

N. Sartorius · A. Janca

## Psychiatric assessment instruments developed by the World Health Organization

Accepted: 27 April 1995

**Abstract** Over the past 30 years the World Health Organization (WHO) has produced a number of assessment instruments intended for national and cross-cultural psychiatric research. WHO instruments have been tested and used in many collaborative studies involving more than 100 centres in different parts of the world. This article reviews the main WHO instruments for the assessment of (a) psychopathology, (b) disability, quality of life and satisfaction, (c) services, and (d) environment, and risks to mental health. The principles used in the development of WHO instruments, their translation and their use across cultures and settings are discussed.

The World Health Organization (WHO) occupies a unique position in the field of health care and represents a neutral platform that can be used to bring about international collaboration in research. Over the years WHO has gained experience in the management of international collaborative research projects and has produced reliable methods for their conduct in different cultures and settings (Sartorius 1989).

The development of cross-culturally applicable and reliable methods for the assessment of problems related to mental health has been one of the major activities in the WHO Mental Health Programme. Many of these methods have been described in scientific publications, released for general use and applied in various research projects worldwide (Sartorius 1993). This article outlines the basic characteristics of the main instruments produced and used in the studies coordinated by the WHO Mental Health Programme.<sup>1</sup> The specific characteristics of the instruments described – such as their format, area of assessment, main users, training require-

ments and available translations – are summarized in Tables 1–4.

### Instruments for the assessment of psychopathology

#### Alcohol Use Disorders Identification Test (AUDIT)

AUDIT (Babor et al. 1989) is a brief structured interview aimed at identifying people whose alcohol consumption has become harmful to their health. It consists of ten questions: three questions on the amount and frequency of drinking, three on drinking behaviour and four on problems or adverse psychological reactions related to alcohol. The instrument can be interviewer- or self-administered, and the average administration time is 1–2 minutes. If the respondent is defensive or uncooperative, the clinical screening procedure (CSP) may be used to complement AUDIT. CSP contains a listing of indirect questions and clinical signs likely to indicate the harmful consequences of alcohol use.

AUDIT has been tested in a WHO collaborative project on the early detection of people with harmful alcohol consumption. High reliability of the constituent scales, as well as high face validity and the ability to distinguish light drinkers from those with harmful drinking has been reported (Saunders and Aasland 1987; Saunders et al. 1993 a, b).

#### Composite International Diagnostic Interview (CIDI)

CIDI (WHO 1993 a) is a highly standardized diagnostic instrument for the assessment of mental disorders according to the definitions and criteria in the ICD-10 *Classification of mental and behavioural disorders* (WHO

N. Sartorius

Department of Psychiatry, University of Geneva, Boulevard de la Cluse 51, CH-1205 Geneva, Switzerland

A. Janca (✉)

Division of Mental Health, World Health Organization, CH-1211 Geneva 27, Switzerland

<sup>1</sup> More details about these and other WHO instruments can be found in the *Catalogue of assessment instruments used in the studies coordinated by the WHO Mental Health Programme* (Janca and Chandrashekar 1993), available from WHO on request

**Table 1** WHO instruments for the assessment of psychopathology (*WHO*, World Health Organization; *ICD*, International classification of diseases; *DSM*, Diagnostic and statistical manual)

Instrument	Format	Area	User	Training	Languages
Alcohol Use Disorder Identification Test (AUDIT)	Structured	Harmful alcohol use	Health or research worker	Not required	English, Japanese, Norwegian, Romanian, Spanish
Composite International Diagnostic Interview (CIDI)	Structured	ICD-10, DSM-III-R and DSM-IV mental disorders	Lay interviewer	Essential	Arabic, Chinese, Dutch, English, French, German, Icelandic, Italian, Japanese, Kannada, Russian, Serbian, Spanish
ICD-10 Symptom Checklist for Mental Disorders	Semi-structured	ICD-10 mental disorders	Psychiatrist or psychologist	Not required	Chinese, English, Estonian, German, Italian, Japanese, Kannada, Portuguese, Russian, Spanish
International Personality Disorder Examination (IPDE)	Semi-structured	ICD-10, DSM-III-R and DSM-IV personality disorders	Psychiatrist or psychologist	Essential	Dutch, English, Estonian, French, German, Hindi, Japanese, Kannada, Norwegian, Swahili, Tamil
Schedules for Clinical Assessment in Neuropsychiatry (SCAN)	Semi-structured	Symptoms and signs of mental disorders	Psychiatrist or psychologist	Essential	Chinese, Danish, Dutch, English, French, German, Greek, Italian, Kannada, Portuguese, Spanish, Turkish, Yoruba
Standardized Assessment of Depressive Disorders (SADD)	Semi-structured	Depressive disorders	Psychiatrist or psychologist	Essential	Bulgarian, Farsi, French, German, Hindi, Japanese, Polish, Turkish
Schedules for Clinical Assessment of Acute Psychotic States (SCAAPS)	Semi-structured	Acute psychotic states	Psychiatrist or psychologist	Essential	Czech, Danish, English, Hindi, Yoruba
Social Description (SD)	Semi structured	Social history	Social worker or psychologist	Essential	Chinese, Czech, Danish, English, Hindi, Russian, Spanish, Yoruba
Self-Reporting Questionnaire (SRQ)	Questionnaire	Neurotic and psychotic symptoms	Self-administered	Not applicable	Amharic, Arabic, Bahasa (Malaysia), Bengali, English, French, Hindi, Italian, Kiswahili, Njanja Lusaka, Portuguese, Spanish, Tagalog

1992) and the revised third edition of the *Diagnostic and statistical manual of mental disorders* (DSM-III-R; APA 1987). A version of CIDI that will accommodate DSM-IV criteria (APA 1994) will be released in 1995.

CIDI is primarily intended for use in epidemiological studies of mental disorders in general populations. The instrument consists of fully spelled-out questions and of a probing system aimed at assessing the clinical significance and psychiatric relevance of reported phenomena. No clinical judgement is required in coding and recording respondents' answers, and the schedule can be competently administered by a lay or clinician interviewer after 1-week's training. The average administration time of CIDI is 90 min. CIDI is accompanied by a set of supporting materials that includes manuals and computer programs for data entry, cleaning and scoring of ICD-10 and DSM-III-R diagnoses.

A number of versions and modules of CIDI have been produced for specific research purposes (Janca et

al. 1994a); of these only two, a computerized version of CIDI (CIDI Auto; WHO 1993c) and the Substance Abuse Module (Robins et al. 1990), have so far been formally adopted as parts of CIDI by the WHO CIDI Advisory Committee. CIDI has been extensively tested in two fields trials involving 20 centres, 12 languages and about 1200 respondents. The field trials results show that the instrument is generally acceptable, appropriate and a reliable diagnostic tool for use across cultures and settings (Robins et al. 1988; Wittchen et al. 1991; Cottler et al. 1991; Janca et al. 1992).

#### ICD-10 Symptom Checklist for Mental Disorders

The ICD-10 Symptom Checklist for Mental Disorders (Janca et al. 1994b) is a semi-structured instrument intended for clinicians' assessment of psychiatric symptoms and syndromes in the F0-F6 categories of ICD-10.

**Table 2** WHO instruments for the assessment of disability, of illness, and quality of life

Instrument	Format	Area	User	Training	Languages
WHO Psychiatric Disability Assessment Schedule (WHO/DAS)	Semi-structured	Disability due to mental and often disorders	Psychiatrist or psychologist	Essential	Arabic, Bulgarian, Chinese, Croatian, Danish, English, French, German, Hindi, Japanese, Russian, Serbian, Spanish, Turkish, Urdu
Psychological Impairments Rating Schedule (PIRS)	Semi-structured	Psychological and behavioural deficits	Psychiatrist or psychologist	Essential	Arabic, Bulgarian, Croatian, English, French, German, Serbian, Turkish
WHO Disablement Scale (WHO DS)	Rating scale	Disablement due to mental and/or physical disorders	Psychiatrist or psychologist	Not required	Arabic, Chinese, Czech, Danish, Dutch, English, German, Hindi, Italian, Japanese, Kannada, Portuguese, Romanian, Russian, Spanish
Broad Rating Schedule (BRS)	Semi-structured	Psychotic symptoms and related disability	Psychiatrist or psychologist	Not required	Bulgarian, Chinese, Czech, Danish, English, German, Hindi, Japanese, Russian, Yoruba
Family Interview Schedule (FIS)	Structured	Family perception of patient	Psychiatrist or psychologist	Essential	Bulgarian, Chinese, Czech, Danish, English, German, Hindi, Japanese, Russian, Yoruba
Social Unit Rating (SUR)	Semi-structured	Burden of mental illness on the family	Lay interviewer	Essential	Arabic, English, French, Hindi, Portuguese, Spanish
WHO Quality of Life Assessment Instrument (WHOQOL)	Questionnaire	Quality of life	self-administered	Not applicable	Croatian, Dutch, English, French, Russian, Shona, Spanish, Tamil
Subjective Well-Being Inventory (SUBI)	Questionnaire	Feelings of well-being	Self-administered	Not applicable	English, Hindi

The instrument requires the clinician user to examine the patient or case notes in order to be able to rate the presence or absence of symptoms that are necessary to make a firm diagnosis in the ICD-10 system. The Checklist also lists symptoms and states that, according to ICD-10 criteria, have often been found to be associated with the syndrome (e.g. alcohol abuse in patients with mania) or should be assessed independently from the syndrome (e.g. mental retardation in patients with organic mental disorder). The symptom lists are accompanied by instructions intended to help the user in considering differential diagnoses. The possibility of recording onset, severity and duration of the syndrome, as well as number of episodes (where applicable), is also provided. The Checklist is accompanied by the ICD-10 Symptom Glossary for Mental Disorders (Isaac et al. 1994). The Glossary provides brief definitions of the symptoms and terms used in the Checklist.

The ICD-10 Symptom Checklist for Mental Disorders has been used at one of the sites participating in the field trials of ICD-10, and preliminary results have shown good psychometric properties for the instrument. The average administration time is 15 min, and the interviewer/observer reliability is acceptable ( $\kappa$  0.72; Janca et al. 1993).

#### International Personality Disorder Examination (IPDE)

The IPDE (WHO 1993 b) is a semi-structured interview schedule designed for the assessment of personality disorders according to ICD-10 and DSM-III-R criteria. It is designed for use by clinicians who have also received training in the use of the IPDE. The IPDE covers the following six areas of the respondent's personality and behaviour: work, self, interpersonal relationships, affects, reality testing and impulse control. The last six items in the schedule are scored without questioning and are based on the interviewer's observation of the respondent during the interview. The IPDE requires that behaviour or a trait be present for at least 5 years before it should be considered a manifestation of personality or a symptom of personality disorder and that at least one criterion of personality disorder be fulfilled before the age of 15 years. The information about the respondent obtained by reliable informants can also be recorded and is used in the final scoring of the diagnosis. The final scoring, which may be done clerically or by computer, is used in making ICD-10 and/or DSM-III-R diagnoses; a dimensional score can also be calculated.

Because of the length of the interview (2–3 h) the IPDE has recently been produced in two versions, one

**Table 3** WHO instruments for the assessment of services

Instrument	Format	Area	User	Training	Languages
Pathways Interview Schedule	Semi-structured	Sources of care	Health or research worker	Not required	Arabic, Bahasa (Indonesia), Chinese, Czech, English, French, Japanese, Kannada, Korean, Portuguese, Spanish, Turkish, Urdu
Quality Assurance in Mental Health Care Checklists:					
A. Mental Health Policy Checklist	Semi-structured	Mental health care (policy)	Health or administrative worker	Not required	Chinese, English, French, Italian, Portuguese, Spanish
B. Mental Health Programme Checklist	Semi-structured	Mental health care (programme)	Health or administrative worker	Not required	Chinese, English, French, Italian, Portuguese, Spanish
C. The Primary Health Care Facility Checklist	Semi-structured	Mental health care (primary care facility)	Health or administrative worker	Not required	Chinese, English, French, Italian, Portuguese, Spanish
D. The outpatient Mental Health Facility Checklist	Semi-structured	Mental health care (outpatient facility)	Health or administrative worker	Not required	Chinese, English, French, Italian, Portuguese, Spanish
E. The Inpatient Mental Health Facility Checklist	Semi-structured	Mental health care (inpatient)	Health or administrative worker	Not required	Chinese, English, French, Italian, Portuguese, Spanish
F. The Residential Facility for the Elderly Mentally Ill Checklist	Semi-structured	Mental health care (residential facility for the elderly mentally ill)	Health or administrative worker	Not required	Chinese, Czech, Danish, English, Hindi, Russian, Spanish, Yoruba
WHO Child Care Facility Schedule (CCFS)	Semi-structured	Quality of child care facility	Health or administrative worker	Not required	English, French, Greek, Portuguese

for ICD-10 and the other for DSM-IV diagnoses. Both versions of the instrument are accompanied by the user manual, screener, hand-scoring sheets and computer-scoring programs.

The IPDE has been tested in a WHO-coordinated field trial in which 14 centres from 11 countries participated. The field trial results indicate good acceptability, high inter-rater reliability and satisfactory temporal stability for the criteria and diagnoses assessed by the interview (Loranger et al. 1991, 1994).

#### Schedules for Clinical Assessment in Neuropsychiatry (SCAN)

SCAN (WHO 1994) is a semi-structured clinical interview schedule designed for clinicians' assessment of the symptoms and course of adult mental disorders. SCAN comprises an interview schedule, i.e. the 10th edition of the Present State Examination (PSE; Wing et al. 1974), Glossary of Differential Definitions, Item Group Checklist (IGC) and Clinical History Schedule (CHS). The SCAN schedule consists of part 1, which covers non-psychotic symptoms such as physical health, worrying, tension, panic, anxiety and phobias, obsessional symptoms, depressed mood and ideation, im-

paired thinking, concentration, energy, interests, bodily functions, weight, sleep, eating disorders, and alcohol and drug abuse; part 2 covers psychotic and cognitive disorders, as well as abnormalities of behaviour, speech and affect. When using SCAN, the clinician interviewer (e.g. psychiatrist or clinical psychologist) decides whether a symptom has been present during the specified time and to what degree of severity. One or two periods are selected to cover the main phenomena necessary for diagnosis. The periods usually include the "present state" (i.e. the month before examination) and the "lifetime before" (i.e. any time previously). Another option is to rate the "representative episode", which may be chosen because it is particularly characteristic of the patient's illness. The average administration time of SCAN is 90 min. The SCAN glossary is an essential part of SCAN and provides differential definitions of SCAN items and a commentary on the SCAN text.

A set of computer programs (CATEGO) is used for processing SCAN data and for the scoring and diagnoses according to ICD-10 and DSM-IV criteria. A computerized version of SCAN (CAPSE) is also available. It assists the interviewer in applying SCAN and allows direct entry of ratings at the time of the interview. Questions and ratings are displayed on the screen; if

**Table 4** WHO instruments for the assessment of environment, risks and qualitative research

Instrument	Format	Area	User	Training	Languages
Axis III Checklist	Semi-structured	Contextual factors	Psychiatrist or psychologist	Not required	Arabic, Chinese, Czech, Danish, Dutch, English, German, Hindi, Italian, Japanese, Kannada, Portuguese, Romanian, Russian, Spanish
Interview Schedule for Children (ISC)	Semi-structured	Child's psychosocial environment	Psychiatrist or psychologist	Not required	English, German, Portuguese, Slovenian, Spanish
Parent Interview Schedule (PIS)	Semi-structured	Child's psychosocial environment	Psychiatrist or psychologist	Not required	English, German, Portuguese, Slovenian, Spanish
Home Risk Card	Semi-structured	Child's home risk factors	Health or research worker	Not required	English, Hindi
<b>Qualitative Research Instruments</b>					
A. Exploratory Translation and Back-translation Guidelines	Guide	Linguistic equivalence	Health or research worker	Not required	English, Greek, Kannada, Korean, Romanian, Spanish, Turkish, Yoruba
B. Key Informant Interview Schedule	Semi-structured	Cultural aspects of mental health	Anthropologist or ethnographer	Essential	English, Greek, Kannada, Korean, Romanian, Spanish, Turkish, Yoruba
C. Focus Group Interview Guide	Guide	Cultural aspects of mental health	Anthropologist or ethnographer	Essential	English, Greek, Kannada, Korean, Romanian, Spanish, Turkish, Yoruba

needed, SCAN glossary definitions can also be referred to.

SCAN has been tested in WHO-organized field trials involving 20 centres in 14 countries. The field trials results indicate good feasibility and reliability of the instrument comparable to those obtained in testing the PSE-9 (Wing et al. 1990).

#### Standardized Assessment of Depressive Disorders (SADD)

SADD is a structured clinical interview schedule aimed at assessing the symptoms and signs of depressive disorders. Part 1 of the instrument covers the basic sociodemographic data about the patient. Part 2 contains a checklist of 39 symptoms and signs characteristic of depression and is accompanied by a glossary that provides definitions of symptoms and signs to be assessed, a listing of possible probes and examples of answers for each symptom. The checklist also includes a number of open-ended questions for recording rare or culture-specific symptoms of depression, as well as items related to the past history of the patient (e.g. number of previous episodes, precipitating factors, presence of mental disorders in relatives). Part 3 of the instrument serves to record the diagnosis and severity of the patient's condition. The ratings in SADD refer to the week preceding the interview and to any other time prior to the current episode. The administration of the instrument takes a short time if the clinician has examined the patient previously. If the case is "fresh", the time taken to obtain

the necessary information and rate it is longer (i.e. 45–60 min).

SADD has been tested in the WHO Collaborative Study on the Standardized Assessment of Depressive Disorders and has been found to be easy to use and acceptable to both psychiatrists and patients. The reliability of the sociodemographic, symptom checklist and past history sections of the instrument has been found to be high (Sartorius et al. 1980, 1983).

#### Schedule for Clinical Assessment of Acute Psychotic States (SCAAPS)

SCAAPS is a semi-structured interview schedule for clinicians' recording of information about patients with acute psychotic states. Such information is collected from different sources, such as the clinical interview of the patient, key informants and medical records. The instrument also offers the possibility of recording the follow-up diagnostic evaluation of the patient.

SCAAPS consists of six parts. Part A contains the screening criteria for acute psychotic states (e.g. onset of symptoms within 3 months of the initial assessment); part B comprises items related to the psychiatric history and social description of the patient; part C contains a 19-item symptom checklist covering symptoms from worrying and anxiety to symptoms reflecting stressful life events; part D serves to record the initial diagnostic evaluation and the results of the 1-year follow-up assessment; part E covers the treatment, course and outcome of the disorder; part F is intended for narrative summa-

ries of the initial examination, and 3-month and 1-year follow-up. The average duration of the SCAAPS interview is 120 min.

The instrument has been used in the WHO Collaborative Studies on Acute Psychoses and has been found to be a cross-culturally appropriate tool for collecting data about acute psychotic states in different parts of the world (Cooper et al. 1990).

### Social Description (SD)

The SD is a schedule with open-ended questions aimed at collecting information in a systematic manner about the social history of the psychiatric patient. The schedule is intended for research purposes, and can be used by social workers or clinicians. It covers the following areas: residence and household; education of the patient; work activities of the patient; children; marital status; education and occupation of the spouse; education and occupation of the parents; education and occupation of the head of the current household; religion; patient's childhood setting; daily and leisure activities; birth order of the patient and siblings; a thumbnail sketch by the interviewer who has to rate on a 5-point scale the current socioeconomic status of the patient, the patient's family background and the patient's current social isolation within the framework of his/her respective culture. The average administration time of the instrument is 120 min.

The SD has been used in the WHO International Pilot Study of Schizophrenia and has been found to be a useful means for collecting the social history of patients in different cultures and settings (WHO 1973). It has been used in a modified form in several other WHO studies such as the Collaborative Determinants of Outcome of Severe Mental Disorders (Jablensky et al. 1992).

### Self-Reporting Questionnaire (SRQ)

The SRQ is an instrument designed for screening the presence of psychiatric illness in patients contacting primary health care settings. It can be self-administered or interviewer-administered with illiterate or semi-literate patients, and its administration time is 5–10 minutes. The questionnaire consists of 24 questions, 20 of which are related to neurotic symptoms and 4 of which relate to psychotic symptoms. Each of the 24 questions is scored 1 or 0: a score of 1 indicates that the symptom was present during the past month; a score of 0 indicates that it was absent. Depending on the criteria, culture and language, different cut-off scores are selected in different studies, but most often the cut-off is 7. A score of 7 or above indicates the existence of a probable psychological problem. The SRQ is accompanied by a recently produced user's guide (Beusenberg and Orley 1994) that describes the instrument, its use and scoring, and

also summarizes its results of reliability and validity studies.

The SRQ has been tested in over 20 studies, (including the WHO Collaborative Study on Strategies for Extending Mental Health Care and the WHO Study on Mental Disorders in Primary Health Care), and has been found to be an appropriate, reliable and valid case-finding tool for use in primary health care settings, particularly in developing countries (Harding et al. 1980, 1983; WHO 1984).

---

### Instruments for the assessment of disability and burden

#### WHO Psychiatric Disability Assessment Schedule (WHO/DAS)

WHO/DAS is a semi-structured instrument designed for the evaluation of the social functioning of patients with mental disorders. Such an evaluation can be done by a psychiatrist, psychologist or social worker. The information about the functioning of the patient is collected from the patient, key informant(s) or written records. The instrument has been developed in accordance with the principles underlying the WHO *International classification of impairments, disabilities and handicaps* (WHO 1980).

WHO/DAS consists of 97 items grouped in five parts. Part 1 comprises items related to the patient's overall behaviour, and includes ratings of self-care, underactivity, slowness and social withdrawal. Part 2 serves to assess the patient's social role performance, and covers participation in household activities, marital role, parental role, sexual role, social contacts, occupational role, interests and information, and behaviour in emergencies or out-of-the ordinary situations. Part 3 of WHO/DAS is intended for the assessment of the patient's social functioning in the hospital, including ward behaviour, nurses' opinions, occupations and contact with the outside world. Part 4 covers modifying factors related to the patient's dysfunction (specific assets, specific liabilities, home atmosphere and outside support). Parts 5 and 6 serve for a global evaluation of the patient and a summary of the ratings and scoring, respectively. Items in parts 1 and 2 of DAS are rated on a 6-point scale, i. e. no dysfunction, minimal dysfunction, obvious dysfunction, serious dysfunction, very serious dysfunction and maximum dysfunction. The patient's current functioning (past month) is to be rated against the presumed "average" or "normal" functioning of a person of the same sex, comparable age and similar socioeconomic background. The average administration time of WHO/DAS is 30 min. A guide to the use of WHO/DAS and an explanation of certain key terms (e. g. psychological burden, social skills, impairment, etc.) accompany the instrument.

WHO/DAS has been tested and used in the WHO Collaborative Study on the Assessment and Reduction of Psychiatric Disability and has been found to be a reli-

able and valid tool for the assessment and cross-cultural comparison of psychiatric disability (Jablensky et al. 1980).

#### WHO Psychological Impairments Rating Schedule (WHO/PIRS)

WHO/PIRS is a semi-structured instrument intended for clinicians' assessment of selected areas of psychological and behavioural deficits in patients with functional psychotic disorder. The main areas covered by the instrument concern negative symptoms, social skill and communication, and an overall impression of the patient and his/her personality. WHO/PIRS should be administered after a PSE interview, preferably by the same clinician. The average administration time is 25 min.

The instrument consists of 97 items grouped in 10 sections. Part A includes items and scales for rating observed behaviour of the patient. Part B includes a pattern assembly, three Rorschach cards and a letter-deletion test aimed at eliciting the patient's performance when presented with standard tasks.

WHO/PIRS has been used in the WHO Collaborative Study on Impairments and Disabilities Associated with Schizophrenic Disorders and has been found to be a reliable assessment tool (test-retest reliability kappa: 0.79; Jablensky et al. 1980).

#### WHO Disablement Scale (WHO DS)

WHO DS has been developed as a component of the multiaxial presentation of the ICD-10 *Classification of mental and behavioural disorders*. It is a simple scale intended for the recording of the clinicians' assessment of disablement caused by mental and physical disorders. The ratings refer to specific areas of functioning, such as personal care (e.g. personal hygiene, dressing, feeding), occupation (e.g. function in paid activities, studying, home-making), family and household (e.g. interaction with spouse, parents, children and other relatives), and the broader social context (e.g. performance in relation to community members, participation in leisure and other social activities). The scale provides anchor-point definitions for six ratings ranging from 0 (no dysfunction) to 5 (maximum dysfunction). The administration time of WHO DS takes 5 min if the clinician knows the patient and has examined him or her.

WHO DS has been tested in WHO-coordinated field trials of the ICDIO Multiaxial Classification that involved about 70 centres from more than 25 countries. The field trials results indicate good acceptance of the instrument by clinicians belonging to different psychiatric schools and traditions (Lopez-Ibor et al. 1994).

#### Broad Rating Schedule (BRS)

The BRS has been developed for use in a long-term follow-up study of patients given the diagnosis of schizophrenia, and serves to summarize the follow-up findings. The schedule uses information from all available sources, including the patient, informant and medical or other records. The severity of psychotic symptoms and disabilities is rated for the previous month on a scale ranging from absent to severe. Symptoms, as well as disabilities, are also rated on a modified version of the DSM-III-R Global Assessment of Functioning (GAF) Scale, which ranges from 1 (persistent danger of severely hurting oneself or others, or persistent inability to function in almost all areas) to 90 (absent or minimal symptoms, or good functioning in all areas, interested and involved in a wide range of activities, etc.). The instrument also contains sections on subjects lost to follow-up and deceased subjects. The ratings of these sections are based on the best judgement of the clinician using all available information. The BRS should be rated after completion of the interview of the patient and informant and a review of the records. Clinicians do not need specific training in the use of the schedule.

#### Family Interview Schedule (FIS)

The FIS is a structured instrument for the assessment of family members' perception of the patient's psychiatric problems and their consequences for the patient and his or her family. It is also an instrument developed for use in the WHO Long-Term Follow-Up Study of Schizophrenia. The source of information for this schedule should be a permanent member of the patient's family. The schedule is divided into the following sections: I – symptoms and social behaviour; II – impact; III – stigma; IV – service providers; V – attribution. The section on symptoms and social behaviour covers the day-to-day behaviour and responsibilities of the patient in the past month (e.g. helping with household chores). The section on impact ascertains involvement of family members in helping the patient as well as their difficulties in managing and coping with problems caused by the patient's psychiatric problems. The section on stigma consists of a list of experiences the family member has had because of the patient's psychiatric problems (e.g. that neighbours treated him or her differently). The service providers section of the instrument is aimed at assessing the help provided to the patient and the family by doctors, nurses and other relevant care-givers. The section on attribution is intended for recording the family member's views (based on the information obtained from care-givers) on causes of the patient's psychiatric problems.

The FIS is accompanied by a "visual analogue" measure, i.e. a graphic presentation of the scale ranging from "almost never or not at all" to "almost always or a lot". The administration time of the FIS is 30–45 min.

The user (psychiatrist, psychologist, social worker or nurse) should be trained in the administration of the instrument.

### Social Unit Rating (SUR)

The SUR is a semi-structured interview aimed at recording the effect of a patient's illness on his/her immediate living group. The instrument consists of 20 items including basic sociodemographic information about the patient (e.g. occupation, education, employment), time residing in a given area, time residing in the present household, composition of the social unit, main sources of income, total weekly income and sources of help for the social unit. The rest of the items in the instrument relate to the pre-illness status of the social unit and to the effect of the patient's illness on the social unit.

Any lay interviewer can administer the SUR after appropriate training. The administration time of the instrument is 30–45 min. The SUR has been used in the WHO Collaborative Study on Strategies for Extending Mental Health Care and has been found to be a useful means for the assessment of the effects of mental illness on the family or household of the patient (Giel et al. 1983).

---

## Instruments for the assessment of quality of life

### WHO Quality of Life Assessment Instrument (WHOQOL)

The WHOQOL is an assessment instrument that allows an enquiry into the perception of individuals of their own position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. The instrument covers the following six broad domains of the quality of life: physical domain, psychological domain, level of independence, social relationships, environment and spiritual domain. Within each domain a series of facets of the quality of life summarizes that particular domain. For example, the psychological domain includes the facets positive feelings; thinking, learning, memory and concentration; self-esteem; body image and appearance, negative feelings. Response scales in the instrument are concerned with the intensity, frequency and subjective evaluation of states, behaviour and capacities. The WHOQOL provides a quality of life profile that consists of an overall quality of life score, scores for each of the broad domains of the quality of life, scores for individual facets of the quality of life and within facets, separate scores for the recording of the subject's perception of his or her condition and quality of life.

The WHOQOL is being developed in the framework of a WHO collaborative project on quality of life measures involving numerous centres in different cultural settings. One of the main goals of the project is to assess

the psychometric properties of the instrument such as its reliability, validity and cross-cultural sensitivity (The WHOQOL Group 1994).

### Subjective Well-Being Inventory (SUBI)

SUBI is a questionnaire for the assessment of subjective well-being. It can be self- or interviewer-administered and is designed for research purposes. The questionnaire consists of 40 items designed to measure feelings of well-being (or lack of it) as experienced by an individual in relation to concerns such as their health or family. The items in SUBI represent the following factors in the structure of subjective well-being: general well-being – positive effect; expectation-achievement congruence; confidence in coping; transcendence; family group support; social support; primary group concern; inadequate mental mastery; perceived ill-health; deficiency in social contacts; general well-being – negative effect. SUBI is accompanied by the “stepwise ethnographic exploration” procedure that can be used to assess that SUBI is appropriate for use in the cultural setting in which the study will take place.

The instrument has been used in research projects carried out by the WHO Regional Office for South-East Asia and has been found to be culturally applicable for the quantitative measurement of subjective well-being (Sell and Nagpal 1992).

---

## Instruments for the assessment of services

### Pathways Interview Schedule

This is a semi-structured instrument designed for the systematic gathering of information on the routes and sources of care used by patients before seeing a mental health professional. The instrument can be administered by a psychiatrist, psychologist, social worker or nurse, and its average administration time is 10 min. An instruction manual describing how to use the instrument is available.

The Pathways Interview Schedule consists of seven sections. Section A covers basic information about the centre and the mental health professional. In Section B the basic information about the patient is recorded (e.g. age, sex, marital status, social position, past history of care by any mental health service). Section C covers the details of the first carer (e.g. who he/she was, who suggested that care, what was the main problem presented, when it began, what was the main treatment offered, duration of patient's journey to first carer). Sections D, E and F cover similar details of the second, third and fourth carers. Section G is intended for the diagnosis of the patient according to the assessment by the mental health professional.

The instrument has been used in the WHO Study on Pathways to Psychiatric Care and has been found to be



a simple and inexpensive method of studying a psychiatric service and routes followed by patients seeking care for psychiatric disorders (Gater et al. 1990, 1991).

#### Checklists for Quality Assurance in Mental Health Care

This instrument represents a set of checklists accompanied by glossaries designed to assist in the development of programmes of quality assurance in mental health care. The checklists are based on recommendations of a group of experts in the field of mental health care and have been tested in a field trial that included 10 countries in all the WHO regions (Bertolote 1994).

The following checklists and glossaries are available:

A. The Mental Health Policy Checklist is an instrument aimed at assessing national mental health policies and assisting in the development of country programmes of quality assurance in mental health. The checklist has 21 items enquiring about issues such as the existence of a written mental health policy and operational programmes. The rest of the items are grouped into the following categories: decentralization, intersectoral action, comprehensiveness, equity, continuity, community participation and periodic reviews of mental health policy. The average administration time is 75 min. The instrument can also be used to assess the policy of smaller population units (e.g. a federal state).

B. The Mental Health Programme Checklist is an instrument aimed at assessing the countries' mental health programmes and assisting in the development of programmes of quality assurance in mental health. The checklist consists of 32 items covering several main areas such as whether there are written national, regional and local mental health programmes, the range of actions for promotion of mental health, treatment, rehabilitation and prevention of mental disorders, etc. The rest of the items are grouped into the following sections: plan of work, monitoring and evaluation, and community participation in the planning, implementation and evaluation of mental health actions/programmes. A glossary provides descriptions of these items. The average administration time of the checklist is 30 min.

C. The Primary Health Care Facility Checklist is an instrument for the assessment of primary health care facilities delivering mental health care and for assistance in the development of programmes of quality assurance of mental health care in such facilities. The instrument consists of a checklist, glossary, scoring instructions and list of references. The checklist has 42 items covering physical environment (e.g. reasonable space available, adequate supply of basic drugs, etc.); administrative arrangements (e.g. written procedures available for the protection of confidentiality of patients and staff records); care process (e.g. treatment plans are written

down for each patient and followed by all staff); interaction with families (e.g. family members are encouraged to be involved in the patient's treatment programme); outreach (e.g. contact is regularly made with other health facilities, social agencies, patients' employers, etc.). The average administration time is 60 min.

D. The Outpatient Mental Health Facility Checklist is an instrument used to assess outpatient mental health facilities in a given country or set-up, and to assist in the development of programmes of quality assurance in mental health in such facilities. The instrument consists of a checklist, glossary and scoring instructions. The checklist comprises 53 items and covers areas such as physical environment (e.g. the facility has been officially inspected and needs local standards for the protection of the health and safety of patients and staff); administrative arrangements (e.g. a written policy on philosophy and model of care is available and priorities have been defined); care process (e.g. every patient is evaluated in terms of biological, psychological and social functioning); interaction with families (e.g. home visits for improving caring and coping skills of families of selected patients are carried out); outreach (e.g. a standard information form is always sent to another facility whenever a patient is referred to it). The average administration time is 60 min.

E. The Inpatient Mental Health Facility Checklist is an instrument used to assess inpatient mental health facilities in a given country or set-up, and to assist in the development of programmes of quality assurance in mental health in such facilities. The instrument consists of 77 items covering areas such as physical environment, administrative arrangements, staffing, care process, interaction with families, discharge and follow-up. A glossary provides descriptions of items to be assessed. Scoring instructions are also available. The average administration time is 20 min.

F. The Residential Facility for Elderly Mentally Ill Patients Checklist is an instrument used to assess residential facilities for the elderly mentally ill in a given set-up and assist in the development of programmes of quality assurance in mental health in such facilities. The checklist consists of 69 items that cover the physical environment, administrative arrangements, care process, and interaction with families and community. The glossary provides a description of these items and instructions for their scoring are also given. The average administration time is 75 min.

#### WHO Child Care Facility Schedule (WHO CCFS)

WHO CCFS (WHO 1990 a) is an observer rating schedule aimed at assessing the quality of child care in day-care programmes for children. It can be administered by a research or administrative worker who should be

familiar with recording and rating procedures. The average administration time is 90 min.

The instrument consists of 80 items covering the following areas that define quality child care: (1) physical environment (e.g. the indoor environment is spacious enough for the number of children present and is attractive and pleasant); (2) health and safety (e.g. the facility meets local standards for protection of the health and safety of children in group settings); (3) nutrition and food service (e.g. meal times are used by staff to promote good nutrition); (4) administration (e.g. at least annually, staff conduct a self-study to identify strengths and weaknesses of the programme); (5) staff-family interaction (e.g. parents and other family members are encouraged to be involved in the programme in various ways and there are no rules prohibiting their unannounced visits); (6) staff-children interaction (e.g. staff respect the cultural backgrounds of the children and adopt the learning situation to preserve their heritage and acquaint other children with the cultural legacy of all members of the group); (7) observable child behaviour (e.g. children respect the needs, feelings and property of others, i.e. take turns, share toys); (8) curriculum (e.g. the daily schedule is planned to provide a variety of activities, including those that are indoor/outdoor, quiet/active, etc.).

WHO CCFS contains a glossary which defines each of the items to be observed and rated. The instrument is also accompanied by the user manual and a list of relevant references. Field studies of WHO CCFS have been carried out in Greece, the Philippines and Nigeria and the instrument has been found to be cross-culturally acceptable and reliable in terms of a level of percentage agreement between raters (Tsiantis et al. 1991).

## Instruments for the assessment of environment and risks

### Axis III Checklist

This instrument has been produced in the framework of the development of the ICD-10 multiaxial schema and is intended for clinicians' assessment of Axis III, i.e. contextual (environmental/circumstantial and personal lifestyle/life management) factors contributing to the presentation or course of the ICD-10 mental and/or physical disorder(s) recorded on Axis I of the schema. The contextual factors listed under Axis III represent a selection of ICD-10 Z00–Z99 categories, i.e. Factors Influencing Health Status and Contact with Health Services (Chapter XXI of ICD-10). The following groups of contextual factors are covered by Axis III and assessed by the Checklist: negative events in childhood (e.g. removal from home in childhood, Z61.1); problems related to education and literacy (e.g. underachievement in school, Z55.3); problems related to the primary support group including family circumstances (e.g. disruption of family by separation or divorce, Z63.5); problems related to the social environment (e.g. social exclusion and rejection,

Z60.4); problems related to housing or economic circumstances (e.g. homelessness, Z59.0); problems related to (un)employment (e.g. change of job, Z56.1); problems related to physical environment (e.g. occupational exposure to risk factors, Z57); problems related to psychosocial or legal circumstances (e.g. imprisonment or other incarceration, Z65.1); problems related to a family history of diseases or disabilities (e.g. family history of mental or behavioural disorders, Z81); lifestyle and life management problems (e.g. burn-out, Z73.0).

The Axis III Checklist is included in the ICD-10 Multiaxial Diagnostic Formulation Form, and the clinician is required to tick all applicable categories of Z factors and specify Z codes for each. A listing of contextual factors and the respective ICD-10 Z codes is given as an appendix to the form. The average administration time of the Axis III Checklist is 10 min. The instrument has been tested in the multicentre international field trials of the multiaxial presentation of ICD-10 and has been found to be useful and easy to use by clinicians in different parts of the world (Janca et al. 1994 c).

### Interview Schedule for Children (ISC)

The ISC (WHO 1991) is a semi-structured instrument for the systematic collection of information on a child's psychosocial environment. The instrument has been developed as a companion to the psychosocial axis (Axis V) of the WHO *Multiaxial classification of child and adolescent psychiatric disorders* (WHO 1988). The ISC is accompanied by a glossary that provides descriptions of items and diagnostic guidelines for Axis V (associated abnormal psychosocial situations). However, to ensure the smooth flow of the interview, the items in the ISC are in a different order from that of the glossary. The items in the schedule are as follows: abnormal immediate environment; stressful events/situations resulting from child's disorder/disability; societal stressors; chronic interpersonal stress associated with school/work; acute life events; abnormal qualities of upbringing; abnormal intrafamilial relationships; inadequate or distorted intrafamilial communication; mental disorder, deviance or handicap in the child's primary support group.

The relevant codes for each category have to be inserted into each individual section and the results are transferred to the summary page. It is, however, recommended that the coding and scoring should not be done until the interview has been completed. The instrument is intended for psychiatrists, psychologists, social workers or nurses, and its administration takes 60 min (van Goor-Lambo et al. 1990).

### Parent Interview Schedule (PIS)

The PIS (WHO 1990b) is a semi-structured instrument for the systematic collection of information about the child's psychosocial environment so that appropriate

codings can be made on the psychosocial axis (Axis V) of the WHO *Multiaxial classification of child and adolescent psychiatric disorders* (WHO 1988). The instrument is accompanied by a glossary and diagnostic guidelines for the assessment of items. As in the ISC, the relevant codes have to be inserted in each individual section and the results should be transferred to the summary page after the interview. Items in the PIS are identical with those in the ISC, and their order in the schedule and glossary is different to ensure the smooth flow of the interview.

The instrument is intended for psychiatrists, psychologists, social workers or nurses, and its administration takes 60 min. The preliminary results of the Axis V field trials (van Goor-Lambo et al. 1990) were used in the preparation of the PIS version which is being tested at present.

### Home Risk Card

The Home Risk Card is a listing of risk factors that, if present at the home of a child, may indicate that such a child and home need extra help and special attention. The risk factors covered by the instrument include: mother's age (under 17 years); number of children under 3 years (more than two); mother/carer ignorant about the child's needs and unresponsive to health messages (e.g. cannot answer questions about the child that mothers normally can answer); mother/carer mentally disordered or severely depressed (e.g. looks desperate, hopeless, cries easily); mother/carer neglectful or uninterested in the well-being/development of the child (e.g. shouts or hits the child for trivial reasons during home visit); disorganized, uncleaned house; father known to be delinquent (e.g. arrested by police), alcoholic or otherwise mentally disordered; severe marital discord (e.g. physical violence between parents); abject poverty (e.g. no change of clothing).

The Home Risk Card guides the user in noting facts about the child and household that may adequate intervention measures. The recorded information should also be inserted into require the child's weight card and serve as a reminder to the health professional about the child's need for extra help and attention.

A brief set of instructions helps the user in the application of the Card, which usually takes 5–10 min. The Home Risk Card has been used in a project organized by the WHO Regional Office for South-East Asia and has been found to be a useful guide for the assessment of home risk factors in this region (Sell and Nagpal 1992).

---

### Instruments for qualitative research

A guide providing a general overview of the concepts, methods and tools commonly used in qualitative research has recently been produced by WHO (Hudelson

1994). It is an introductory guide for programme managers, project directors, researchers and others who need to make decisions concerning when and how to conduct research for programme development purposes. This guide gives an overview of qualitative research and its potential uses; provides descriptions of the most common data collection methods used in qualitative research, specifying their strengths and weaknesses; discusses issues of sampling, study design and report-writing in qualitative research; gives examples of several qualitative research designs used by health programmes.

For the WHO Cross-cultural Applicability Research (CAR) study on diagnostic criteria and instruments for the assessment of alcohol and drug abuse and dependence, a set of qualitative research methods and instruments has been developed (Room et al. in press). These include the following:

A. The Exploratory Translation and Back-translation Guidelines is a set of specified procedures for conducting a careful translation and back-translation of an instrument so as to ensure its equivalence in different languages and cultures. The exploratory translation and back-translation used in the WHO CAR study comprises a series of step-by-step procedures summarized in Table 5.

B. The Key Informant Interview Schedule is a semi-structured, exploratory, ethnographic interview schedule that covers phenomena relevant to ICD-10 and DSM-III-R definitions and criteria for substance use disorders (e.g. withdrawal, tolerance, loss of control, etc.). The questions in the interview schedule follow a "funnel-type structure", i.e. general topics are first discussed and then more detailed questions about specific issues are asked.

The informant's answers are noted on the schedule verbatim. However, to ensure accuracy of the notes, the key informant interviews should be tape-recorded whenever possible or an observer should be present while the interviewer asks questions and both should take notes.

The Key Informant Interview Schedule developed for the WHO CAR study has been applied in nine centres representing distinct cultures and has been found to be an appropriate method for eliciting information on culture-specific characteristics of substance use and abuse in different parts of the world (Bennett et al. 1993).

C. The Focus Group Interview Guide is a brief interview guide specifying the main topics for discussions on various aspects of culture-specific characteristics of psychoactive substance use and abuse. According to the WHO CAR study protocol the following topics have been explored by this method: what is normal and abnormal use of alcohol or drugs; what are the meanings of

**Table 5** Steps in the development of equivalent versions of instruments in different languages

Step 1	Establishment of a (bilingual) group of experts belonging to the culture in which the instrument was developed and the culture in which it will (also) be used.
Step 2	Examination of the conceptual structure of the instrument by the expert group.
Step 3	Translation of items into the target language (or formulation of items in both languages if the instrument is produced anew).
Step 4	Examination of translation by bilingual group.
Step 5	Examination of the translation in unilingual groups (i.e. a group of individuals who do not know the source language of the instruments and therefore cannot guess the meaning of badly formulated items. The unilingual groups are usually moderated by a member of the bilingual expert group.
Step 6	Back-translation of the text, possibly amended by the unilingual group.
Step 7	Examination of back-translation by bilingual group informed by its members about the contents of discussion in the unilingual groups. Participation of members of the bilingual group in the designing of the studies to establish the metric properties (e.g. validity, reliability, sensitivity) of the instrument.

the various diagnostic terms related to the concept of alcohol or drug dependence; what are the similarities and differences between alcohol and drug abuse and alcohol and drug addiction; which prevention and intervention strategies are most likely to be effective against alcohol- or drug-related problems in the culture?

A set of instructions for the selection, composition and moderation of focus groups accompanies the list of discussion topics. Techniques of recording, reconstructing, managing and analysing the information obtained through the focus groups are also specified.

## Discussion

All the WHO instruments have been developed in the context of collaborative and cross-cultural studies. In some instances an instrument that was already in use in one cultural setting was selected as the initial draft, which was then developed further; in other instances the development of the instrument started from a draft produced by an international group of experts representing several cultural settings and disciplines. All the instruments exist in more than one language and the vast majority have been used in more than one country. This was not accidental: WHO has in fact made it its aim to produce instruments for cross-cultural and collaborative work that will serve as a part of a common language helping researchers and other experts from different countries to understand one another, to work together and to compare the results of their studies even when these are not performed at a particular time following a commonly agreed protocol.

The decision to develop instruments suitable for international, cross-cultural and collaborative work had several consequences. *First*, the development of the instruments took more time than it would take to develop an instrument for use in a single country or language. *Second*, certain characteristics of patients, their socio-cultural surroundings and the health services that they receive are so different that it is not possible to assess them using the same instrument. In such instances guidelines about the assessment were provided, while the formulation of specific items and other measurement tasks were entrusted to groups of experts who were fully acquainted with the circumstances.

*Third*, the development of instruments required additional funds for face-to-face meetings of the experts involved in the development of the instruments. These meetings (usually conducted at the centres participating in the development of an instrument) proved to have important consequences and benefits for the process of instrument development. The discussions of the results of the field trials and other aspects of the research necessary to produce the instrument and assess its metric characteristics gave invaluable insights into the differences between cultures and into the feasibility of investigations in different settings. The meetings also served as an important motivator to continue the often tedious work required over a long period of time. An effort was made on each occasion to bring together the centre heads and younger investigators for whom attendance at such meetings was of particular importance.

*Fourth*, certain constraints were imposed on the instruments by the structure of the languages in which the instruments were produced. Certain concepts have no natural "home" in other languages and enquiring about them can therefore become very time-consuming and difficult. In such instances it is usually best to sacrifice an item or section rather than to make part of the instrument awkward to use and complicate the training of interviewers. When this is not acceptable, it is usually necessary to return to the beginning and consider whether it is possible to obtain information about the topic of interest in another manner, not using assessment instruments of the type described here.

*Fifth*, cross-cultural differences can best be overcome if the assessments are carried out by individuals who are familiar with the culture and well trained in the use of the instruments. Most of the instruments that WHO has developed are therefore semi-structured and have been proposed for application by a well-trained member of the same culture. The use of semi-structured interviews, however, requires a considerably more intensive training than is the case for fully standardized instruments. This is a disadvantage that is less grave than the much more intensive training necessary when non-structured assessment methods are chosen. Furthermore, semi-structured instruments share some of the advantages of the fully structured instruments (e.g. the systematic coverage of all areas of interest, simpler data processing). *Sixth*, issues such as copyright, transla-

tion rights and modification procedures have to be designed with a view to covering the different centres and languages in which the instrument has been produced.

The WHO instruments have been developed in collaboration with groups of experts in many countries. Their contribution to the production of the instruments has been invaluable, and it is certain that without their selfless and enthusiastic collaboration it would not have been possible to develop the many materials – instruments and results of scientific investigations – that have been made available over the years. In the course of this work over the past 3 decades most of the centres that have participated in this work have made many international contacts, gained new insights about other cultures, increased their expertise in cross-cultural work and learned about the most convenient ways of international collaboration. The network of centres that has come into existence and that continues to work on instruments (and collaborate in research) has been an excellent by-product of the work on instrument development.

Another by-product of the work on instruments and of other WHO-coordinated international and cross-cultural collaborative research has been the formulation of guidelines concerning ethical aspects of collaboration in the field of mental health across national borders (Sartorius 1990). One of the principles developed is that collaboration in research – in view of the high investments and various potential disadvantages of short-term international collaborative projects – should be structured in a manner that will make it highly probable that collaboration in the collaborative network will continue after the project that started the network has been completed. This has been realized in the instance of the WHO network that continues its existing collaborative links among all centres – including those that are at present not actively involved in any particular studies.

The technology of translation used in the development of WHO instruments deserves a brief mention. The method that has been developed rests on various previous methods used to ensure equivalence of translation in collaborative mental health research (Sartorius 1979) but has parts that have not been systematically used before. The steps used to produce equivalent versions in different languages are shown in Table 5. The procedure shown in this table is an approximation of the process described in more detail elsewhere (Sartorius 1995; Sartorius and Kuyken 1994). The features that deserve attention at this point are the decision to incorporate an examination of the translation by a unilingual group and the existence of bilingual/bicultural groups that can guide the process of producing equivalent versions of the instrument in different languages.

The instruments described in this paper cover the needs for data collection in a number of areas of psychiatric investigation. Other areas, however, also require attention, and it is to be hoped that WHO will continue working on the development of instruments for these. Among them are (1) the instruments that could be used to assess *the stigma of psychiatric illness* and its changes

under the influence of various interventions that the health services or the society as a whole might undertake to diminish it; (2) instruments that would be useful to measure the *tolerance* of individuals for their own diseases and the diseases in those who surround them; (3) instruments that might help us to better assess conditions and states such as “*burn-out*” and “*malaise*” and their impact on the productivity of the individuals who suffer from them and of the community as a whole; (4) instruments that could help us to assess *features of the community* relevant to the provision of mental health care (e.g. the capacity of the community to accept sick and disabled members); (5) instruments that could better describe the *needs of individuals and communities*; (6) instruments we could use in the assessment of states that are at the borderline of normality (e.g. mild cognitive disorders, subthreshold mental disorders); (7) instruments that could be used in international studies of *impairments, disabilities and handicaps* defined in terms of the second revision of the *International classification of impairments, disabilities and handicaps*.

The difficulties of producing an instrument satisfying all the metric requirements and dealing with an area of assessment that should be investigated because of its public health importance pale in comparison with the difficulty of ensuring that the instrument is well known, properly updated, sufficiently well learned and widely applied. It is probably to this second task that the majority of efforts should be directed if we are to contribute to a better understanding among all those concerned with mental illness and with ways of helping them, their families and communities.

---

## References

- American Psychiatric Association (1987) Diagnostic and statistical manual of mental disorders 3rd edn, revised (DSM-III-R). APA, Washington, DC
- American Psychiatric Association (1994) Diagnostic and statistical manual of mental disorders, 4th edn (DSM-IV). APA, Washington, DC
- Babor TF, de la Fuente JR, Saunders JB, Grant M (1989) AUDIT, the Alcohol Use Disorders Identification Test. Guidelines for use in primary health care. WHO, Geneva
- Bennett LA, Janca A, Grant BF, Sartorius N (1993) Boundaries between normal and pathological drinking: a cross-cultural comparison. *Alcohol Health Res World* 17: 190–195
- Bertolote J (1994) Quality assurance in mental health care: checklists and glossaries, vol 1. WHO, Geneva
- Beusenbergh M, Orley J (1994) A user's guide to the Self-Reporting Questionnaire (SRQ). WHO, Geneva
- Cooper JE, Jablensky A, Sartorius N (1990) WHO collaborative studies on acute psychoses using the SCAAPS schedule. In: Stefanis CN et al (eds) *Psychiatry: a world perspective*, vol. 1. Classification and psychopathology, child psychiatry, substance use. (International congress series) Excerpta Medica, Amsterdam, pp 185–192
- Cottler LB, Robins LN, Grant BF, Blaine J, Towle LH, Wittchen HU, Sartorius N, Altamura AC, Andrews G, Burke JD, Dingemans PR, Droux A, Farmer A, Helzer JE, Janca A, Lepine JP, Miranda CT, Pull C, Regier DA, Rubio-Stipec M, Sandanger I,

- Smeets R, Tacchini G, Tehrani M, Tipp JE, Allgulander C, Haliakas J, Ingebrigsten G, Isaac M, Jenkins PL, Kuehne GE, Lyketos G, Maier W, Kraus J, Liang Shu (1991) The CIDI-Core substance abuse and dependence questions: cross-cultural and nosological issues. *Br J Psychiatry* 159: 653–658
- Gater R, Goldberg D, Sartorius N (1990) The WHO Pathways to Care Study. In: Stefanis CN et al (eds) *Psychiatry: a world perspective*, vol 4. (International congress series) Excerpta Medica, Amsterdam, pp 75–78
- Gater R, De Almeida E, Sousa B, Barrientos G, Caraveo J, Chandrashekar CR, Dhadphale M, Goldberg D, Alkathiri AH, Mubashar M, Silhan K, Thong D, Torres-Gonzales F, Sartorius N (1991) The pathways to psychiatric care: a cross-cultural study. *Psychol Med* 21: 761–74
- Giel R, de Arango MV, Babikir AH, Bonifacio M, Climent CE, Harding TW, Ibrahim HHA, Ladrido-Ignacio L, Srinivasa Murthy R, Wig NN (1983) The burden of mental illness on the family. Results of observations in four developing countries. *Acta Psychiatr Scand* 68: 186–201
- Harding TW, de Arango MV, Balthazar J, Climent CE, Ibrahim HHA, Ladrido-Ignacio L, Srinivasa Murthy R, Wig NN (1980) Mental disorders in primary health care: a study of their frequency and diagnosis in four developing countries. *Psychol Med* 10: 231–41
- Harding TW, Climent CE, Diop M, Giel R, Ibrahim HHA, Srinivasa Murthy R, Suleiman MA, Wig NN (1983) The WHO collaborative study on strategies for extending mental health care. II. The development of new research methods. *Am J Psychiatry* 140: 1474–80
- Hudelson PM (1994) *Qualitative research for health programmes*. WHO, Geneva
- Isaac M, Janca A, Sartorius N (1994) *The ICD-10 symptom glossary for mental disorders*. WHO, Geneva
- Jablensky A, Schwarz R, Tomow T (1980) WHO collaborative study on impairments and disabilities associated with schizophrenic disorders. A preliminary communication: objectives and methods. In: Strömberg E et al (eds) *Epidemiological research as basis for the organization of extramural psychiatry*. *Acta Psychiatr Scand* 62: (suppl. 286): 152–159
- Jablensky A, Sartorius N, Ernberg G, Anker M, Korten A, Cooper JE, Day R, Bertelsen A (1992) Schizophrenia: manifestations, incidence and course in different cultures: a World Health Organization ten-country study. *Psychol Med [Monograph Suppl]* 20
- Janca A, Chandrashekar CR (1993) *Catalogue of assessment instruments used in the studies coordinated by the WHO Mental Health Programme*. WHO, Geneva
- Janca A, Robins LN, Cottler LB, Early TS (1992) Clinical observation of assessment using the Composite International Diagnostic Interview (CIDI): an analysis of the CIDI field trials-wave II at the St. Louis site. *Br J Psychiatry* 160: 815–818
- Janca A, Üstün TB, Early TS, Sartorius N (1993) The ICD-10 symptom checklist – a companion to the ICD-10 classification of mental and behavioural disorders. *Soc Psychiatry Psychiatr Epidemiol* 28: 239–242
- Janca A, Üstün TB, Sartorius N (1994a) New versions of World Health Organization instruments for the assessment of mental disorders. *Acta Psychiatr Scand* 90: 73–83
- Janca A, Üstün TB, van Drimmelen J, Dittmann V, Isaac M (1994b) The ICD-10 symptom checklist for mental disorders, version 2.0. WHO, Geneva
- Janca A, Mezzich JE, Kastrup MC, Katschnig H, Lopez-Ibor JJ, Sartorius N (1994c) The multi-axial presentation of the ICD-10 classification of mental and behavioural disorders. Presented at the 7th European Symposium of the Association of European Psychiatrists, Vienna
- Lopez-Ibor JJ, Sartorius N, Janca A, Kastrup M, Katschnig M, Mezzich J (1994) The ICD-10 multi-axial system: preliminary results of field trials. In: Beigel A, Lopez-Ibor JJ, Costa e Silva JA (eds) *Past, present and future of psychiatry: IX World Congress of Psychiatry*, vol I. World Scientific, Singapore, pp 157–168
- Loranger A, Hirschfield R, Sartorius N, Regier D (1991) The WHO/ADAMHA international pilot study of personality disorders: background and purpose. *J Pers Disord* 5: 296–306
- Loranger AW, Sartorius N, Andreoli A, Berger P, Buchheim P, Channabasavanna SM, Coid B, Dahl A, Diekstra R, Ferguson B, Jacobsberg LB, Mombour W, Pull C, Ono Y, Regier DA (1994) The international personality disorder examination (IPDE): the WHO/ADAMHA international pilot study of personality disorders. *Arch Gen Psychiatry* 51: 215–224
- Robins LN, Wing JE, Wittchen H-U, Helzer JE, Babor TF, Burke JD, Farmer A, Jablensky A, Pickens R, Regier DA, Sartorius N, Towle LH (1988) The composite international diagnostic interview: an epidemiologic instrument suitable for use in conjunction with different diagnostic systems and in different cultures. *Arch Gen Psychiatry* 45: 1069–1077
- Robins LN, Cottler LB, Babor T (1990) CIDI substance abuse module. Department of Psychiatry, Washington University School of Medicine, St Louis, Mo
- Room R, Janca A, Bennett LA, Schmidt L, Sartorius N (in press) WHO cross-cultural applicability research on diagnosis and assessment of substance use disorders: an overview of methods and selected results. *Addiction*
- Sartorius N (1979) Cross-cultural psychiatry. In: Kisker KP, Meyer JE, Muller C, Stromgren E (eds) *Psychiatrie der Gegenwart*, vol I/1, 2nd edn. Springer, Berlin Heidelberg New York, pp 711–737
- Sartorius N (1989) Recent research activities in WHO's mental health programme. *Psychol Med* 19: 233–244
- Sartorius N (1990) Cultural factors in the etiology of schizophrenia. In: Stefanis CN et al (eds) *Psychiatry: a world perspective*, vol 4. *Social psychiatry ethics and law: history of psychiatry, psychiatric education*. (International congress series) Excerpta Medica, Amsterdam, pp 33–44
- Sartorius N (1993) WHO's work on the epidemiology of mental disorders. *Soc Psychiatry Psychiatr Epidemiol* 28: 147–155
- Sartorius N (1995) SCAN translation. In: Wing JK, Sartorius N, Ustun TB (eds) *Diagnosis and clinical measurement in psychiatry – an instruction manual for the SCAN system*. Cambridge University Press, London
- Sartorius N, Kuyken W (1994) Translation of health status instruments. In: Orley J, Kuyken W (eds) *Quality of life assessment: international perspectives*, pp 3–18
- Sartorius N, Jablensky A, Gulbinat W, Ernberg G (1980) WHO collaborative study: assessment of depressive disorders. Preliminary communication. *Psychol Med* 10: 743–749
- Sartorius N, Davidian H, Ernberg G, Fenton FR, Fujii I, Gastpar M, Gulbinat W, Jablensky A, Kielholz P, Lehmann HE, Naraghi M, Shimizu M, Shinfuku N, Takahashi R (1983) Depressive disorders in different cultures. Report on the WHO collaborative study on standardized assessment of depressive disorders. WHO, Geneva
- Saunders JB, Aasland OG (1987) WHO collaborative project on the identification and treatment of persons with harmful alcohol consumption. Report on phase I. Development of a screening instrument. WHO, Geneva
- Saunders JB, Aasland OG, Arundsen A, Grant M (1993a) Alcohol consumption and related problems among primary health care patients. WHO collaborative project on early detection of persons with harmful alcohol consumption. I. *Addiction* 88: 339–352
- Saunders JB, Aasland OG, Babor TF, de la Fuente JR, Grant M (1993b) Development of the Alcohol Use Disorders Identification Test (AUDIT). WHO collaborative project on early detection of persons with harmful alcohol consumption. II. *Addiction* 88: 617–629
- Sell H, Nagpal R (1992) Assessment of subjective well-being. The subjective well-being inventory (SUBI). WHO Regional Office for South-East Asia, New Delhi

- The WHOQOL Group (1994) The development of the WHO Quality of Life Assessment Instrument (The WHOQOL). In: Orley J, Kuyken W (eds) *Quality of life assessment: international perspectives*. Springer, Berlin, Heidelberg New York pp 41–57
- Tsiantis J, Caldwell B, Dragonas T, Jegede RO, Lambidi A, Banaag C, Orley J (1991) Development of a WHO child care facility schedule (CCFS): a pilot collaborative study. *Bull WHO* 69: 51–57
- Van Goor-Lambo G, Orley J, Poustka F, Rutter M (1990) Classification of abnormal psychosocial situations: preliminary report of a revision of a WHO scheme. *J Child Psychol Psychiatry* 31: 229–241
- Wing JK, Cooper JE, Sartorius N (1974) *Measurement and classification of psychiatric symptoms: an instruction manual for the PSE and CATEGO programme*. Cambridge University Press, London
- Wing JK, Babor T, Brugha T, Burke J, Cooper JE, Giel R, Jablensky A, Regier D, Sartorius N (1990) SCAN: schedules for clinical assessment in neuropsychiatry. *Arch Gen Psychiatry* 47: 589–593
- Wittchen H-U, Robins LN, Cottler L, Sartorius N, Burke J, Regier D, Altamura AC, Andrews G, Dingemans R, Droux A, Essau CA, Farmer A, Halikas J, Ingebrigsten G, Isaac M, Jenkins P, Kühne GE, Krause J, Lepine JP, Lyketsos G, Maier W, Miranda CT, Pfister H, Pull C, Rubio-Stipec M, Sandanger I, Smeets R, Tacchini G, Tehrani M (1991) Cross-cultural feasibility, reliability and sources of variance of the Composite International Diagnostic Interview (CIDI) – results of the multicentre WHO/ADAMHA field trials (wave I). *Br J Psychiatry* 159: 645–653
- World Health Organization (1973) *Report on the international pilot study of schizophrenia, vol. 1*. WHO, Geneva
- World Health Organization (1980) *International classification of impairments, disabilities and handicaps*. WHO, Geneva
- World Health Organization (1984) *Mental health care in developing countries: a critical appraisal of research findings. Report of a WHO study group*. WHO, Geneva
- World Health Organization (1988) *Draft multiaxial classification of child psychiatric disorders. Axis V. Associated abnormal psychosocial situations including glossary descriptions of items and diagnostic guidelines*. WHO, Geneva
- World Health Organization (1990a) *WHO child care facility schedule with user manual*. WHO, Geneva
- World Health Organization (1990b) *Parent interview schedule. Draft for comments and field testing*. WHO, Geneva
- World Health Organization (1991) *Interview schedule for children. Draft for comments and field testing*. WHO, Geneva
- World Health Organization (1992) *The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines*. WHO, Geneva
- World Health Organization (1993a) *The composite international diagnostic interview, core version 1.1*. American Psychiatric Press, Washington, DC
- World Health Organization (1993b) *International personality disorder examination*. WHO, Geneva
- World Health Organization (1993c) *Computerized CIDI (CIDI-Auto)*. WHO, Geneva
- World Health Organization (1994) *Schedules for clinical assessment in neuropsychiatry (SCAN)*. American Psychiatric Research, Washington, DC