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11.1 Culture and Mental Health/Illness

Culture has been defined as an integrated pattern of human behaviors including thoughts, communication, actions, customs, beliefs, values, and institutions of a racial, ethnic, religious, or social nature (Pumariega et al. 2013). Hughes (1993) further defined culture as a socially transmitted system of ideas that (1) shapes behavior, (2) categorizes perceptions, (3) names selected aspects of experience, (4) is widely shared by members of a particular society or social group, (5) is an orientating framework to coordinate and sanction behavior, and (6) conveys values across the generations. Most societies define normality and deviance in human behavior within the context of culture, including the acceptable range of affective expressiveness, idioms and threshold of distress, and expressed beliefs and actions.

The overt expression of illnesses, with both physical and mental components, is also expressed and understood within the context of culture. Cultural values and beliefs influence the emphasis and expression of particular symptoms and idioms of distress. Many cultures have cultural syndromes which are variations of symptom clusters that bear some similarity to medical or psychiatric diagnostic criteria but deviate in culturally specific manners. Cultures also include explanatory models of illness, which reflect the values or beliefs of the culture. In traditional cultures, these often involve spiritual, supernatural, interpersonal, and relational factors that go beyond biological or psychological models. These explanatory models influence symptom expression as well as healing models, even when the underlying pathophysiology may be invariant. Explanatory models and syndromes are adopted and modified as cultural beliefs evolve and are handed down through generations and across cultures (e.g., the belief in the “evil eye,” which has variations in Turkey,

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Italy, and Hispanic countries) (American Psychiatric Association 2013; Lewis-Fernández et al. 2014; Pumariega et al. 2013). As people emigrate to new nations and are exposed to different prevailing host cultures, their symptom expression and explanatory models will change as they adopt host culture beliefs and behavioral patterns. However, many immigrants and children of immigrants hold both prevailing culture and culture of origin beliefs and explanatory models in parallel. They may believe that medical treatments help but at the same time blame their illness on forces beyond human control or influence and engage in traditional spiritual practices from their culture of origin. The latter beliefs and practices are often called upon more frequently during times of distress. Therefore, it is not unusual that first-, second-, and even third-generation immigrants undergoing psychological or psychiatric distress will jointly use formal mental health services as well as engage in traditional rituals and healing practices (Rothe et al. 2010; Pumariega et al. 2013).

11.2 Psychosis in Cultural Context

Diverse cultures have based explanatory models for psychosis or reality disturbance on spiritual, supernatural, and social-interpersonal beliefs. These explanatory models affect how psychosis is viewed and addressed in different cultural contexts, especially by believers in traditional folk culture. For example, McCabe and Priebe (2004) studied explanatory models of psychosis in samples of Whites, Bangladeshis, Afro-Caribbean, and West Africans diagnosed with schizophrenia in the UK. They found that Whites cited biological causes more frequently than the three non-White groups, who cited supernatural and social causes more frequently. A biological explanatory model was related to enhanced treatment satisfaction and therapeutic relationships but not treatment compliance. Those groups who endorsed supernatural or social causation preferred counseling and natural/spiritual healing practices. These differences clearly influence how psychosis is viewed by families and society, the degree of stigma associated with mental illness associated with psychotic symptoms, and the help-seeking behaviors and interventions sought by affected individuals and their families (see Sect. III below).

The intersection of culture and psychosis may be best understood in the context of the continuum of experiences of psychotic symptoms. On one end of the spectrum are brief isolated psychotic symptoms experienced by otherwise “normal” individuals, which in studies have been identified at relatively high rates (Myers 2011). The other end of the spectrum includes severe mental illnesses, including psychotic symptoms associated with severe episodes of mood disorders and psychotic relapses or chronic functional thought disorders such as schizophrenia. In the middle of the spectrum, there is now recognition of what are called “traumatic psychoses,” which are psychotic reactions associated with traumatic experiences (e.g., hallucinations based on a perpetrator’s reappearance) and can occur in people with and without serious mental illnesses (Kingdon and Turkington 2005). Some scholars have proposed that the common denominator in this continuum is that of dissociative experiences, which are relatively common cognitive-emotional reactions in humans

(Castillo 2003). The differentiators across this continuum are the severity of the acute precipitating stress and the perpetuating psychological and biological factors associated with the experiences. Culture provides the belief system and explanatory model that interprets human emotional and behavioral experiences, including psychotic experiences, both for the sufferer and for the family and community they live within (Spiegel 1971; Castillo 2003).

Many diverse cultures have culturally syntonically associated experiences with psychotic symptoms. Some of these are reactive to stressors, such as the process of grief and loss (hallucinations based on the presence of the lost loved one), and many cultural syndromes which are associated with significant stress-related psychotic symptoms focus on disturbances of reality testing. For example, in the classic Japanese syndrome termed *Koro*, a male can hallucinate that their penis is physically shrinking (Durst and Rosca-Rebaudendo 1991). Some psychotic symptoms are based on religious-spiritual experiences (such as experiencing apparitions of religious figures), which are reactive or adaptive to stressors. It is important to recognize such experiences so as to not over-interpret or inappropriately pathologize them and distinguish them from true indicators of serious psychopathology. Consultation with cultural consultants, spiritual healers, or family members who understand or share the patient's explanatory model and can place the patient's experience within outside of the range of expected cultural experiences can be helpful to effectively evaluate their context and pathological significance (Pumariega et al. 2013).

Differences in the expression of psychiatric symptomatology across different cultural groups and populations will also lead to misdiagnosis and mistreatment associated with psychosis. Epidemiological differences and diagnostic biases have been identified in the diagnosis of psychosis across cultures (Myers 2011). In developing nations and non-Western cultures, brief transient psychoses have been found to be far more common than in Western cultures and identified as being related to social stress and often self-remitting, with an unclear relationship to chronic psychotic illness (Jilek and Jilek-Aall 1970; Jilek 2000; Mamah et al. 2012). A classic finding of diagnostic bias is the overdiagnosis of schizophrenia versus bipolar disorder in certain nations (e.g., in the USA versus Europe) and the overdiagnosis of schizophrenia in African-origin people both in Western nations and in Africa (Kilgus et al. 1995; Myers 2011).

Another impact that culture can have on psychotic symptoms is in the context of immigration. Acculturation stress can be one of the major stressors precipitating psychosis, particularly when that stress of encountering a very different culture and language is sudden or acute (otherwise known as "culture shock"). Other complicating traumatic factors associated with immigration include pre-migratory experiences that led to the emigration (war, natural disaster, terrorism), treacherous emigration journeys (dangerous travel, abuse and victimization, losses of loved ones), and traumatic stressors involved in resettlement (uncertain and insecure residence, loss of contact with family, and social supports) (Bhugra 2004; Rothe et al. 2010). Many studies have pointed to a higher rate of psychotic symptoms and illness among first-generation immigrants. This effect has also been linked to the

degree of ethnic density, or ethnic-cultural isolation, that the new immigrant finds themselves in; thus, settlement in an ethnic enclave is a protective factor (Bhugra and Jones 2010; Myers 2011).

11.3 Culture and Traditional Interventions for Psychosis

There is a long history of the use of culturally prescribed rituals and ceremonies to treat psychotic symptoms among traditional and indigenous cultures, occurring for centuries before the medicalization of mental illness. Most such interventions have been directed at addressing spiritual/supernatural factors (such as exorcisms of evil spirits or addressing the relationship between the individual and responsible deities). These interventions have often been combined with the use of herbal remedies or even the use of psychoactive agents in ceremonies. The latter are intended to facilitate or induce altered states of consciousness to better commune with responsible spirits. There is some evidence that traditional healing interventions have value in the management of psychotic symptoms and illnesses, and functionally such interventions address the dissociative experiences and symptoms associated with traumatic psychoses. Collaboration with traditional healers who can perform such rituals can enhance services for individuals with psychosis, especially in minority communities and resource-limited environments (Abbo et al. 2012).

Another important component of how traditional cultures have addressed psychosis has been through social rehabilitation and integration. The psychotic symptom itself is viewed as expression of special supernatural or spiritual abilities or insight. The psychotic person is thereby assigned special “spiritual roles” where their “special powers” have special spiritual meaning and value for the community (Halifax 1979; Myers 2011). These practices, which some have termed “protective stigma,” became an interesting way to integrate people with mental illness and reduced the stigma they might have experienced among their family members and neighbors.

11.4 Cultural Influences on Psychological Interventions

More formal psychological therapeutic models based on cultural beliefs have been developed in recent history. These are also infused with the values/beliefs of the predominant culture and informed by its explanatory models.

Yoga and meditation are perhaps the oldest psychotherapeutic interventions. Buddha as the integrative theorist used Pali and Hindu teachings and explanations to develop a model oriented to address distress and enhance human potential. Parallels have been between Kundalini awakening (a Tantric tradition of Yoga) and psychosis. Kundalini, a spiritual concept, is a powerful energy that resides at the base of the tail bone, often represented by a snake twisting up the spine. In most people, this energy is dormant until something causes it to awaken. This can be induced through specific types of yoga, breathing exercises, or chanting. In some

cases the causes of awakening are unclear – it can be totally spontaneous. When the Kundalini awakens, it may stir up a lot of repressed feelings and traumas from the unconscious and cause considerable anguish and pain in the individual. A premature Kundalini awakening may cause psychotic episodes in individuals with severe early traumas. Such traumas are usually associated with serious organic or biological disturbances. Some people with psychotic symptoms tend to show low-amplitude alpha mixed with moderate- to high-amplitude fast beta waves, often predominating in the frontal and perhaps in the temporal lobes of the brain. This may indicate a partial Kundalini arousal on a fragmented and fragile basis. This fast EEG frequency pattern, which lacks the slow-frequency, high-amplitude components, indicates a lack of grounding and a dissociation between levels of consciousness. On the other hand, there are also yogic techniques oriented to reducing Kundalini, and recent applications with schizophrenia have addressed negative symptomatology and social cognition (Sannella 1987; Arias et al. 2006).

Morita therapy is a systematic psychotherapy based on Eastern psychology, named in 1919 after Shoma Morita, a Japanese psychiatrist. It is a behavioral, structured program and tries to lead patients from preoccupation with somatic symptoms and attempts to eliminate neurotic symptoms through four phases by accepting them as natural while engaging an outward perspective on life and increased social functioning, with an emphasis on moral teachings. It has had some recent application in the treatment of schizophrenia with some positive results (Li and He 2008).

Psychoanalysis as an explanatory and therapeutic model is based on the values of Western European culture and attempted to explain human psychological distress and disorder as resulting from early developmental failures and the impact of unresolved psychological conflict overwhelming the rational mind. Psychosis is addressed in psychoanalytic psychotherapy through strengthening defense mechanisms to better address internal distress and conflict that may fuel psychotic symptoms and improve insight to strengthen reality testing. In current day practice, psychoanalytic psychotherapy is seen as complimentary or adjunctive to the use of pharmacotherapy to treat psychotic symptoms (Fenton 2000).

Cognitive behavioral therapy (CBT) developed as a late twentieth-century Western model that focuses on distortions of rational thoughts and behaviors and their resulting emotions as the main explanatory model for psychiatric disturbance, as well as the development of functional cognitive and behavioral skills for daily living and functioning. It applies this explanatory model and the resulting structured therapeutic techniques to address such distortions for a growing range of psychiatric disorders. It was initially applied to address depression and anxiety, with significant efficacy and effectiveness, but progressively has been applied to more serious disorders such as bipolar disorder and schizophrenia and even disorders with a neurological basis such as Tourette's disorder. This is again not surprising due to the relationship between psychotic symptoms (especially traumatic psychoses) and dissociative experiences driven by anxiety as previously discussed (Castillo 2003; Kingdon and Turkington 2005), with the early work on CBT and anxiety informing this work. It has had recent significant application to the treatment of psychosis (associated with schizophrenia and mood disorders) through similarly assisting the

individual in identifying and addressing reality distortions as thought distortions. It has a primarily Western cultural bent, though it has recently been the focus of work on cultural modification to address diverse cultural orientations (see Sect. V).

Family therapy is a mid-twentieth-century Western model that initially focused on family dysfunction as being causative of psychosis, influenced by the work of the communication theorists, who hypothesized that disturbed communication within social contexts that placed vulnerable individuals in highly conflicted situations (such as within distressed families) was causative in the onset and perpetuation of psychosis. There were even attempts to treat schizophrenia through intensive family therapy in long-term experimental inpatient settings (Watzlawick 1963). The hypothesis of communication and relationship dysfunction as causative was found to be fallacious, but the role of disturbed communication leading to increased distress and vulnerability toward psychotic relapse was supported empirically (McFarlane and Cook 2007). This led to the concept of high “expressed emotion” (EE) being a significant mediating factor in symptom stability and reduction and a target for intervention. However, it has also been found that high EE is actually normative among many cultural groups, and in those contexts, EE is less significant in precipitating or exacerbating psychotic symptoms (Karno et al. 1987). In addition, the role of families in supporting cognitive and functional rehabilitation has been supported by many studies (McFarlane et al. 2003). Family therapy has also progressively been adopted in different cultural contexts and also been increasingly informed by cultural adaptations.

11.5 Cultural Adaptation of Western Evidence-Based Interventions

As CBT and other forms of evidence-based psychotherapies have evolved, there has been greater emphasis on its cultural adaptation to enhance effectiveness with more diverse populations, especially non-European-origin groups.

Griner and Smith (2006) conducted a meta-analysis of 80 publications on culturally adapted psychotherapies and found three levels of cultural adaptations (in order of extensiveness): Level 1, translation of therapeutic materials into the language of the client; Level 2, incorporation of cultural values/beliefs and contextual variables (unique stressors and challenges) into the psychotherapy; and Level 3, incorporation of cultural theories of problem formation and therapeutic change. Falicov (2009) identified other levels of cultural adaptation of psychotherapies, which included (1) incorporation of cultural values/beliefs and contextual variables (including stressors and challenges unique to that cultural group); (2) implementation by professionals of the same race, ethnicity, and language as clients; (3) addressing accessibility and flexibility of scheduling to fit cultural values and needs; and (4) clinician collaboration with natural resources (extended family, spiritual traditions, and community) and engagement strategies.

One of the most comprehensive frameworks for the cultural adaptation of psychotherapy was proposed by Tseng et al. (2005) that outlines four levels of

adjustment to the therapy and adapted for psychosis by Rathod and colleagues (2015): (1) Philosophical reorientation or reexamination and orientation of the fundamental view of life which affects the direction and goal of therapy, e.g., acceptance or conquering, normality, and maturity. This domain includes level of acculturation, beliefs and attributions of illness, and cultural orientation toward psychotherapy. (2) Practical considerations of societal factors that impact on the performance of therapy (e.g., racism, legal status, economic conditions, health systems and reputation, funding arrangements, level of stigma associated with mental illness, etc.), all of which impact on the patient's experiences and often determine their trust or lack of it in the system of care. (3) Technical adjustments of methods and skill in providing psychotherapy, including the mode and manner of therapy and various clinical issues within the therapy for clients of various backgrounds. This incorporates understanding of the setting and environment of therapy, therapeutic relationship, choice of therapy, family structures and goals, and role of religion and spirituality. (4) Theoretical modifications of concepts need to be made for a best fit for the individual and their cultural strength (including views on mind-body relations, self and ego boundaries, individuality vs. collectiveness, personality development, parent-child relations, and preferred defense mechanisms and coping styles).

The evidence for culturally adapted psychotherapies has been mixed but promising. Griner and Smith (2006), conducting a meta-analysis of 76 studies, demonstrated an effect size of 0.45 for culturally adapted evidence-based interventions in comparison to nonculturally adapted treatments. Huey and Polo (2008), using a meta-analysis of 38 studies of interventions for minority youth, was inconclusive insofar as comparative effectiveness, but demonstrated significantly stronger treatment adherence to culturally adapted interventions. The ultimate challenge faced by culturally adapted interventions is making the necessary adaptations while retaining fidelity to the original concepts and methodology of interventions.

Conceptually, cultural adaptations of psychological interventions for psychosis and psychotic symptoms need to include and address the following key elements: (a) demystification and psychoeducation (culturally relative explanatory models of psychosis, cultural framework around reality testing), including stigma; (b) cultural idioms around psychotic experiences; (c) the role of the family in efforts for rehabilitation and recovery, including the culturally relative nature of EE; and (d) cultural role expectations for rehabilitation. Kingdon and Turkington (2005) discuss early intervention techniques used in working with traumatic psychoses, chiefly identification of relevant stressors and context, reattribution of hallucinations, dealing with patient's beliefs and attitudes about key events, and (in cases where borderline personality characteristics are present) the use of dialectic behavioral techniques (p.40–41). They first recommend ethnic and gender matching (in therapist or even in supervisor) – may be ideal, but not always feasible. They go on to recommend attention to therapist style (language, tone of voice, and areas of emphasis), eliciting basic beliefs and considering spiritual or cultural explanations for inclusion in the therapeutic work.

Rathod et al. (2010) conducted a qualitative study in ethnic minority groups that concluded that CBT would be acceptable for minority patients with psychosis and

may be more effective if it was culturally adapted to meet their needs. Based on the principles outlined by Tseng (2005) for cultural adaptation of psychotherapy, Rathod et al. (2013) pursued a randomized controlled trial of a culturally adapted cognitive behavioral therapy for psychosis (CaCBTp). This trial was conducted in two centers in the UK ($n=33$) with culturally diverse participants with a diagnosis of a schizophrenic disorder, including Black British, African Caribbean/Black African, and South Asian Muslim participants. Assessors blind to randomization and treatment allocation conducted administration of outcome measures. Participants in the CaCBTp group achieved statistically significant results posttreatment compared to those in the treatment as usual arm, with some gains maintained at follow-up. High levels of satisfaction with the CaCBTp were reported.

Mausbach et al. (2008) pursued the comparative evaluation of a group-based manualized behavioral intervention targeting areas of everyday functioning (managing medications, improving social and communication skills, organizing and planning daily life, using transportation, and managing finances). The culturally adapted version of this program included (a) translation of intervention and assessment materials from English to Spanish, (b) inclusion of bicultural/ bilingual group facilitators, (c) integrating culturally specific icons and idioms in the materials, and (d) basing the format, content, and treatment goals on Mexican cultural values such as *simpatia* (the use of polite social relations) and *personalismo* (emphasizing warm relationships). Fifty-nine Latino participants diagnosed with persistent psychotic disorders were assigned to either the culturally tailored skills-training intervention ($n=21$), the equivalent non-tailored intervention ($n=15$), or a community-based support group ($n=23$). Participants receiving the culturally tailored intervention showed significant improvement in several outcomes, particularly significant improvement in the ability to role-play a variety of complex daily functional situations, significantly fewer medication errors, and higher quality of well-being scores at 6 months. Rathod et al. (2015) present the most up-to-date research on CBT in ethnic minority groups and present the cultural adaptation of core CBT techniques including reattribution, normalization, explanation development and formulation, reality testing, inference chaining, and resetting expectations.

Acceptance and commitment therapy (ACT) is a newer behavioral treatment that promotes radical acceptance of unavoidable psychological distress in the service of pursuing valued goals and actions. Patients are encouraged to accept unavoidable events, to acknowledge but let go of symptoms without treating them as either true or false, and to identify and work toward goals that were consistent with their broader life values. Bach and Hayes (2002) first demonstrated the effectiveness of ACT in a small randomized trial with brief treatment of psychotic inpatients. The ACT group showed a 50 % reduction in re-hospitalization rates by 4-month follow-up and reported less distress from and believability in their psychotic symptoms. Paradoxically, patients receiving ACT simultaneously reported a higher frequency of psychotic symptoms at follow-up, possibly demonstrating increased acceptance of the symptoms. Guadiano and Herbert (2006) replicated the Bach and Hayes (2002) study with a predominantly (80 %) poor African-American population, with better measures and a better control condition that controlled for experimental

contact. They found significant results, especially on measures of overt psychotic behavior such as the Brief Psychiatric Rating Scale.

Some models of evidence-based culturally adapted interventions have focused on families to address these key elements. Koppelowicz et al. (2003) developed a family intervention for Latinos with schizophrenia that focused on behavioral, conflict resolution, and cognitive skills training for patients and family members. It had significant impact on re-hospitalization, symptoms, function; no difference in caregiver burden or quality of life. Barrio and Yamada (2010) pursued an iterative intervention development process guided by a cultural exchange framework, based on findings from an ethnographic study of Latino families with members with schizophrenia. They piloted this multifamily group 16-session intervention with 59 Latino families in a randomized control trial. The preliminary data from family- and client-level outcomes and post-study focus groups indicate that the intervention is effective by increasing illness knowledge and reducing family burden. Yang et al. (2014) developed and piloted an anti-stigma intervention based on a peer-family group format, co-led by a clinician and a trained family caregiver, to counter stigma among Chinese immigrants. The intervention provides psychoeducation, strategies to counter experienced discrimination, and techniques to resist internalized stigma. Results suggest preliminary efficacy in reducing internalized stigma for caregivers who evidenced at least some prior internalized stigma.

Some of the work on cultural adaptation of psychotherapy of psychosis has involved further investigation of the application of the concept of *expressed emotions* (EE). Mexican Americans have been found to have lower rates of high EE than other ethnic and national groups (Jenkins and Karno 1992). In the USA, and relative to European-Americans, Mexican American caregivers have been found to be less critical of their ill relatives (Kopelowicz et al. 2006), as well as more likely to live with and spend more time with them (Lopez et al. 2004; Ramirez Garcia et al. 2004). The relation between expressed emotion (EE) and caregiver acceptance was tested with the use of video-recorded interactions between 31 Mexican American family caregivers and their relatives with schizophrenia. Acceptance was defined as the family caregiver's engagement with the ill relative along with low levels of expectations for behavioral change. Three aspects of caregiver acceptance were measured: global acceptance of the patient, unified detachment (i.e., non-blaming but engaged problem discussion), and low aversive responses to patient behavior (e.g., criticisms and demanding change). Relative to high EE caregivers, low EE caregivers were consistently more accepting of their ill relatives across the three measures of acceptance. Unified detachment was negatively associated with emotional overinvolvement, and aversive responses were positively related to criticism. Warmth was not related to acceptance. Such findings can guide the development of cultural adaptations that address family EE effectively within a cultural context and improve the prognosis for the patient and the caregiving environment (Vaughn and Leff 1981).

The pharmacotherapy of psychosis also requires cultural adaptations to address both biological and psychological factors. Increasing evidence points to differential pharmacogenetics based on ethnically and racially specific polymorphisms of

metabolic enzymes and postsynaptic receptors. Many of these polymorphisms have been handed down multiple generations via population migrations. These polymorphisms include D2 receptor sensitivity in African origin (which increase risk for extrapyramidal symptoms and tardive dyskinesia), CPY2D6 slow metabolism with Asian origin and indigenous American populations (which increase risk of side effects and potency with lower doses), and CPY2D6 slow metabolism in dietary context with Latinos (through the use of corn and citrus). Clinicians have to be alert to these polymorphisms when prescribing psychiatric medications, especially antipsychotics. They also need to be alert to ethnic/racial/cultural biases around diagnosis, which can lead to inappropriate treatment. Patients and families, especially from ethnic minority groups, also experience specific stigma through the use of pharmacotherapy for psychiatric disorders, feeling that these have at times been misused for cultural oppression. Psychoeducation needs to demystify pharmacotherapy and empower patients and families from diverse backgrounds by the process of informed consent and therapeutic choice (Lin and Finder 1983; Lin et al. 1995; Malik et al. 2010).

11.6 Impact of Globalization

Concern has been voiced by some critics of globalization in mental health, such as Watters (2010), that this may lead to the Westernization of mental health, with a greater emphasis on standardization of assessment and treatment that would minimize cultural factors such as explanatory models, treatment acceptability, and culturally specific interventions. Watters identifies these explanatory models, accompanied by symptom expression and idioms of distress unique to the cultural context, as important in the prevention of alienation and stigma and the maintenance of the bond between the affected individual and their families and communities. He cites various examples of studies that have shown that the Western scientific model may have the opposite effect than intended around stigma and social integration, possibly serving to alienate those affected with mental illness from their families and communities. There is also danger in excessive reductionism adversely impacting the rich diversity in understanding and interventions of psychotic experiences.

However, globalization could lead to a healthy exchange and mutual learning of approaches to treat psychotic disorders. The use of culturally based interventions and of natural supports such as families and spiritual institutions may provide solutions to one of the main challenges in serving those people with these illnesses: overcoming their socio-cognitive impairments in order to sustain their connections to their families and communities. Such social connections are critical in enhancing function and recovery from psychotic illnesses. Western psychiatric service systems have often failed in providing such social connectedness and rehabilitation while spending large sums per capita in the treatment of psychotic relapses (in hospitalization, residential treatment, and pharmacotherapy). Naturalistic, community-based models of care in low-resource nations may be important exemplars to reform our service systems for these vulnerable citizens.

Even with this greater openness to culturally based interventions and care models, access to such approaches still poses a major challenge. This lack of access particularly impacts some of our most vulnerable populations (minorities, immigrants) who tend to utilize traditional mental health services at much lower rates due to these being less acceptable and culturally relevant (Pumariega et al. 2013). We cannot count on ethnic matching of mental health providers as a solution since these are in lower relative numbers among the overall pool of professionals compared to the overall population. Additionally, mental health professionals from minority and immigrant backgrounds are themselves not often trained in culturally informed models. The best approach to address this major access gap is training all mental health providers in principles of culturally informed care and evidence-based culturally based interventions, especially those for psychoses. Such training and standard setting efforts are underway by some professional organizations and some public mental health providers (Pumariega et al. 2013), but they need to be far broader if we are to catch-up with the increasing cultural diversity of our populations and their needs.

Additionally, mainstream mental health providers can collaborate with culturally specific healers in providing parallel care, particularly sharing their mutual understanding of the management of psychotic symptoms and experiences. An early example of this is provided by Pedro Ruiz, well-known leader in world psychiatry, who found, as a young attending heading a partial hospitalization program for Latinos with serious mental illness in New York City, that many of his patients were dropping out of the program at high rates. He attempted to make the ambiance of the program more culturally welcoming, but this did not yield results. It was only after he discovered that the patients instead were attending an Espiritismo center-church (Puerto Rican Afro-Caribbean religion) for their spiritual healing needs that he then was able to establish a successful collaboration with the church based on mutual support of each others' explanatory model and interventions that led to more comprehensive care (Ruiz 1977).

Conclusion

The cultural adaptation and tailoring of psychiatric treatment in general and of schizophrenia and other psychotic disorders in particular is an area that will witness continued growth in interest and application. This will occur as there is greater emphasis on mental health care and services worldwide and greater exchange in knowledge and treatment models as a result of globalization and improving socioeconomic conditions in emerging nations.

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