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COMMENTARY

Robust empirical data and clinical utility: the only drivers of change†

COMMENTARY ON… THE CLASSIFICATION OF MENTAL DISORDER

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†See pp 2–9 and 14–19, this issue.

SUMMARY

We have arrived at our current descriptive classifications, with their many and varied array of categories, through the committee processes of DSM and ICD. To date, expert opinion, rather than solid science, has been the driver for change and this helps to explain the bewildering number of diagnostic categories and the fact that many patients meet criteria for several categories. Over the coming years, advances in neuroscience will offer the opportunity to base classification on robust evidence with diagnostic entities mapping more closely onto the workings of the brain. There are major shortcomings to the current classifications but all changes come at a cost to their users. We should be fully aware of the shortcomings and be thinking about the future. However, major changes to classification should await the emergence of robust empirical data and proven clinical utility. This will be the best way to benefit patients.

DECLARATION OF INTEREST

None.

Psychiatric classification influences the practice of, thinking about and external perceptions of psychiatry. It is therefore understandable that considerable effort is expended by many senior figures in psychiatry on making periodic reviews of the major systems of psychiatric classification in an attempt to take account of new knowledge and concepts. However, all changes come at substantial costs to the users of the classification – be they clinicians, patients, researchers, managers, administrators or politicians (Craddock 2007). Apart from the time and money required for training, there is the potential for confusion and for communication difficulty that may lead to problems in making comparisons across time. Thus, it is desirable that an appropriately high threshold is set when judging the advance in knowledge that is deemed necessary to justify each change. In this regard, it is important to be dispassionate and cautious in evaluating the strength and relevance of the increment in knowledge since previous classifications.

As Professor Goldberg (2010, this issue) points out, there are many shortcomings in the current classifications (ICD–10 and DSM–IV), which have a bewildering array of descriptive categories, several of which may apply to any particular patient. Undoubtedly, many of these categories have found their way into the classifications as a result of impassioned support by eminent and influential psychiatrists during earlier DSM and/or ICD committee meetings, rather than because of robust, relevant and compelling evidence. In his article, Professor Goldberg asks whether research advances 'might not impose some natural limits on the nature of the system, so that instead of becoming progressively more complex, a simpler classification might emerge'. This is an extremely important question and it is timely to address this issue now that the classifications are being considered.

What do clinicians need from a diagnostic classification?

The main clinical aims of diagnosis include the optimisation of treatments and allowing useful prognostic statements to be made (Kendell 1975; Craddock 2007). Clinicians benefit from the simplest, most user-friendly model that is clinically useful. The history of medicine teaches us that therapeutic and prognostic decision-making are usually facilitated, often greatly, as classifications move closer to the underlying biological mechanisms. For this reason it is desirable to move towards a classification that maps the expression of illness onto the underlying workings of the brain (Zielasek 2008; Bullmore 2009a; Craddock 2010). It is not yet clear whether this will be most usefully achieved by using multiple overlapping 'categorical' domains of psychopathology or multiple dimensions (Craddock 2007, 2010; van Os 2009).

We have entered a period of unprecedentedly rapid progress in our understanding of mental illness. While ensuring that the needs of our patients are at the forefront of thinking and planning, we need to prepare ourselves to move towards more complex and biologically plausible models of illness rather than clinging on to the biology-free models based on clinical empiricism that have been the tradition of psychiatry (Bullmore 2009b).

We can certainly expect that over the coming generation psychiatry can move towards a classification that is informed by understanding of the normal workings of the brain and is based on the common dysfunctions that give rise to the experiences of patients with psychiatric illness (Craddock 2010). That said, it is likely to take at least 5–10 years before the state of understanding may be sufficiently mature to justify major changes to classification. In other words, although we can be more certain than ever before of the shortcomings of our current classification, we cannot yet specify with confidence the most useful structure and content for the future. As mentioned, this future is likely to require a willingness to use both categorical and dimensional approaches. Further, like all medical classifications, it is likely to involve a pragmatic mix of approaches that reflect the differing levels of understanding of each diagnostic entity (Craddock 2007).

What should we do now? There seems no justification for major changes to existing categories before the emergence of a solid evidence base on which to determine the biological and clinical validity and usefulness of each entity, as well as the biological relationship between the entities.

Structural questions

What about Professor Goldberg's suggestion that there be major groupings of disorders into (for example): neurocognitive disorders, neurodevelopmental disorders, psychoses, emotional disorders and externalising disorders? The idea of a few major groupings that have common properties is very appealing and it is surely the direction in which psychiatry must aim to progress. Such a classification would help in the teaching of psychiatry, in reassuring those outside the discipline of its logical and scientific foundation and it would be of great benefit in clinical practice. However, although the suggested categories have some clinical plausibility, they do not seem to be grounded in sufficient empirical evidence to justify their introduction. For example, a great deal of work is ongoing to understand the complex relationship between mood disturbance and psychosis (Craddock 2009). Much remains to be discovered but there is already substantial evidence for a complex overlap in the underlying pathogenesis of major mood and psychotic syndromes (Craddock 2010). Thus, it does not seem like a very good idea to draw what is likely to be an arbitrary distinction between 'emotional disorders' and 'psychoses'. Similarly, if schizophrenia is shown to be a 'neurodevelopmental disorder', which category does it go in? It seems too early to set out broad categories, which may actually hamper progress over the coming years. Rather, it seems preferable to wait until changes can be made that are driven by robust neuroscientific data and proven clinical utility, rather than the current appearance of clinical plausibility.

What about dimensions? At least for mood and psychotic disorders, we already know that there is a major overlap between underlying biology and we also know that dimensional approaches can provide useful clinical information over and above current diagnostic categories (Dikeos 2006). Hence, it is likely to be useful to encourage use of dimensional descriptions of psychopathology alongside the current categories.

In summary

The neuroscientific understanding of major psychiatric illness is advancing rapidly and can be expected to provide a rational basis for future psychiatric classifications that will have greatly increased clinical usefulness. We need to be fully aware of the problems and limitations of our current classification and start thinking in earnest about the future – but we are not there yet. Major changes should be justified by robust evidence and proven clinical utility. While we are awaiting the evidence over the coming decade or two, we should be cautious in any changes that are made and realistic in our evaluation of our current evidence base (Key points). Introducing descriptive dimensions alongside categories makes sense. Wholesale change of categories does not.

KEY POINTS

- Any change to a classification system imposes a substantial burden of costs and time on all those using it
- Clinical utility of diagnosis (directing therapy and prognosis) is likely to be optimal for classifications that map closely onto the underlying workings of the brain
- We are entering a period of rapid advance in the neuroscientific understanding of major psychiatric illness and this will have a major impact on future classifications (at least 5–10 years ahead)
- ICD–10 and DSM–IV do have major shortcomings, but we must not make 'cosmetic' changes that are not based on an empirically driven fundamental advance in knowledge

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IN OTHER WORDS

From *Perceval's Narrative*

Selected by Femi Oyebode

John Thomas Perceval (1803–1876) was an army officer and son of the British Prime Minister Spencer Perceval. From 1831 to 1834 he was confined in private asylums, first in Brisslington House near Bristol, then in Ticehurst Asylum in Sussex. His two-volume autobiographical account, *A Narrative of the Treatment Experienced by a Gentleman, during a state of Mental Derangement; designed to explain the causes and the nature of insanity, and to expose the injudicious conduct pursued towards many unfortunate sufferers under that calamity*, was published in 1838 and 1840. It was reprinted as *Perceval's Narrative* (ed. G. Bateson) in 1962 by the Hogarth Press. On his recovery, he spent the rest of his life campaigning for reform of the asylums and the lunacy legislation.

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Tie an active limbed, active minded, actively imagining young man in bed, hand and foot, for a fortnight, drench him with medicines, slops, clysters; when reduced to the extreme of nervous debility, and his derangement is successfully confirmed, manacle him down for twenty-four hours in the cabin of a ship; then for a whole year shut him up from six a.m. to eight p.m. regardless of his former habits, in a room full of strangers, ranting, noisy, quarrelsome, revolting, madmen; give him no tonic medicines, no peculiar treatment or attention, leave him to a nondescript domestic, now brushing his clothes, sweeping the floors, serving at table, now his companion out of doors, now his bed-room companion; now throwing him on the floor, kneeling on him, striking him under all these distressing and perplexing circumstances; debar him from all conversation with his superiors, all communication with his friends, all insight into their motives, every impression of sane and well-behaved society; surprise him on all occasions, never leave harassing him night or day, or at meals; whether you bleed him to death, or cut his hair, show the same utter contempt for his will or inclination; do all in our power to crush every germ of self-respect that may yet remain, or rise up in his bosom; manacle him as you would a felon; expose him to ridicule, and give him no opportunity of retirement or self-reflection; and what are you to expect. And whose agents are you; those of God or of Satan? And what good can you reasonably dare to expect? And whose profit is really intended?

… By soundness of mind, I do not mean any unerring powers of judgment, or any invincible moral strength: I know too well, as the wise man says, that madness is in the heart of all men. But I use the terms in the ordinary sense in which they are employed, to denote a man against whom there is no true ground for the charge of being able to manage his own affairs – unfit for liberty through mental incapacity. A man who knows who and what he is, his position in the world, and what the persons and things are around him; who judges according to known, or intelligible rules; and who, if he has singular ideas or singular habits, can give a reason for his opinions and his conduct; a man who, however wrong he may act, is not misled by any uncontrollable impulse or passion; who does not idly squander his means; who knows the legal consequences of his actions; who can distinguish between unseemly and seemly behaviour, who feels that which is proper and that which it is improper to utter, according to the circumstances in which he is placed; and who reverences the subject and the ministers of religion; a man who, if he cannot always regulate his thoughts and his temper and his actions, is not continually in the extremes, and if he errs, errs as much from benevolence and hesitation, as from passion and excitement, and more frequently; lastly, a man who can receive reproof, and acknowledge when he has needed correction.