EPIDEMIOLOGY OF MENTAL DISORDERS AND PSYCHOSOCIAL PROBLEMS

Personality disorders

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WORLD HEALTH ORGANIZATION
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Preface

Psychiatric illness is common and can have serious consequences. It has been estimated that as many as 500 million people may be suffering from some kind of mental disorder or impairment. In many countries 40% of disabled people owe their disability to mental disorders. Epidemiological predictions concerning mental illness show that there is every probability that the magnitude of mental health problems will increase in the future, as a result of various factors, including the increasing life expectancy of those with a mental disorder or disability and the growing number of people reaching the ages in which the risk of mental disorder is high.

The magnitude of mental health problems far exceeds that of the resources available for their resolution. In most parts of the world services which could help people who suffer from mental disorders are insufficient in both quality and quantity. This is often true even in the most highly developed countries. The general public and most of the professional medical community—often including psychiatrists—are insufficiently aware of the extent and nature of mental disorders and of the burden which these disorders represent for the individuals who suffer from them, their families and their communities. Traditional health statistical services in most countries are unable to provide accurate information about the extent of mental health problems in their populations. Most statistics routinely collected by health statistical services are based on mortality, which may lead to a distorted picture of the health status of a population since diseases of long duration that do not necessarily end in death—including many mental and neurological conditions—do not show up in such statistics. Lack of awareness of the magnitude and nature of mental health problems and of the availability of effective means of preventing or treating them is the cause of the low priority given to mental health programmes in most countries.

If health priorities are to be chosen properly, it is essential for accurate information to be available on the incidence and prevalence of mental and neurological disorders in the community and in general health facilities, their variation across countries and cultures and over time, their sociodemographic characteristics and the risk factors associated with their occurrence.

Unfortunately, reliable and comparable epidemiological data on mental and neurological disorders are scarce. Two of the reasons for the paucity of such data are particularly important: (1) the inadequacy of the training received by general health care personnel (and the absence of biological markers of mental illness) leads to a low recognition rate of mental health

problems in their patients; and (2) the absence until recently of a "common language"—comprising a nomenclature, an agreed diagnostic system, and standardized instruments for the assessment of these disorders—means that the data that have been collected are not truly comparable.

Ideally, a series of cross-cultural surveys should be carried out for well-defined conditions or groups of conditions in order to advance our knowledge of the epidemiology of mental health problems. Over the past 20 years considerable progress has been made in developing the methodology for carrying out such work. WHO has played an important role in this field: with the publication of diagnostic guidelines (WHO, 1992a) accompanying Chapter V of the Tenth Revision of the *International Statistical Classification of Diseases and Related Health Problems* (ICD-10) (WHO, 1992b), a widely tested and accepted diagnostic system has become available; WHO has also contributed to the development of instruments for the standardized assessment of psychopathology, including the Composite International Diagnostic Interview (CIDI) (Robins et al., 1988), the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) (Wing et al., 1990), and the International Personality Disorder Examination (IPDE) (Loranger et al., 1991), and developed a network of centres in which training in their use can be obtained. In addition, WHO has carried out cross-cultural clinical and epidemiological research which has demonstrated that such work is feasible, and established research teams and centres in which further related work can be carried out.

Some countries have conducted major epidemiological studies in recent years (e.g. Brazil, China, USA), but data on the epidemiology of mental disorders are still scarce and difficult to obtain. For these reasons, WHO decided to produce a series of monographs, each of which discusses epidemiological data on a specific disorder (or group of related disorders). Special attention is given to epidemiological data gathered in developing countries, which are often neglected in epidemiological reviews published in scientific journals. As shown in several major WHO epidemiological studies, e.g. the International Pilot Study of Schizophrenia (WHO, 1979); the study on depression in different cultures (Sartorius et al., 1983); the study on the determinants of the outcome of severe mental disorders (Jablensky et al., 1992); the study on pathways to psychiatric care (Gater et al., 1991); and the study on ill-defined psychological disorders in general medical settings (Sartorius et al., 1990), the comparison of epidemiological data obtained in developing countries, or in countries that do not have a long tradition of epidemiological research, with those gathered in developed countries, or in countries with a stronger tradition of such research, can provide valuable insights into the very nature of the disorders—their causes, form, course and outcome.

All these monographs are similar in format: they review issues related to diagnosis and classification, with special reference to ICD-10, as well as the standardized assessment instruments available and used for the assessment of mental disorders. Incidence and prevalence studies carried out in the general population, in primary care settings, and in psychiatric settings, as well as in

other institutions such as nursing homes, prisons, etc., are also reviewed. The main risk factors for the disorder, or group of disorders, are then discussed, and data on time trends in the prevalence and incidence of the disorder given where available. Each monograph ends with conclusions and recommendations for future studies.

It is hoped that these monographs will help research and health institutions, health planners, clinicians, and those concerned with informing the general public to better understand the magnitude of the problems they have to face, to develop effective preventive strategies and to build appropriate and humane care-delivery systems.

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List of acronyms and abbreviations used in this book

ADAMHA	Alcohol, Drug Abuse and Mental Health Administration
BPD	Borderline Personality Disorder Scale
BSI	Borderline Syndrome Index
CIDI	Composite International Diagnostic Interview
CIS	Clinical Interview Schedule
DIB	Diagnostic Interview for Borderline Patients
DIN	Diagnostic Interview for Narcissism
DIPD	Diagnostic Interview for Personality Disorders
DIS	Diagnostic Interview Schedule
DSM-I	*Diagnostic and Statistical Manual of Mental Disorders*, 1st ed.
DSM-II	*Diagnostic and Statistical Manual of Mental Disorders*, 2nd ed.
DSM-III	*Diagnostic and Statistical Manual of Mental Disorders*, 3rd ed.
DSM-III-R	*Diagnostic and Statistical Manual of Mental Disorders*, 3rd ed. (revised)
DSM-IV	*Diagnostic and Statistical Manual of Mental Disorders*, 4th ed.
ECA	European Catchment Area Program
GP	General practitioner
ICD-8	*Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death. Eighth Revision.*
ICD-9	*Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death. Ninth Revision.*
ICD-10	*International Statistical Classification of Diseases and Related Health Problems. Tenth Revision.*
IPDE	International Personality Disorder Examination
MCMI	Millon Clinical Multiaxial Inventory
NTS	Narcissistic Trait Scale
PAF	Personality Assessment Form
PAS	Personality Assessment Schedule
PD	Personality disorder
PDE	Personality Disorders Examination
PDQ	Personality Diagnostic Questionnaire
PDQ-R	Personality Diagnostic Questionnaire—Revised
PIQ-II	Personality Interview Questions II
PSE	Present State Examination
RDC	Research Diagnostic Criteria
SADS	Schedule for Affective Disorders and Schizophrenia
SADS-L	Schedule for Affective Disorders and Schizophrenia—Lifetime

SAP	Standardized Assessment of Personality
SCAN	Schedules for Clinical Assessment in Neuropsychiatry
SCID	Structured Clinical Interview for DSM-III Personality Disorders
SCID-II	Structured Clinical Interview for DSM-III-R Personality Disorders
SCID-PQ	Structured Clinical Interview for DSM-III-R Personality Disorders–Personality Questionnaire
SFS	Social Functioning Schedule
SIB	Schedule for Interviewing Borderlines
SIPD	Structured Interview for DSM-III Personality Disorders
SIPD-R	Structured Interview for DSM-III Personality Disorders—Revised
SNAP	Schedule for Normal and Abnormal Personality Disorders
SPE	Standardized Psychiatric Examination
TPQ	Tridimensional Personality Questionnaire
WISPI	Wisconsin Personality Inventory

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Annex 1

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Annex 2

The ICD-10 Classification of Mental and Behavioural Disorders: diagnostic criteria for research
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1

Introduction

Despite the importance of personality in human functioning, it is only in recent years that the epidemiology of personality disorders (PDs) has been investigated, and that the first comprehensive reviews in English have been published (Casey, 1988; Merikangas, 1989; Merikangas & Weissman, 1986). The need to investigate the epidemiology of PDs is justified for several reasons: firstly, as shown by the most recent epidemiological surveys, PDs are common and have been found in different countries and sociocultural settings; secondly, PDs can be very detrimental to the life of the affected individual and highly disruptive to societies, communities and families; and, thirdly, personality status is often a major variable in predicting the outcome of other psychiatric disorders and their response to treatment (Andreoli et al., 1989; Reich & Green, 1991). Already in 1971, a WHO Seminar on Standardization of Psychiatric Diagnosis, dealing with PDs, recommended that "Epidemiological research should be conducted in the light of the sociocultural and particularly the cross-cultural and comparative aspects of this problem and its public health implication" (WHO, 1972).

This publication begins by discussing the main nosological problems related to PDs and the assessment methods, and goes on to review the epidemiological data on PDs. Finally, the main gaps in current knowledge are discussed and recommendations are made for future studies.

2

Diagnostic issues

2.1 Definition of personality, personality trait and personality disorder

Personality is defined in the second edition of the *Lexicon of psychiatric and mental health terms* (WHO, in press) as "The ingrained patterns of thought, feeling, and behaviour characterizing an individual's unique lifestyle and mode of adaptation, and resulting from constitutional factors, development, and social experience."

Personality trait (originally designated by Allport (1937) as "a constant or persistent way of behaving") is defined as "an ideal 'constant purposive portion' (Stern, 1921) of the personality which is inferred from the totality of an individual's behaviour but never directly observed. A trait is a stable attribute and is often compared and contrasted with state, which is a momentary or time-limited characteristic of an organism or a person" (WHO, in press). Trait therefore refers to "persistent, habitual and recurrent behaviours. The term 'trait' does not explain these regularities, it describes them" (Klerman & Hirschfeld, 1988). However, personality traits as recognized by the revised third edition of the *Diagnostic and statistical manual of mental disorders* (DSM-III-R) (American Psychiatric Association, 1987) are "prominent aspects of personality, and do not imply pathology".

There are two basic types of personality disorder included in the diagnostic guidelines (WHO, 1992a) accompanying Chapter V of the Tenth Revision of the *International Statistical Classification of Diseases and Related Health Problems* (ICD-10) (WHO, 1992b): early onset (long-term) and adult onset (enduring personality change). In the first draft of ICD-10, the category of "personality trait accentuation" was included, defined as "a personality aberration of lesser severity than personality disorder, in which the personality is disharmonious either because of a conspicuous exaggeration of a single trait, or because several traits are abnormally accentuated to a lesser degree. Trait accentuation itself is not a disorder and rarely leads to referral." Because of this last statement, it was decided not to include personality trait accentuation in ICD-10. As regards enduring personality change, this is defined as "a disorder of adult personality and behaviour that has developed following catastrophic or excessive prolonged stress, or following a severe psychiatric illness, in an individual with no previous personality disorder. There is a definite and enduring change in the individual's pattern of perceiving, relating to, or thinking about the environment and the self. The personality change is

associated with inflexible and maladaptive behaviour that was not present before the pathogenic experience and is not a manifestation of another mental disorder or a residual symptom of any antecedent mental disorder" (WHO, in press).

Personality disorders, according to the ICD-10 diagnostic guidelines (WHO, 1992a), "comprise deeply ingrained and enduring behaviour patterns, manifesting themselves as inflexible responses to a broad range of personal and social situations. They represent either extreme or significant deviations from the way the average individual in a given culture perceives, thinks, feels, and particularly, relates to others. Such behaviour patterns tend to be stable and to encompass multiple domains of behaviour and psychological functioning. They are frequently, but not always, associated with various degrees of subjective distress and problems in social functioning and performance." For example, a dependent personality disorder in a favourable environment might not cause dysfunction, but nevertheless might be considered a disorder since it is clinically identical to the same disorder that usually causes dysfunction.

In general, almost all definitions of PD include three key concepts:

1. An onset in childhood or adolescence.
2. A long-standing persistence over time; however, it is not only the persistence over time, but also the pervasiveness of the abnormal behaviour pattern across a broad range of personal and social situations, that constitutes the most relevant feature.
3. The association with a substantial degree of personal distress and/or problems in occupational or social performance.

2.2 Classification of personality disorders

There has been considerable interest in the study of personality and personality disorders since early times. Already in the fourth century BC, the philosopher Theophrastus described different types of personalities in a way that resembles some modern classification systems (Adlington, 1925, quoted by Tyrer et al., 1991). In the psychiatric field, it was Pinel, in 1801, who first distinguished personality disorders ("manie sans délire") from mental illness. He used the term "manie sans délire" to refer to people who had no delusions but were prone to unexplainable, sudden violent behaviours. This definition was subsequently refined during the 19th century by several well-known psychiatrists such as Janet in France, Prichard & Maudsley in England, and Rush in the USA (Tyrer et al., 1991). Other classifications of types of personality and personality disorders were gradually developed in other languages, including Japanese, Russian and Spanish. In Germany, Kraepelin (1921) finally endorsed the term "psychopathic personality" in the 8th edition of his famous treatise, in which he described seven different types of personality disorder. Later in the 1930s in Scandinavia, Sjobring (1973) proposed a scheme to describe and characterize personality mainly based on four dimensions, called

"stability", "solidity", "validity" and "capacity". This model became widespread in Scandinavian countries.

However, as noted by Tyrer et al. (1991), "The categorization of personality disorder did not receive any firm support until the time of Schneider." Schneider (1923) regarded abnormal personalities as "constitutional variants that are highly influenced by personal experiences" and identified ten specific types or classes of "psychopathic personality". The classification system proposed by Schneider has deeply influenced subsequent classification systems (Tyrer et al., 1991). Of the ten types of PD identified by Schneider, eight are closely related to similar types of PD as classified in DSM-III (American Psychiatric Association, 1980).

For many years the lack of standardized diagnostic criteria was a major obstacle to the scientific study of PDs, especially to the study of their epidemiology. For this reason, in 1971, a WHO Seminar on Standardization of Psychiatric Diagnosis (WHO, 1972) recommended:

(a) the strengthening and/or initiation of research on standardization of diagnosis and classification of PDs and epidemiological data on them;
(b) the introduction of a multiaxial or multidimensional system of recording PDs;
(c) the consideration of possible culture-specific entities;
(d) the development of methods to record the severity of the disorder.

Since then, important developments in the field of classification have taken place, notably the production and the forthcoming introduction of ICD-10 (WHO, 1992b), following a major international collaborative effort involving some 195 centres in 55 countries, and the introduction of the DSM-III multiaxial classification system (American Psychiatric Association, 1980).

2.3 ICD-10, DSM-III and DSM-III-R classification of personality disorders

Table 1 lists the specific PDs as classified in ICD-10, ICD-9 (WHO, 1977), DSM-III-R and DSM-IV (American Psychiatric Association, in press), while Annexes 1 and 2 show respectively the ICD-10 diagnostic guidelines and the ICD-10 diagnostic criteria for research for these disorders.

The ICD-10 diagnostic guidelines stress that PD is "nearly always associated with considerable personal and social disruption" (WHO, 1992a). In the ICD-10 classification, which does not have a multiaxial system for the separate recording of the personality status, PD can be diagnosed together with any other mental disorder, if present. Although a multiaxial system for ICD-10 is being developed, this will not include a separate axis for PDs, as in DSM-III and DSM-III-R. On the contrary, PDs will be included in axis A, which is the axis for medical conditions; axis B will deal with the assessment of disability in social and occupational functioning and axis C with environmental factors relevant for the occurrence of the disorder(s). Each axis will contain as many

Table 1

Comparison of classification of personality disorders in ICD-9, ICD-10, DSM-III-R and DSM-IV

ICD-9	ICD-10	DSM-III-R	DSM-IV
Paranoid personality disorder	Paranoid personality disorder	Paranoid personality disorder	Paranoid personality disorder
Schizoid personality disorder	Schizoid personality disorder	Schizoid personality disorder	Schizoid personality disorder
Personality disorder with predominantly sociopathic or asocial manifestations	Dissocial personality disorder	Antisocial personality disorder	Antisocial personality disorder
(a) Explosive personality disorder (b) NA	Emotionally unstable personality disorder: (a) Impulsive type (b) Borderline type	(a) NA (b) Borderline personality disorder	(a) NA (b) Borderline personality disorder
Hysterical personality disorder	Histrionic personality disorder	Histrionic personality disorder	Histrionic personality disorder
Anankastic personality disorder	Anankastic personality disorder	Obsessive–compulsive personality disorder	Obsessive–compulsive personality disorder
NA	Anxious [avoidant] personality disorder	Avoidant personality disorder	Avoidant personality disorder
NA	Dependent personality disorder	Dependent personality disorder	Dependent personality disorder
Affective personality disorder	Other specific personality disorders	Passive–aggressive personality disorder	NA
Asthenic personality disorder		Schizotypal personality disorder	Schizotypal personality disorder
		Narcissistic personality disorder	Narcissistic personality disorder
		Self-defeating personality disorder	NA
		Sadistic personality disorder	NA
			Personality disorder not otherwise specified

diagnoses as are necessary to describe the patient's condition. Despite the importance given to behavioural manifestations for the classification and assessment of PDs, personality traits and attitudes are also considered when a diagnosis is made. In fact with regard to the diagnostic criteria for specific PDs, the ICD-10 diagnostic guidelines subdivide PDs "according to clusters of traits

that correspond to the most frequent or conspicuous behavioural manifestations" (WHO, 1992a). As stressed by Widiger & Frances (1985a), the reliance on behavioural indicators can improve inter-rater reliability, which reduces the amount of inferential judgement required for the diagnosis, but it does not ensure that the same diagnosis will be made at different times. Moreover, the diagnosis of a PD cannot be based on a single behaviour, as any given behaviour has multiple causes (e.g. situational and role factors).

Until now, only one study has explored the diagnostic categories for PDs contained in ICD-10 (first draft) (Blashfield, 1991). This study, carried out among 177 American clinicians, found some degree of overlap between the different categories. However, when the authors compared the diagnostic categories in ICD-10 with those in DSM-III-R, they found that only anankastic (ICD) and obsessive–compulsive (DSM) PDs showed a high level of correspondence.

With regard to the American taxonomic system, a multiaxial classification system was first introduced in DSM-III. Subsequently, with the development of DSM-III-R, more than 100 changes in the classification of PDs have been introduced as compared with DSM-III (Gorton & Akhtar, 1990; Widiger et al., 1988). While the multiaxial and categorical style of classification has been maintained, the diagnostic criteria have been revised to form a list of symptoms for each PD, of which only a certain number are required for a diagnosis to be reached. This polythetic format contrasts with the monothetic format employed for some PDs in DSM-III (e.g. schizoid, avoidant, dependent and compulsive), which required each of several criteria to be present to make a diagnosis. In DSM-III-R, each category of PD consists of 7–10 criteria and the presence of 4–6 is required for diagnosis. The DSM-III-R contains 11 PDs (see Table 1) plus two new disorders (self-defeating PD and sadistic PD) which were not included in DSM-III and which are considered as diagnostic categories needing further study. As in DSM-III, the 11 PDs are divided into three clusters:

- Cluster A (the "odd" or "eccentric" cluster), which includes paranoid, schizoid and schizotypal PD.
- Cluster B (the "dramatic" or "erratic" cluster), which includes histrionic, narcissistic, antisocial and borderline PDs.
- Cluster C (the "anxious" cluster), which includes avoidant, dependent, obsessive–compulsive and passive–aggressive PDs.

One study in the USA has examined the impact of DSM-III-R on diagnostic practice and the internal consistency of the sets of criteria for PDs using a national sample of 291 patients who had been identified by their clinicians as manifesting personality disorders (Morey, 1988). The results demonstrated a substantial divergence between DSM-III and DSM-III-R diagnoses, especially evident for schizoid and narcissistic PDs; when DSM-III-R criteria were applied, there was an 800% increase in the rate of schizoid PD and a 350% increase in the rate of narcissistic PD diagnosed by the clinicians.