Editorials

Diagnostic and Statistical Manual-5: No revolutionary road

The American Psychiatric Association (APA) released the fifth edition of its Diagnostic and Statistical Manual (DSM-5) in May 2013.¹ DSM-5 had been years in the making. The process included planning sessions, international research conferences, review of the literature, a series of monographs, secondary analysis of data and field trials involving hundreds of scientists and clinicians and feedback from the public. Many interest groups which watched the process and outcome closely included neurologists, psychologists, insurance and pharmaceutical industries, legal and forensic fraternity, military veterans and anti-psychiatry groups. The Indian Psychiatric Society also submitted its views to the APA.²

The DSM-5 has pursued the basic framework adopted by the DSM-III³ and its successors (DSM IIIR, IV and IVTR). DSM III, with its atheoretical approach, objective diagnostic criteria, specific exclusions and multi-axial diagnosis, was revolutionary at the time. Its focus on standardized diagnosis and improving inter-rater reliability had a major impact on psychiatric practice and research. It became the international standard. Research and specialist interests increased the number of diagnostic categories manifold with the aim of achieving homogeneous categories. Sub-categorization and the creation of new categories became the norm.

Nevertheless, the new system had problems. Typically, patients emphasize distress and suffering while psychiatrists diagnose and treat 'diseases'. The term 'mental disorder' includes both disease and illness. However, the use of 'psychiatric disorders' does not bridge the disease–illness divide between physician perspectives and the patient's subjective experience of sickness. This resulted in a language, concepts and frameworks, which contrasted starkly with those held by patients; thus impeding the understanding of the illness experience and diminishing the role of patient narratives.⁴

The absence of laboratory tests to diagnose mental disorders forced psychiatry to focus on clinical presentations. The DSM system emphasized symptom counts with little regard for the context (e.g. stress, personality, coping, culture, supports). Psychiatric practice tended to reify diagnosis transmuting syndromes into diseases. The DSM III also suppressed aetiological debates about mental disorders and placed them on the back burner. The biomedical model, which undergirds its approach, became dominant, annihilating other psychological, behavioural and social conceptualizations. However, the APA had argued that reliable psychiatric diagnoses would result in the recognition of underlying neurobiological substrates and facilitate aetiological research; it would also lead to the development of new and more effective treatments.

Frequent revisions of the DSM, with minor changes, often based on inadequate evidence, also prompted debates on the motivation of the APA. The numerous minor and many major disagreements⁶ with WHO's International Classification of Diseases-10⁷ (ICD-10) diagnostic categories supported the argument that most changes were arbitrary as there was no agreement among international experts. The DSM had to contend with many charges including^{8,9} medicalizing normal reactions, lowering diagnostic thresholds to create spurious 'epidemics', creating new categories without evidence, promoting the use of multiple diagnostic labels (comorbidity), using medication responses to define categories, and playing into the hands of the pharmaceutical industry, etc.

On the other hand, defining mental illness is no simple task. A single definition to partition health, illness and disease proved extraordinarily difficult. Diversity of and

heterogeneity within these conditions is a major challenge. DSM-5 now accepts that the goal of achieving diagnostic homogeneity by clinical subtyping no longer appears sensible. Biologists, unable to define valid homogeneous categories based on genetic data and neuroscience characteristics, now argue against its use as the 'gold standard'. They propose an alternative format, i.e. Research Domain Criteria (RDoC) to map the underlying dimensions. ¹⁰ However, the new scheme will take many years to bear fruit.

Defenders of DSM argue that its primary purpose is to enable psychiatrists to reliably identify individuals who seek clinical attention, and to facilitate communication among clinicians and researchers. They argue that the field of psychiatry has to grapple with the current state of knowledge with its inherent limitations (e.g. the lack of laboratory diagnosis, poor understanding of genetic basis and psychological vulnerability, and the need to provide categorical diagnosis for dimensional constructs such as depression, anxiety, personality disorder, cognitive impairment, substance misuse). They acknowledge its imperfections but argue that it reflects our current understanding and the state of science. They contend that DSM-5 is not an attempt to define normal (and that being normal is not the same as not having a DSM-5 diagnosis) and having a diagnosis is not the same as being insane or crazy, stigmatizing labels which do not apply to the vast majority of people with a DSM diagnosis. They suggest that prescribing medication for any condition in preference to time- and labour-intensive psychological interventions is dependent on many factors including the economic realities of medical practice and does not necessarily imply medicalizing normality.

A close examination of the DSM-5 suggests the maintenance of status quo. Despite the many iterations of the DSM, neurobiological, epidemiological, cross-cultural and behavioural validity, as envisaged by Robins and Guze, ¹¹ the early pioneers of operational criteria, remains elusive. ¹² Even reliability of diagnosis, the main argument for operational definitions, remains very modest for many categories, with kappa values of 0.2–0.4, now accepted as standard in DSM-5. ¹³

The WHO, currently revising the ICD-10, also faces similar challenges. ¹⁴ The ICD-10, while being more representative of global psychiatry, also adopted similar approaches to the DSM system. There have also been many efforts towards convergence of DSM-5 and the ICD-11.

However, psychiatric diagnoses and theories, with their technical language, operational criteria, elaborate classificatory systems and empirical data continue to lack the predictive power required of hard science. Psychiatric theory is forced to fit the evidence generated, which is in turn based on current biomedical models. Its diagnostic systems and models do not explain many aspects of mental health and illness. Human cognition, emotion and behaviour are complex, interconnected and under a variety of influences (e.g. genetics and biology, psychological, social and cultural forces), whose effects cannot be teased out under controlled experimental conditions. Operational diagnostic criteria, with good reliability, are a poor substitute for the lack of robust concurrent and predictive validity.

Psychiatry, at this moment in time, has been compared to biology before Darwin and astronomy before Copernicus. Thomas Kuhn in his work *The structure of scientific revolutions*¹⁵ described three stages: (i) normal science (routine scientific work) with paradigms and a dedication to solving puzzles, (ii) serious anomalies produced by research, which lead to a crisis, and finally (iii) resolution of the crisis by the creation of a new paradigm. Psychiatry today, with its current concepts, theories and its many anomalies, is awaiting a paradigm shift, which will not only clarify these complex issues but will also provide for a new framework and understanding. Psychiatric research, despite its current attempts at testable conjectures and refutations, is still within a paradigm, which seems inadequate for the complexity of the task. It awaits its new dawn. The proposed psychiatric classifications, DSM-5 and ICD-11, should not be reified but considered the discipline's next tentative step within its current paradigm, which seems inadequate for the challenge.

REFERENCES

- 1 American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed (DSM-5). Arlington, VA:APA; 2013.
- 2 Jacob KS, Kallivayalil RA, Mallik AK, Gupta N, Trivedi JK, Gangadhar BN, et al. Diagnostic and statistical manual-5: Position paper of the Indian Psychiatric Society. Indian J Psychiatry 2013;55:12–30.
- 3 American Psychiatric Association. *Diagnostic and statistical manual III*. Washington: APA; 1980.
- 4 Jacob KS. Patient experience and psychiatric discourse. The Psychiatrist 2012;36:414-17.
- 5 Jacob KS. Psychosocial adversity and mental illness: Differentiating distress, contextualizing diagnosis. *Indian J Psychiatry* 2013;55:106–10.
- 6 First MB. Harmonisation of ICD-11 and DSM-V: Opportunities and challenges. Br J Psychiatry 2009;195:382–90.

- 7 World Health Organization. The International Classification of Diseases (ICD)-10: Clinical descriptions and diagnostic guidelines. Geneva: WHO; 1992.
- 8 Malhi GS. DSM-5: Ordering disorder? Aust NZJ Psychiatry 2013;47:7-9.
- 9 Sachdev PS. Is DSM-5 defensible? Aust NZJ Psychiatry 2013;47:10-1.
- 10 Cuthbert BN, Insel TR. Toward the future of psychiatric diagnosis: The seven pillars of RDoC. BMC Med 2013;11:126.
- 11 Robins E, Guze SB. Establishment of diagnostic validity in psychiatric illness: Its application to schizophrenia. Am J Psychiatry 1970;126:983–7.
- 12 Kendler K, Kupfer D, Narrow W, Phillips K, Fawcett J. Guidelines for making changes to DSM-V. Available at http://www.dsm5.org/ProgressReports/Documents/Guidelines-for-Making-Changes-to-DSM_1.pdf (accessed on 31 Jan 2013).
- 13 Kraemer HC, Kupfer DJ, Clarke DE, Narrow WE, Regier DA. DSM-5: How reliable is reliable enough? Am J Psychiatry 2012;169:13–15.
- 14 International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders. A conceptual framework for the revision of the ICD-10 classification of mental and behavioural disorders. World Psychiatry 2011;10:86–92.
- 15 Kuhn TS. The structure of scientific revolutions. Chicago:University of Chicago; 1962.

K.S. JACOB
Department of Psychiatry
Christian Medical College
Vellore
Tamil Nadu
India
ksjacob@cmcvellore.ac.in

The National Medical Journal of India is covered in Current Contents: Clinical Medicine, Science Citation Index, SciSearch and Research Alert.

—Editor