# Part 1

## Classification

# 1

# Functional psychiatric disorders in ICD-10

NORMAN SARTORIUS T. B. ÜSTÜN

## Introduction

This chapter reviews the so-called 'functional' psychiatric disorders in the mental and behavioral disorders section of International Classification of Disorders 10th Revision (ICD-10). It describes the clinical characteristics of these disorders in the elderly and discusses their classification in the ICD-10, using the following outline:

1. General structure of ICD-10
2. Overview of functional disorders in ICD-10 (Organic versus functional: The concept of functional disorders in ICD-10.)
3. Special features of functional disorders in the elderly: selected examples are given for each section of ICD-10 Chapter V.

| | |
|---|---|
| Section F0: | Mild cognitive disorder |
| Section F1: | Psychoactive substance use disorders |
| Section F2: | Late paraphrenia |
| Section F3: | Depressive disorders |
| Section F4: | Anxiety disorders |
| | Adjustment disorders |
| | Neurasthenia |
| Section F5: | Physiological disorders |
| Section F6: | Disorders of adult personality and behavior |

## General structure of ICD-10

The production of an international classification of diseases is a constitutional task for the World Health Organization (WHO). The organization took on this task in 1948 and since then has prepared five revisions of the International Classification of Diseases. The tenth version (ICD-10) was adopted in 1990 by the World Health Assembly which is the supreme decision making body of the WHO formed by

representatives of the 183 Member States of the Organization. The classification began to enter into use in the member states on 1 January 1993.

ICD-10 has 22 chapters, each dealing with different groups of conditions which have to be classified and reported to public health authorities. The chapters provide a classificatory structure for groups of diseases or syndromes, causes of death, reasons for contact with health services and other health-related information.

Chapter V of ICD-10 dealing with 'Mental and Behavioral Disorders' is the only chapter in ICD-10 which has brief definitions for each of the categories of the classification. These definitions were first introduced in the ICD-8 (Sartorius et al. 1993; Sartorius 1991*a*). Their development was a component of a special program dealing with the standardization of psychiatric diagnosis and classification launched in the early 1960s. It was felt that such a program was necessary because of the vast differences which existed between psychiatric schools, the vagueness of categories and allied difficulties, which were making communication in the field of mental health extremely difficult. The program was successful: it raised awareness of public health and alerted psychiatric communities to difficulties in making reliable diagnoses and recording them; it developed methods for the exploration of these differences and it prepared an internationally acceptable classification of mental disorders and a glossary describing its categories (Kramer et al. 1979; Shepherd, Brooke & Cooper, 1968).

Mental disorders in the elderly were given a special emphasis in this program. One of the seven scientific meetings held to discuss proposals for ICD-8 focused on mental disorders of old age such as involutional melancholia 296.0 and involutional paraphrenia 297.1 (Stengel, 1958; Averbuch, E. S. et al., 1970; WHO, 1977). The meeting recommended inclusion of new categories (e.g. the depressive syndrome linked to organic brain damage in the elderly) and urged the WHO to develop a multidiagnostic or multiaxial classification for work in psychogeriatrics. It also drew attention to the need to better define methods for the assessment of severity of cognitive deficit and related disability. Some of the recommendations of the program were implemented in making the ICD-8: others led to research (e.g. to the current WHO coordinated comparative studies of dementia and the development of a battery of neuropsychological tests); some remain valid and may be taken up by WHO in the future.

In the development of ICD-10, WHO introduced several innovative features. These included an alphanumeric designation of codes (which resulted in a significant expansion of the number of categories available to each group of diseases). The alphanumeric coding scheme also allows discrimination between the content of different chapters (e.g. letter 'A' designates 'certain infectious and parasitic diseases' whereas letter 'F' signifies 'mental disorders'. The digits after the letter specify the individual categories. However, not all of the digits are being used. In this way, it will be possible not only to adapt to advances in the scientific

Table 1.1. *ICD-10 Chapter V diagnostic categories*

| | |
|---|---|
| F0 | Organic, including symptomatic mental disorders |
| F1 | Mental and behavioral disorders due to psychoactive and other substance use |
| F2 | Schizophrenia, schizotypal and delusional disorders |
| F3 | Mood (affective) disorders |
| F4 | Neurotic, stress related and somatoform disorders |
| F5 | Behavioral syndromes and mental disorders associated with physiological dysfunction |
| F6 | Disorders of adult personality and behavior |
| F7 | Mental retardation |
| F8 | Disorders with onset specific to childhood |
| F9 | Behavioral and emotional disorders with onset usually occurring in childhood and adolescence |

knowledge but also to maintain a continuity between the successive versions of the classification without disruptions in the coding scheme. The categories in ICD-10 are meant to apply to all age groups with the exception of categories reserved for disorders which only appear at a certain age. Thus depression in children will be coded in the same category as all depressive disorders, while disorders specific to childhood and adolescent problems are given separate categories.

The mental and behavioral disorders in ICD-10 have been classified into ten major groups by broad clinical similarity (Cooper, 1988). Table 1.1 shows the major groupings.

Experience from different countries made it obvious that the various groups of users of a classification have different needs (Sartorius 1991*a*). Therefore the mental disorder classification in the ICD-10 has been prepared in several versions for use by clinicians, researchers and primary health care workers. A multiaxial presentation as well as special 'fascicles' for special groups of users have also been prepared. Each of these versions is based on the 'core ICD-10' classification and is compatible with other members (see Table 1.2).

Table 1.2. *ICD-10 Chapter V family of documents*

| Member | Primary Audience |
|---|---|
| ICD-10 Clinical descriptions and diagnostic guidelines | Clinicians |
| ICD-10 Diagnostic criteria for research | Researchers |
| ICD-10 Psychiatric adaptation | Medical record librarians and statisticians |
| ICD-10 Primary care adaptation | PHC practitioners |
| ICD-10 Neurological adaptation | Neurologists |
| ICD-10 Multiaxial presentation | Researchers and epidemiologists |
| ICD-10 Lexicon of terms | All users |

## ICD-10 Terminology: What is organic and what is functional?

In current psychiatric use, a differentiation is usually made between 'organic' and 'functional' disorders. An 'organic' disorder is characterized by certain symptoms and by structural or otherwise identifiable changes in the central nervous system. The word 'functional' is used to describe conditions in which a different set of symptoms is present and current methods of investigation have been unable to prove structural damage or identifiable (e.g. humoral) change that could account for the condition. 'Functional' usually includes the psychogenic disorders (e.g. dissociative disorders),as well as mood disorders, schizophrenia and related disorders. Recent years have brought evidence of structural change and neurophysiological derangement in several of the 'functional' disorders and it is probable that both the terms 'functional' and 'organic' will soon be a thing of the past. WHO has maintained the term 'organic' disorders in the ICD-10 because of its wide current use; it does not use the term 'functional' as a descriptor for a category or a group of categories.

There are a few categories which are referred to as 'nonorganic' e.g. 'F51 nonorganic sleep disorders' or F52 'sexual dysfunction not caused by organic disorder or disease'. When used, the words 'nonorganic' in these categories, have been employed because they allow the placement of such categories in the chapter of mental and behavioral disorders, the 'organic' counterpart term being placed in other chapters of the ICD-10 (organic sleep disorders for example are classified in neurological disorders).

## Special features of functional disorders in the elderly

Although there are no mental disorders within the ICD-10 Chapter V that are seen only in old age, mental disorders in the elderly have certain unique features. In this section these features are briefly reviewed within the context of the ICD-10 classification focusing on selected examples. (As with all other diagnostic categories in ICD-10, these diagnoses apply to any age group and are not intended for application in the elderly only.)

### F0: Mild cognitive disorder (MCD)

Epidemiological findings (Basset & Folstein, 1991) and clinical reports in the area of cognitive disorders have resulted in the inclusion of a new category as 'F06.7 Mild cognitive disorder'(MCD) in ICD-10 (Division of Mental Health, 1992). This category covers the spectrum of disorders which are not as severe as dementia and delirium but do display a decline in cognitive performance. MCD are frequently

Table 1.3. *General criteria defining organic disorders in ICD-10 diagnostic criteria for research*

| | |
|---|---|
| G1. | Objective evidence (from physical and neurological examination and laboratory tests) and/or history of cerebral disease, damage or dysfunction, or of systemic physical disease known to cause cerebral dysfunction, including hormonal disturbances (other than alcohol or other psychoactive substance-related) and nonpsychoactive drug effects. |
| G2. | A presumed relationship between the development (or marked exacerbation) of the underlying disease, damage or dysfunction, and the mental disorder, the symptoms of which may have immediate onset or may be delayed. |
| G3. | Recovery or significant improvement of the mental disorder following removal or improvement of the underlying presumed cause. |
| G4. | Absence of sufficient or suggestive evidence for an alternative causation of the mental disorder, e.g. a highly loaded family history for a clinically similar or related disorder. |
| | If criteria G1, G2, and G4 are met, a provisional diagnosis is justified; if, in addition, there is evidence of G3, the diagnosis can be regarded as certain. |

encountered in the course of other diseases such as cerebral or systemic infections. A variety of diseases can cause an impairment in functioning, mainly in the areas of attention, information processing, language, learning and recall, abstracting and other cognitive domains.

Boundaries of the concept of MCD pose a problem of definition (Henderson, 1992). The concept is so far recognized by exclusion of cases who are normal and those cases with cognitive impairment who already meet diagnostic criteria for dementia, delirium and other categories. Definition of a middle spectrum is never easy. Patients given this diagnosis suffer from a variety of conditions heterogeneous in etiopathogenesis, associated symptoms and outcome.

There are also other issues which arise with the introduction of this new category. How should subjective complaints of cognitive dysfunction be assessed? How much change in cognitive function can be expected in normal ageing? Moreover, verification of complaints by objective tests, and relationship of the cognitive disorder with other medical conditions also pose a question: what will be acceptable as the required 'evidence' of association?

As we have discussed in the second section of this chapter, the discrimination between organic versus functional is somewhat arbitrary and vague. The distinction mainly depends on our capacity to find the organic basis of the signs. If one is confronted with complaints of cognitive difficulty that fulfil the criteria as outlined in Table 1.3 (e.g. in medical or surgical wards, in patients after a viral infection) the diagnosis may be easy to make. On the other hand, in some elderly patients who complain about increasing forgetfulness, it may be difficult to

establish the 'organic' etiological link. There is no 'functional counterpart' of MCD category as a formal diagnosis in ICD-10. Subjective complaints of cognitive dysfunction shoud therefore lead diagnosticians to explore also: F39 Unspecified mood disorder, F48.9 Neurotic disorder, unspecified; or F59 Unspecified behavioral syndromes associated with physiological disturbances and physical factors.

### F1: Psychoactive substance use disorders

Patterns of drug use change with age. While some drug use (e.g. heroin, cocaine and hallucinogens) is mainly seen in younger age groups, the elderly more often abuse alcohol and other legally permissible substances (e.g. medical drugs). The elderly often use several such substances at the same time, in a stereotyped way. Old people may be more prone to intoxication and other harmful consequences of substance use because of changes in the metabolism of substances in old age. 'Tolerance' to psychoactive substances may be diminished and low amounts of the substance may lead to significant behavioral or toxic effects.

When 'functional' disorders are seen in conjunction with substance use disorders and are due to such use they are coded in Section F1, such as a psychotic disorder (F1x.5), Personality or Behavior disorder (F1x.71), Residual affective disorder (F1x.72), other persisting cognitive impairment (F1x.74).

### F2: Late paraphrenia

Paraphrenia was included in ICD-9 as a formal diagnostic category (297.2), and discontinued in ICD-10. Kraepelin (1896) had defined paraphrenia as a category which falls between paranoia and dementia praecox. As later used by Roth (1955), the term referred to a delusional disorder that does not show the personality disintegration associated with early-onset schizophrenia. Affectivity should be well preserved and there should be no 'schizophrenic' symptoms such as inappropriate affect, loosening of associations, incoherence, and overtly disorganized behavior. Today, there is a growing tendency to see this category as being composed of several disorders. Cases previously diagnosed as paraphrenia are now placed within the boundaries of either 'paranoid schizophrenia' (Quintal et al., 1991; Hymas, Naguib, & Levy, 1989), 'delusional disorder' or 'organic delusional disorder' (Flint, Rifat & Eastwood, 1991; Holden, 1987; Miller et al., 1986; Gold, 1984). In view of this, paraphrenia was dropped from ICD-10 as a main entry; however, since some clinicians still use this category, it has been retained as an inclusion term for schizophrenia and delusional disorders. ICD-10 does not specify an upper age limit for the initial occurrence of schizophrenia or related disorders. Therefore it is possible to classify some of these cases as late onset schizophrenia or a delusional disorder. There is no provision of a separate code for 'age of onset' in the ICD-10.

Table 1.4. *F32 General criteria depressive episodes*

G1 The depressive episode should last for at least two weeks.
G2 Absence of hypomanic or manic symptoms sufficient to meet the criteria for hypomanic or manic episode (F30.–) at any time in the subject's life.
G3 Most commonly used exclusion criteria: the episode is not attributable to psychoactive substance use (F1) or any organic mental disorder, in the sense of F0.

**F32.0 Mild depressive episode**

A The general criteria for depressive episode (F32) must be met.

B At least two of the following three symptoms:
1. Depressed mood to a degree that is definitely abnormal for the subject, present for most of the day and almost every day, largely uninfluenced by circumstances, and sustained for at least two weeks.
2. Loss of interest or pleasure in activities which are normally pleasurable.
3. Decreased energy or increased fatiguability.

C An additional symptom or symptoms from the following to give a total of at least four:
4. Loss of confidence, and self-esteem.
5. Unreasonable feelings of self-reproach or excessive and inappropriate guilt.
6. Recurrent thoughts of death or suicide, or any suicidal behavior.
7. Complaints or evidence of diminished ability to think or concentrate, such as indecisiveness or vacillation.
8. Change in psychomotor activity, with agitation or retardation (either subjective or objective).
9. Sleep disturbance of any type.
10. Change in appetite (decrease or increase) with corresponding weight change.

However, researchers are free to add a code for the categories in question (e.g. as the fifth or sixth digit) to facilitate retrieval of data for further investigation. The ICD-10 dedicated WHO instruments; Schedules for Clinical Assessment in Neuropsychiatry (SCAN) (WHO, 1992) and Composite International Diagnostic Interview Core Version (CIDI) (Division of Mental Health, 1990) for clinical and research use have provisions for the coding of age of onset for this purpose.

### F23: Acute and transient psychotic disorders

These may be seen in the elderly under stress. These are cases in which symptoms develop suddenly (within hours to two weeks) and total duration is less than three months (schizophrenia-like symptoms lasting less than one month). A careful evaluation is necessary for differential diagnosis from F0 organic disorders (e.g. delirium) or F1 substance use (e.g. withdrawal state).

Table 1.5. *Somatic syndrome*

| |
|---|
| To qualify for the somatic syndrome, *four* of the following symptoms should be present: |
| (1) marked loss of interest or pleasure in activities which are normally pleasurable; |
| (2) lack of emotional reactions to events or activities that normally produce an emotional response; |
| (3) waking in the morning two hours or more before the usual time; |
| (4) depression worse in the morning; |
| (5) objective evidence of marked psychomotor retardation or agitation (remarked on or reported by other persons); |
| (6) marked loss of appetite; |
| (7) weight loss (5% or more of body weight in the last month); |
| (8) marked loss of libido. |

## F3: Depressive disorders

ICD-10 employs a generic description for depressive disorders for all age groups (Table 1.4). Although depression may be more frequent in the elderly and has some special features (e.g., increased suicide rates, increased importance of dysphoric symptoms and probable linkage to psychosocial factors occurring in old age such as retirement and object loss), the groups reviewing the evidence did not feel that depression in the elderly should be given a special category.

### Involutional melancholia

Kraepelin (1896) described this as a disorder with severe agitated depression, delusions of nihilism, guilt, grandiosity and hypochondriasis beginning after menopause in women and during late adulthood in men. It 'survived' as an independent category in ICD-9. The findings of some research that the elderly report more somatic symptoms, may be an artefact due to coexisting physical illness. In controlled studies, melancholia in hospitalized populations was found to be symptomatically similar to depression in the middle-aged (Blazer, Bachar & Hughes, 1987). Consequently, ICD-10 retained the term among inclusion terms but removed the category, unconvinced that 'involutional depression' is a separate disease entity. The notion of 'melancholia' (which implies a sort of 'biological basis' in depression), has been recognized by providing a category for *somatic syndrome* in ICD-10 (Table 1.5). Terms such as biological, vital, melancholic or endogenomorphic are used for this syndrome in other classifications.

The diagnosis of depression in the elderly may be problematic. Many systemic diseases and some drugs may cause depression in late life. Depressive disorders following stroke (Robinson et al., 1984) and other diseases such as Parkinson's Disease are common (Ring & Trimble 1991; Fleminger, 1991). When diagnosed,

these conditions should be coded as organic depression (F06.3) with an additional code to specify the associated disease. In addition, comorbidity with physical disease may make the depressive disorder more severe and more difficult to treat.

Another important point in the diagnosis of depression in the elderly is the differential diagnosis between pseudodementia and coexisting dementia and depression. In pseudodementia, patients may have depression (F32) or another mental or physical illness presenting with apathy and apparent cognitive decline which may be confused with dementia; however, the cognitive impairment resolves when the affective disorder or other illness is successfully treated. In coexisting dementia and depression, patients have two diagnoses – both dementia (F00 to 03) and depression (F32) – and when the depression is treated, there is usually improvement in mood but not in cognitive impairment.

## F4: Neurotic, stress-related and somatoform Disorders

These disorders in the elderly are similar to those occurring in earlier life. The old are considered to be more prone to adjustment disorders (F43.2) due to psychosocial factors. Life events (such as object loss, physical illness and changes in the social status,) may interfere with social functioning and the performance of the individual. The diagnosis of adjustment disorder in the ICD-10 system depends on findings from an evaluation of the relationship between:

(i) form, content and severity of symptoms;
(ii) previous history and personality; and
(iii) presence of stressful event, situation, or life crisis.

The criteria require that the presence of stress factors should be clearly established and that there should be strong, presumptive, evidence that the disorder would not have arisen without them. If the stressor is relatively minor, or if a temporal connection (less than three months) cannot be demonstrated, the disorder has to classified elsewhere, according to its presenting features. ICD-10 also allows the user to code the stressor by means of one of the Z codes (Chapter XXI).

### Neurasthenia

A category for the classification of Neurasthenia (F48.0) is included in ICD-10. While research carried out in various settings has demonstrated that a significant proportion of cases diagnosed as neurasthenia have symptoms which would make it possible to classify them under depression or anxiety, there are also cases in which the clinical picture does not fit any other disease definition (Sartorius, 1991*b*). In the elderly the decline of the motor capacity or slowing of motor functions should be carefully evaluated before making a diagnosis in this category.