Classification in psychiatry: ICD–10 *versus* DSM–IV

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In the English-speaking world psychiatric classification used to be governed by one system, now there are two – Chapter V of the *International Classification of Diseases*, 10th revision (ICD–10), published by the World Health Organization (1992); and the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (DSM–IV), published by the American Psychiatric Association (1994). Chapter V of ICD–10 was designed to be used internationally for the classification of all diseases, whereas DSM–IV was designed by the professional body of psychiatrists in America for the classification of mental disorders. Even though ICD–10 is the official coding system in many countries, DSM–IV appears to be more popular among mental health professionals. Both systems propose explicit diagnostic criteria, ICD–10 in the *Diagnostic Criteria for Research* (World Health Organization, 1993), and DSM–IV (1994) in the text of the main edition.

DIFFERENCES BETWEEN ICD–10 AND DSM–IV

On the surface the two classifications appear very similar, so much so that the American Psychiatric Association (1995) felt sufficiently confident to publish a DSM–IV International Version in which the DSM–IV criteria are listed against the ICD–10 codes. Kendell (1991), prior to the publication of DSM–IV, argued that if differences between these classification systems were minor, the corresponding sections should be made identical, but if there were to be differences, they should be substantial, thereby allowing the research community to accumulate data and assess the relative construct validity of each system. There are differences in almost every category, and on the surface they are minor and easily dismissed. Is there a problem?

Diagnosis in psychiatry is still mostly descriptive (Andrews & Peters, 1998), surface manifestations of what clinicians believe the underlying disorder to be. Therefore, in clinical practice the two classifications are often likely to be functionally equivalent. It seems unimportant, for instance, that post-traumatic stress disorder defined by DSM–IV requires distress or impairment to be present, yet the same disorder defined by ICD–10 does not. All people who seek help are to some degree distressed or impaired by their symptoms, otherwise they would be unlikely to seek help, and so all people who seek help will meet both criteria. But can we be sure that such minor differences are always so trivial? Outside the clinical setting, for instance in epidemiological studies, such differences may be important. In epidemiological work, structured interviews are usually employed and are unique in that they systematically explore each diagnostic criterion before assigning a diagnosis, unlike clinicians who quickly narrow down to the presenting diagnosis. Structured interviews offer one method to explore the cross-system diagnostic concordance between the two classifications.

A substantial amount of research is accumulating regarding cross-system diagnostic concordance. In the substance use disorders differences between ICD and various versions of DSM have been found at the diagnostic level (Rapaport *et al*, 1993; Langenbucher *et al*, 1994; Grant, 1996; Hasin *et al* 1996*a*,*b*). The dependence criteria in ICD–10 and DSM–IV are now almost identical but the harmful use/abuse criteria are quite different. Wacker *et al* (1992) examined the differences between ICD–10 and DSM–III–R in affective and anxiety disorders. With regard to the affective disorders, they demonstrated that a small number of differences between ICD–10 and DSM–III–R depressive episode existed and the majority of these differences were accounted for by the lower threshold in the number of symptoms required in ICD–10. Furthermore, in comparing ICD–10 with DSM–IV, Lopez-Ibor (1994), concluded that the diagnostic systems were largely comparable. In the anxiety disorders, Wacker *et al* (1992) noted that dissonance between ICD–10 and DSM–III–R related mainly to agoraphobia, social phobia and generalised anxiety disorder.

METHOD

The Composite International Diagnostic Interview (CIDI), version 2.1 (World Health Organization, 1997), is a fully structured diagnostic interview that systematically addresses each ICD–10 and DSM–IV criterion. We have recently examined the correspondence between these classifications using the CIDI in 1300–1500 people drawn from a disorder-enriched population sample combined with a clinic sample, enriched so that the prevalence of any disorder was approximately twice that expected in a true sample of the general population (Andrews & Slade 1998*a*,*b*; Andrews *et al*, 1998; Peters *et al*, 1998). This enrichment ensured that there were, at least for the rarer disorders, sufficient cases to make the comparisons between the classifications meaningful.

To eliminate disagreement not necessarily related to the classifications we removed two sources of error that could have contributed to discrepancy, first in the construction of the CIDI questions, and second, in the interpretation of the diagnostic criteria in the scoring algorithm. These matters are at present being considered by the CIDI advisory committee. Thus, the residual differences identified are most likely due to operational differences between the classification systems, not to the method of diagnosis.

RESULTS

In Table 1 the disorders are listed according to their level of concordance, that is, the percentage of cases with a positive diagnosis on either classification system that have a positive diagnosis on both classification systems. Depression, dysthymia, substance dependence and generalised anxiety disorder all display high levels of concordance, a reflection of the similarity in diagnostic criteria. Moderate concordance is found in social phobia, obsessive–compulsive disorder and the three panic/agoraphobia disorders. The concordance for post-traumatic stress disorder was only 35% with

Table 1 Frequency in enriched sample and percentage concordant for the main ICD–10 and DSM–IV mental disorders

Disorder	Frequency of ICD–10 (%)	Frequency of DSM–IV(%)	Percentage concordant[1]
Dysthymia	3.4	3.1	87
Depressive episode	16.6	15.6	83
Substance dependence	7.6	8.5	77
Generalised anxiety disorder	9.9	10.1	77
Social phobia	12.9	10.5	66
Agoraphobia with panic disorder	3.9	4.3	66
Obsessive–compulsive disorder	1.9	2.7	64
Panic disorder	6.1	4.1	56
Agoraphobia without panic disorder	3.1	3.9	45
Post-traumatic stress disorder	6.9	3.0	35
Substance harmful use or abuse	8.4	8.6	33
Any mental disorder	37.0	31.9	68

1. The percentage of people positive on either classification who are positive on both.

ICD–10 identifying cases at twice the frequency of DSM–IV. Because of the divergent definitions each classification system proposes, the concordance was low for substance harmful use/abuse. Overall, the concordance for any mental disorder was 68%, with the threshold for an ICD–10 disorder being lower than that for a DSM–IV disorder.

In depression, dysthymia, substance dependence and generalised anxiety disorder, diagnoses exhibiting a high level of concordance, the classifications are very similar and the concordance remains above 75%. For example, ICD–10 but not DSM–IV requires, in the diagnosis of depression, that there be two of the three key symptoms of depression (feeling sad, losing interest or lacking energy). However, we have demonstrated that this difference in the classification systems does not produce a high number of discrepant diagnoses (Andrews et al, 1998). In these disorders, the definitions could, and perhaps should, be made identical. In disorders with moderate concordance, although the definitions correspond, differences do exist. For example, in obsessive–compulsive disorder ICD–10 requires that attempts be made to resist the obsessions and compulsions, while DSM–IV only requires resistance to the obsessions. This is a minor difference that, if corrected, would increase the diagnostic concordance to 76%. Similarly, in social phobia common features exist in the two classification systems, yet the configuration of those features differs significantly. More specifically, DSM–IV requires persistent fear of social situations and feelings of humiliation in Criterion A and avoidance in Criterion D, whereas ICD–10 Criterion A requires fear of the social situation or feelings of humiliation or avoidance. Thus, in this group of disorders, apparently minor differences produce only moderate levels of concordance, between 45 and 66%. In the lowest group, the level of concordance for post-traumatic stress disorder was surprising given the similarity in concept between classification systems. Upon analysis it turns out that concordance would be raised if ICD–10 included a 'numbing of general responsiveness' criterion, as is suggested in the ICD–10 *Clinical Descriptions and Diagnostic Guidelines* (World Health Organization, 1993) but which was not included in the ICD–10 *Diagnostic Criteria for Research* (World Health Organization, 1992). If this were included and DSM–IV deleted the disability criterion then the concordance rises to 56%. In substance harmful use/abuse the low level of concordance is not so surprising, given the differing definitions each classification system proposes for this category, and research into which definition more closely resembles the underlying disorder is essential.

IMPLICATIONS FOR PSYCHIATRIC CLASSIFICATION

Kendell's fear that minor differences could hinder any possibility of agreement seems to have come true. What should be done? Sartorius et al (1995) predicted that ICD–10 would last for more than the customary 10 years because of the infrastructure now invested in computerised coding, case-mix and diagnostic systems. Because of this longevity he allowed that minor adjustments to ICD–10 could be made to improve performance, and indeed, there is a network of ICD–10 centres that will continue to be involved in improvements in the classification. Information about such improvements will come from a number of sources including the careful recording of observations by clinicians and empirical studies such as this one which has identified a number of minor changes. Correspondingly, DSM–IV should be reviewed and where there is fundamental conceptual agreement between ICD and DSM the wording of the classifications should be made identical. The research community should be advised when the agreement is low, so that the necessary research can be carried out to inform the next revisions of ICD and DSM. While the present unnecessary dissonance between the classification systems continues, patients, researchers and clinicians will be all the poorer.

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