901). This ambition complicated further the relations between science and psychoanalysis to such an extent that after the success it had known in the psychiatry of many developed countries of the Western World, psychoanalysis has been expelled from some. Its lack of scientificity, on the base of various epistemological arguments related to the unfalsifiable nature of its theoretical assumptions, remained the main reason (Popper 1963). In many cases, however, many consider that the main problem is the lack of adequate methodology to study psychoanalysis and its related assumptions. Dealing with subjectivity and fine-grained psychological mechanisms remains rather difficult to study in a classical evidence-based perspective in which reductionism plays a major methodological role. But absence of evidence in no way means evidence of absence. Those advocating the usefulness of psychoanalysis in modern psychiatry consider that, as long as there are evidences of the efficiency of psychoanalytic psychotherapies, understanding the mechanisms underlying these effects is as much a question to scientific methodology as it is to psychoanalysis. It raises doubts not only about the scientificity of psychoanalytic psychotherapy but also about the reductionism of classical EBM methodology. To reconcile true reductionist scientific methods with unreal or nonscientifically defined objects such as a person's subjectivity remains difficult.

The recent evolutions in neuroscience open new perspectives in this regard. It becomes more and more evidence based that the idea that psychotherapy is not a biological treatment is a myth (Prosser et al. 2016). The progress of neurosciences indeed allow neuroscientists to apply neuroscientific methods and considerations to phenomenological and psychodynamic concepts like empathy, intersubjectivity, object relation, emotions, attachment, self, transgenerational transmission, etc. Hence, a new scientific approach, neuropsychoanalysis, is catching a growing interest of neuroscientists and psychoanalysts worldwide (Solms and Turnbull 2003). Applying neuroscientific methods and theories to psychoanalytic notions reveals new scientifically attractive horizons.

Many psychoanalysts see this evolution as an opportunity to bridge the gap between psychoanalysis and biology. They seem to bring the realization of an old Freudian dream closer: to find biological mechanisms behind his metapsychological hypotheses.

Conclusion

This brief review of the current situation of the controversies around the talking cure and psychoanalytically enlightened types of psychotherapies shows that the debate is far from being definitively closed or resolved. Even if psychoanalysis has lost much of its former glory, it may be for its own good. The development of neurosciences has paradoxically made new insights into some of the psychoanalytic basic concepts possible. They pave the way for new interactions between psychoanalysis and biology, one of the old Freudian dreams. The importance given now to the person of the mentally ill and to their subjective feelings brings back at the forefront questions that have been largely addressed by psychoanalysis, its clinical practice, and some of its practical hypotheses. In its new stance, psychoanalysis, or at least a large part of those who are referring to it, is now ready to address thoroughly the critics it has raised at various levels. Our impression is that it should be seen as good news for patients, carers, professionals, and stakeholders.

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Family Therapy: A Necessary Core Competence for Psychiatric Trainees

23

Nathalie Raes, Ine Jespers, and Gilbert Lemmens

Contents

Abstract

Psychiatric disorders interact with the social context of the affected individual. The family interactions may affect the mental health of the individual, and simultaneously, psychiatric disorders affect family members and relationships.

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As a psychiatrist, it is important to have insights in how patients and families can be stuck in negative circles reinforcing psychiatric symptoms and undermining good outcome. The interactions between psychiatric disorders and family interactions are discussed. Some theoretical concepts and techniques of systemic family therapy will be given, and the importance of family intervention in psychiatric care will be stressed. For the psychiatrist in training, this implicates that he should acquire the skills to perform a systematic assessment and plan intervention with attention for the family system. He should obtain knowledge of family management, interactions, and be able to recognize dysfunctional patterns.

Keywords
Family therapy · Systemic therapy · Competence · Psychiatric trainee

Introduction

Psychiatric disorders do not occur in a vacuum. Patients with psychiatric disorders are not wholly detached from a social context. They (were or) are part of families which are more or less supportive to them. These present or past family interactions may affect their mental health and how they are coping with the psychiatric disorder. Simultaneously, psychiatric disorders are affecting the family members and relationships and are challenging family resources to support the mentally ill relative. As a psychiatrist, it is important to have insights in how patients and families can be stuck in negative vicious circles reinforcing psychiatric symptoms and undermining good outcome. Psychiatrists should gain sufficient competences and tools to block unhelpful family interactions and to unlock family resources. In this chapter, the interactions between psychiatric disorders and family interactions will be discussed. Further, some theoretical concepts and techniques of systemic family therapy will be given, and the importance of family intervention in psychiatric care will be stressed. Finally, some implications for the clinical competences of psychiatrist (in training) will be explained since, as Stefan Priebe has in 2013 stated in the *British Journal of Psychiatry*, the future of academic psychiatry may be social.

Family Interactions and Psychiatric Disorders

With an average life-time prevalence of 25% for any mental disorder, at least one in four Western families will be affected by a psychiatric disorder (Alonso et al. 2004). Moreover, most psychiatric disorders such as depression, anxiety disorders, eating disorders, and substance abuse run in families, meaning that they are frequently reported in different first and second degree relatives (such as parents, offspring, grandparents, uncles) (McLaughlin et al. 2012). Furthermore, recent research indicates parent psychopathology is not only strongly associated with an increase of class specific, but also of every class of offspring psychiatric disorders (McLaughlin

et al. 2012). A daughter of a parent with a substance use disorder is as an adult not only at risk for substance use disorders but also for other psychiatric disorders such as anxiety disorders, mood, or behavior disorders.

The etiology of most psychiatric disorders is multifactorial with a notable genetic component varying between 30% and 70% combined with stressful environmental factors (Prescott and Kendler 1999). However, the family environment remains the most immediate psychosocial context. Families can function as a source of social support, growth, and development, but for many people suffering from psychiatric disorders, they may also be a cause of stress. An increasing body of research points to the important role the family environment plays in gene expression and brain development (Heru 2006). Increasing genes-family correlation and interaction studies increase our understanding how the complex relationship between biological and family factors plays an important role in the development and course of psychiatric disorders (Hudson and Rapee 2005).

Different family factors have been identified to play a role in the development and course of psychiatric disorders. Although these factors may vary depending on the different psychiatric disorders, they can be classified in different domains such as stressful family events, parenting style, the family climate, and the marital relationship. The presence of negative factors within these domains is generally associated with development and negative course of most psychiatric disorders, whereas positive factors within these domains seem to be protective. Family maltreatment and abuse is associated with different adult psychiatric disorder such as mood disorders, anxiety disorders, self-harm, depression, eating disorder, substance use abuse, PTSD, and personality disorders (Hudson and Rapee 2005).

However, until now, it remains unclear why different persons affected by similar negative family factors develop different psychiatric disorders. At the same time, psychiatric disorders affect not only the individual with the illness, but also have an important impact on the well-being of the relatives, the relationships (e.g., couple and parent-child relationship) and the family functioning. Thus, most family domains, which are affected by psychiatric disorders, are simultaneously reinforcing psychiatric symptomatology, leaving the family stuck in a negative vicious circle. The complex and close interactions between family characteristics and different psychiatric disorders will be further discussed and illustrated with some examples of different psychiatric disorders.

Stressful Family Events

Several negative family events are linked with psychiatric disorders. They include early death of a parent, psychopathology of a parent, child abuse, low socioeconomic status, and poverty. As stated before, each parent psychopathology is associated with increased risk for every class of mental disorder in their children (McLaughlin et al. 2012). Mood and anxiety disorders in the mother relate to a wide range of psychiatric disorders in the offspring. Parental death is associated with a higher risk of psychopathology in the offspring. This is especially true when children

lose their parent from external causes, like suicide, accidents, or homicides and for children who lost a parent early in life (Berg et al. 2016). A recent review article states that socioeconomically disadvantaged children and adolescents are two or three times more likely to develop mental health problems (Reiss 2013). Especially, a decrease in socioeconomic status (SES) and persistently low SES are predictors of the onset of psychopathology. Low income and low parental education are indicators of SES with the most important impact on mental health (Reiss 2013). Material deprivation is associated with the onset of mental health problems, whereas parental education seems to have an impact on their course or severity (McLaughlin et al. 2011).

Adverse life events in early life are also related to the development of psychiatric disorders in adulthood. Subtypes of early life stress are associated with several psychiatric disorders. Physical abuse, sexual abuse, and unspecified neglect are related to the development of mood disorders and anxiety disorders. Emotional abuse is associated with personality disorders and schizophrenia (Carr et al. 2013). Childhood abuse is common in bipolar disease, and it also predicts a more severe course of the disorder with earlier onset, psychosis, suicidality, aggression, and more mood episodes, hospitalization, and comorbidity (Johnson et al. 2016). Bipolar depressive symptoms are particularly related to negative life events associated with loss and danger (like financial difficulties and job loss) (Johnson et al. 2016). There is a strong relationship between early adverse experience and substance use and abuse (drugs, alcohol, and nicotine) later in life (Anda et al. 2006).

Parental Style

Parental style, which refers to the strategies that parents use in their child rearing, plays an important role in the development of children and it, among other factors, may modify attachment of children. Parental autonomy support has been linked to several positive developmental outcomes in adolescents, including well-being, and school achievement (Vansteenkiste et al. 2004), whereas negative parental styles are often associated with insecure attachment of children, which, on its turn, is strongly related with the development of psychiatric disorders (Hudson and Rapee 2005; Vansteenkiste et al. 2004). A parenting style characterized by rejection/criticism and control/intrusiveness has a higher risk of developing depressive disorder in the child (Hudson and Rapee 2005). Affectionless control, a parental style characterized by low care and overprotection, is correlated with a longer duration of the depressive episode (Handa et al. 2009). Other parental characteristics like a lack of warmth, autonomy support, and monitoring and the presence of parental conflict, aversion, and over involvement are positively related with depression (Yap et al. 2014). Several parental characteristics have been reported to have an influence on the development and course of behavior disorders in children. They include lack of clarity when giving assignments, inconsistently dealing with undesirable behavior, harsh punishment, lack of surveillance in young children, and insufficient knowledge of the comings and goings of older children (Reid et al. 2002). Adolescents

with anorexia nervosa (AN) also report more parental problems (i.e., separation, criticism, high expectation, over-involvement, under-involvement, depression in the mother, low affection, critical comments on shape, weight, or eating) compared with healthy controls, but not with psychiatric controls (le Grange et al. 2010). Research investigating the role of psychologically controlling parenting (Tetley et al. 2014) has demonstrated indirect associations between psychologically controlling parenting and the development of eating disorders (ED) symptoms mediated by variables such as maladaptive perfectionism, distress, or self-competence (Snoeck et al. 2007). Parental psychological control is related to maladaptive perfectionism of ED patients, which in turn is related to ED symptoms (Soenens et al. 2008). High maternal psychological control leads to lowered adolescents' self-competence, which in turn predicts increased bulimic symptoms in a community sample. Finally, adolescents with binge-eating purging behaviors experience more maternal psychological control compared to restrictive patients (Depestele et al. 2017).

Affective Family Climate

A family climate characterized by low levels of warmth and support and high levels of conflicts and rejection is frequently reported to be associated with different adult psychiatric disorders (Handa et al. 2009). Higher levels of verbal abuse, greater family conflict, and less family cohesiveness have been noted in families of borderline personality disorder, and a home environment characterized by high communication deviance (e.g., a measure of distracted or vague conversational style) and a strongly negative affective climate puts adolescents at risk for psychotic disorders (Schaub 2002). More specifically, expressed emotion (EE), measured by the amount of critical remarks, signs of hostility, and amount of involvement, is an important measure for the affective climate in a family and plays a considerable role in the onset and relapse of different psychiatric disorders such as depression, bipolar disorders, schizophrenia, and eating disorders (Di Paola et al. 2010; Schaub 2002). Children with a mother high in criticism are at higher risk of developing a depression (Burkhouse et al. 2012). A patient with schizophrenia living in a family with a high level of expressed emotion, i.e., criticism, hostility, an emotional over involvement, has a higher risk of relapse (Kavanaugh and Hooley 1992) whereas having a supportive, involved family member was a strong predictor of medication compliance and good outcome.

Coercive and aversive interactions are characteristic in families with children with oppositional defiant disorders and conduct disorders. There is a higher risk of developing these negative interaction patterns when there is distress or psychopathology in a parent. When parents do not support each other, abuse alcohol or drugs, experience stress or if parents themselves exhibit antisocial behavior, there is less chance that they will have a positive attitude and be able to keep calm when confronted with undesirable behavior.

When considering behavior disorders, the emphasis should not only be on the family context. Peers and the school constitute an important part of the environment

when assessing and treating behavior disorders. The same coercive interactions can develop in contact with other children and children with behavior problems are often rejected by peers. Rejection itself is a risk factor for developing behavior problems and when children become excluded they miss the opportunity to practice their social skills. Children who share the school environment with other children with aggressive behavior problems are at risk for developing more aggression. There is more aggression in schools situated in a neighborhood with more socio-economically disadvantaged groups. In the adolescence, there is a higher risk of the teenager with behavior problems to join a delinquent group of peers. In this group, rule breaking behavior, which is often positively validated, could result in an increase of deviant behavior. This so-called "deviancy training" can be a contraindication for group therapy, and the same increase in delinquent behavior is observed when young people are assigned to judicial institutions.

Marital Relationship

Being in a relationship has frequently been associated with greater psychological well-being and physical health. However, the advantages of having a relationship may not compensate for a distressed relationship. A strong correlation between marital conflict and different psychiatric disorders in partners and offspring has been reported. Children are at greater risk of psychopathology (e.g., externalizing and internalizing problems) if they are exposed to interparental conflict (Dwyer et al. 2006; Hudson and Rapee 2005). Dwyer et al. (2006) even stated that the elimination of parental verbal conflict and mood problems would result in 20% less child mental health problems. Interparental violence significantly predicts anxiety disorders, conduct disorders, alcohol use disorders, and property crime in the offspring (Fergusson and Horwood 1998). Several studies have indicated that marital distress is strongly associated with increases in depressive symptoms and incidence of depression for both men and women (Beach and Whisman 2012). Sharing of positive activities and spousal caretaking may have beneficial effects on alcohol use, whereas withdrawal and avoidance of the drinking family member, negative verbal comments about the drinking, and physical violence directed at the drinking family member may serve as cues to further drinking (McCrady et al. 2016).

Family Burden

As previously mentioned, psychiatric disorders have also an important impact on the family members, their relationships, and the family functioning. Family members taking care for the depressive relative have more depressive and other psychiatric symptoms and report a lower life satisfaction (Van Wijngaarden et al. 2004). Children living with a depressed parent show more internalizing and externalizing problems (Beardslee et al. 2011). Family members of a patient with AN experience more distress, anxiety, and diminished quality of life and reducing the caregiver's

strain could be important in improving outcome (Le Grange et al. 2010). Psychiatric disorders also modify the way parents interact with their children. Attention-deficit/hyperactivity disorder (ADHD), parental conflict, financial problems, and cramped housing have a negative influence on parenting skills. Depressive parents are more unpredictable, critical, hostile, and less involved and able to compromise when arguing with their children (Beardslee et al. 2011). Further, psychiatric disorders affect the partner and sibling relationships and the family as a whole. Parents of children with ADHD report less marital satisfaction and more marital conflict than those of nonproblem children, and interactions between children with ADHD and their sibling relationships are characterized by greater conflict than those of non-problem sibling dyads. Couples in which one partner abuses drugs or alcohol show more relationship problems with increased risk of separation or divorce. Couples with a partner suffering from depression show more negative dyadic distress, less constructive and more avoidant/demand-withdrawal conflict communication, more violence, and less dyadic coping (Rehman et al. 2008). Families of patients with eating disorders show more problems with affective involvement, communication, task accomplishment, and problem solving (Holtom-Viesel and Allan 2013). The organization of most families of psychotic patients undergoes a variety of changes, including alienation of siblings; exacerbation, or even initiation, of marital conflict; severe disagreement regarding support versus behavior control; even divorce (McFarlane 2016).

Family Recovery

With the recent deinstitutionalization of residential services (e.g., reduction of inpatient beds) and the development of community-based services in most Western welfare states, the family remains the most salient interpersonal context for patient with psychiatric disorders. Over 50% of Australians living with severe mental ill-health have daily contact with their family member/s (Morgan et al. 2012) and roughly 20% live with dependent children (Mayberry et al. 2009). But families often feel abandoned by the mental healthcare workers not receiving sufficient support for their own needs and information about how to manage the illness of their relative (Transvag and Kristoffersen 2008). They are seldom invited to participate in the treatment of their relative although they often want to be involved.

However, the shift from rehabilitation to *recovery*, which has taken place in policy and practice in the international realm since the mid-1980s, offers new opportunities for the involvement of families in the care of psychiatric patients (Glynn et al. 2006). Within a post-Cartesian understanding of recovery processes patients' personal experiences of hope, healing and empowerment are seen as inseparable from the social and cultural milieus from which they emerge and is recovery seen as an inherently social process where family members play a pivotal role in (Rhys et al. 2016). We are no longer seen as beings in relationship, but rather as relational beings from the outset, and it is through social relationships that we are able to redefine our experience. As a result, different authors have emphasized the

importance of "family recovery" (Glynn et al. 2006; Rhys et al. 2016), where targets and pathways for recovery are embedded in the relationships between family members, the family and the environment, and the interactions among them. For persons living with mental illnesses, recovery is a dynamic process that contributes to and is influenced by family life, family experiences, and the well-being and functioning of other family members. The focus on intrapsychic experiences is replaced by a complex, situated, and processual understanding of the ways in which mental ill-health and recovery manifest in someone's life. Further, Glynn et al. (2006) have stated that most evidence-based psychoeducational family interventions for schizophrenia, developed over the last 35 years, are generally consistent with the principles of the recovery approach since they assume a non-pathologizing stance, utilize a collaborative approach, teach problem-solving and communication skills, and include mutual self-help and peer support.

Concepts and Techniques of Family Therapy

Family therapy is a relatively recent development in the field of psychotherapy. It emerged in the early fifties of the twentieth century in a variety of different countries and within a variety of different movements and services including social work, psychoanalysis, child guidance clinics, marital counseling and therapeutic and research traditions (Carr 2012). As a result, family therapy is a broad psychotherapeutic movement which contains many constituent schools and traditions. The central focus that united the family therapy pioneers is that human problems are essentially interpersonal and that their resolution requires an intervention which addresses relationships between people. Thus, in systemic thinking, there is a reciprocal interaction between a person with a psychiatric problem and the family and its family members, and treating these interactions will benefit the individual's symptoms. These systemic ideas were in the early days supported by research of the Bateson group proposing that schizophrenic behavior occurs in families characterized by specific patterns of "double bind" communication and by new insights stemming from cybernetics ("a transdisciplinary approach for exploring regulatory systems") and general systems theory (GST), which offered a framework for conceptualizing family organization and processes and the occurrence of problematic behavior. The general systems theory was developed by the biologist Ludwig von Bertalanffy (1901–1972) who studied the organization of chemical reactions in a living organism. Applying the ideas from GST, families were seen as systems organized in subsystems (e.g., parental and child subsystem, male and female subsystems) with mutual relations, patterns of interaction, boundaries, hierarchy, and feedback process. Families display a recurring pattern of interactional sequences in which all family members participate. It helps to maintain family relationships and modify transactional patterns in keeping with the changing needs of the family members. Psychiatric symptoms were regarded as representative of a family system in disequilibrium, and family therapists, as external experts, tried to change the dysfunctional relations between the family members. Hereby they focused on

problem-maintaining recursive behavior patterns, pathological triangles involving incongruous intergenerational patterns, difficulties making lifecycle transitions, extreme family enmeshment or disengagement, rigid complementary relationships or escalating symmetrical relationships, unclear, chaotic or rigid family rules. Therapeutic techniques included restructuring the family, joining, enactments, changing parental roles in pathological triangles, rituals, reframing, boundary-making, and paradoxical interventions. Important therapeutic schools of this family approach include structural, strategic/communicative family therapy.

In the late 1980s and 1990s, the mechanical systemic metaphor came under pressure. Under the influence of the constructivism and especially the social constructionism, the concept of the objective external environment was abandoned: language creates realities and meaning is socially constructed. The focus of systemic therapy moved from behavior and interactions towards ideas, perception, language, and dialogue, which subserved interaction patterns. In unhealthy families, the belief systems are not sufficiently flexible to promote the changing demands of the family life cycle and the wider ecological system. Family members with symptoms are entrapped in dominant narratives closing down of the possibilities for new narratives to emerge. Problems are seen as socially constructed and are reformulated in every conversation. The therapist's position shifts from the expert outsider to the interested, not-knowing participant in the therapeutic process. The therapeutic relationship becomes central in therapy. The therapist currently tries to change the family beliefs and narratives using circular questioning, positive connotation, deconstruction of symptoms, and externalization of the problems, reflecting team, working with the self of the therapist, enquiring about unique outcome of exceptions, recruiting family members to act as an outsider witness, re-authoring personal narratives, generating polyphonic/multiple voices, and open dialogues conversations. The Milan, social-constructionistic, solution-focused, narrative, and dialogical family therapies are main representatives of this family therapy approach.

Finally, some family therapy approaches have a specific focus on transgenerational family processes, attachment within families, or the wider social context of the family. In transgenerational family therapy and contextual family therapy, problems may occur through the legacy of invisible loyalities over generation or when adaptation problems are experiences in the different phases of the family lifecycle or during its transitions. Uncovering family loyalities and contextualizing problems using a genogram helps the therapist to unravel and create more healthier intergenerational family scripts. More recently the attachment concept has gained increasing attention in family therapy, which has led to the development of attachment-based and emotion-focused family therapies. In unhealthy families, the attachment needs of the family members are not met leading to negative interactional cycles. The therapy is used as a secure base created for mutual expression and acceptance of disowned unmet attachment needs and related emotions. The central premise of multisystemic and multidimensional family therapies is that adolescent functioning, including behavior problems, is influenced by the interplay among important aspects of the youth's life, such as family, friends, school, and neighborhood. Within this family therapy, individual, family, peer-group-based, and

community-based interventions are combined to harness systemic strengths and to disrupt problematic behavior.

To conclude, four main components are part of every family therapy approach: interactions/relations, context, social systems, and resources. These main components are illustrated in depth below:

- Looking closer at the interplay of people helps to understand individual functioning. An individual's cognitions and emotions develop through **interactions and relations**. In family therapy, these cognitive-affective schemes are seen as socially constructed beliefs. The schemes on the other hand shape current relations. Over time, preferential interactions, patterns, and relations may develop. These can become maladaptive if the cognitive-affective schemes and corresponding interactions do not adjust to the changing context. In family therapy, it is important to detect the schemata underlying specific interactions so they can be changed or expanded.
- Interactions and relations occur within their **context** and that context gives meaning to the interactions and relations. Various contexts resonate in every interaction: spirit of the age, development phase, society, culture, gender, family history, family context, social network, living situation, personality. How different contexts form interactions and relations and how these can be (mal)adaptive in a specific context are explored in family therapy.
- Family therapy also includes **social systems** that refer to a broader system than the family. Nowadays every system that has some connection with the original complaint can be invited in therapy, e.g., partners, the school, peers, local community. Therapeutic social communities can also be created in family group therapy for different psychiatric disorders.
- Finally, the focus of family therapy is on **strengths and resources** present in social systems. Resources within a system are able to help an individual beat his or her problems.

Family and Couple Interventions for Psychiatric Disorders

The last two decades, an increasing number of random controlled trials (RCTs), including reviews and meta-analyses, have demonstrated the efficacy of different couple and family interventions in the treatment of different adult and child and adolescent psychiatric disorders (Lebow 2016). Frequently reported benefits are decreased psychiatric symptomatology, reduced relapse rates (up to 40%), decreased family burden, improved family member wellbeing, and improvements in family and social functioning. The strength of the current evidence greatly varies depending on the psychiatric disorder and the used treatment model. Some interventions still require additional empirical support. But there are a lot of well-validated treatments of which most are recommended in de NICE guidelines and ready for dissemination and utilization in the treatment of psychiatric disorders around the world. They include attachment-based family therapy for adolescent depression and/or suicidal

adolescents (Diamond et al. 2016), functional family therapy, multidimensional family therapy, and multisystemic therapy for juveniles with antisocial or delinquent behavior and substance use disorders (Henggeler and Schaeffer 2016; Hartnett et al. 2017; Liddle 2016), eating disordered-focused (multi-)family therapy for anorexia nervosa and boulimia nervosa (Jewell et al. 2016), psychoeducational (multi-)family therapy for schizophrenia and psychotic disorders (William and McFarlane 2016), behavioral couple therapy for alcohol and substance abuse (McCrady et al. 2016), family focused and family psychoeducation for bipolar disorder (Oud et al. 2016), behavioral marital therapy, systemic couple therapy and systemic multifamily therapy for depression (Barbato and D'Avanzo 2008; Lemmens et al. 2009), and behavioral marital therapy and emotion focused therapy for marital distress (Wiebe and Johnson 2016).

Implications for Training in Psychiatry

Despite the important interactions between family interactions and psychiatric disorders and the efficacy of several couple- and family-based interventions for different psychiatric disorders in child, adolescent, and adult patient populations, family therapy knowledge and skills remain a neglected core competency in most psychiatric residency training programs (Heru et al. 2012). Improving the understanding of family interactions and therapy would help psychiatric trainees to adopt a more interactional and social stance which would complement the dominant biological and, to a lesser extent, psychological perspective during their training. They should acquire several basic competences in working with families ranging from communicating with, forming an alliance with, assessing, educating, supporting, to treating families of patients with a psychiatric disorder. Collaborating with the families and the social environment will enhance the recovery of psychiatric patients and their families.

As many psychiatry residents acquire expertise in one form of psychotherapy, mostly an individual therapy such as cognitive behavior therapy or psychodynamic psychotherapy, it would be recommended to also obtain proficiency in one form of family therapy. At least, the acquirement of some basic family skills is necessary to work with families. Therefore, different core competences consisting of knowledge, attitude, and skills should be included in the training program for psychiatry residents (Berman et al. 2006).

Knowledge

A psychiatry resident should have some knowledge about the structure, relationships, and organization of families, about the basic theoretical concepts of family therapy, and about how families and psychiatric disorders interact. A notion of couple and family development over the family life cycle, the importance of multigenerational patterns, and how age, race, gender, class, culture, sexuality, and spirituality can affect

family life will give insight in normative family processes. An understanding how families are changing in our current society with a variety of family forms, changing gender roles, complex family life cycles, and multiculturality will help to explain how psychiatric disorders may be influenced by the context of newly composed families, single parents and same-sex parents, divorce, loss, immigration, or illness, in which they occur. Knowledge about vulnerability but also strengths and resilience of these families will help to prevent relapse or enhance recovery, respectively. When principles of adaptive and maladaptive relational functioning in family life and family organization, communication, problem solving, and emotional regulation will be discussed during the training program, the trainees will gain more insights how family life interacts with psychiatric disorders and vice versa.

Finally, a good understanding of the current evidence-based couple and family interventions is necessary to develop a treatment plan for the psychiatric patient.

Attitudes

The attitude of the psychiatric trainee in working with families should be based on two major assumptions. First, most involved family members of individuals with mental illnesses need information, assistance, and support to better assist the ill family member and cope with the severe challenges posed to the family system. Next, the way relatives behave toward and get along with the mentally ill person can have important effects, both positive and sometimes negative, on that person's well-being, clinical outcome, and functional recovery. Mutual empathy, curiosity, and respect will help to build a therapeutic and collaborative relationship with the family. Hereby, a therapist should create space for the different voices of the family members and their different perspectives/stories on the psychiatric problem and its solution. Acknowledgment and validation of these different viewpoints may help to develop a collaborative treatment and/or crisis plan.

Skills

Working with families of psychiatric patients inherently implies that the psychiatric trainee is able to communicate with the family members and to develop a therapeutic relationship with them. Further, a trainee should develop competencies in completing a family assessment in the context of the patient's presenting problem, in explaining to the patient and the family what is occurring in the family, and in discussing evidence-based family treatments. During the assessment interview, the psychiatrist should gain information about different aspects of the family: family member's perspectives of the presenting problem, the family history and strengths, stressors during the family life cycle, intergenerational patterns of behavior or illness, the emotional climate in the family, the family organization and interactions, problem-solving in the family, and a family's culture and socio-economic status. After the assessment interview, the resident must be able to integrate biological, psychological, and social factors into a comprehensive formulation that helps the

patient and family members understand the illness and the ways in which they may be helpful or detrimental to its management (Heru et al. 2012). Psychoeducation about the psychiatric illness, its treatment, and impact on the family life should be given to every patient and his family. Family psychoeducation is based on the premise that families need to be supported in their care of the mentally ill person. It includes the provision of emotional support, illness education, help with finding resources during periods of crisis, and help with problem-solving skills (Heru 2006). He should be able to involve family members in medical decisions and the development of a treatment and/or crisis plan. If there is a family conflict, the psychiatrist can assist in resolving the conflict through sensitive response to emotional distress. He should be able to support the family in resolving differences of opinions with family members regarding treatment and involve them in medical decision taking and developing a crisis plan. With their understanding of evidence-based therapeutic treatment programs, the trainee can make recommendations for interventions, which may include other members of the family or social context. The resident can assist in providing training for the family in structured problem-solving techniques and encourage the family to expand their social support networks (e.g., participation in multifamily groups). If the resident has not acquired specific skills in family therapy, he can refer the family to a family therapist for more specialized help (Heru 2006). During training, the resident should preferably have some "exposure" to couple or family therapy. By incorporating these skills in residency training, psychiatrists should be competent to include family members in the assessment and treatment process and obtain a better outcome for the patient and his family.

Conclusion

There is a strong association between family interactions and psychiatric disorders, which has led to the development of different evidence-base couple- and family interventions in in child, adolescent and adult population. Some basic understanding about how families and psychiatric disorder may interact may help the psychiatric trainee to take a more interactional stance in the assessment and treatment of psychiatric disorders with families as a collaborative resource.

Cross-References

► Global Perspectives on Psychiatric Education
► Training in Psychotherapy

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