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# **EDITORIAL**

# Global mental health and psychiatric nosology: DSM-5, ICD-11, and RDoC

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Two major classification systems have played a key role in informing modern psychiatric practice and research. The 3rd edition of the American Psychiatric Association (APA)'s DSM, led by Robert Spitzer, played a seminal role by providing diagnostic criteria for mental disorders. These diagnostic criteria were then relied on not only in clinical settings, but also in research ranging from psychiatric epidemiology through to neurobiological studies and clinical trials. The 5th and latest edition of the manual, DSM-5, was published in 2013 – founded on a broad set of literature reviews, commissioned research, and expert consensus.<sup>1,2</sup>

The 10th edition of the World Health Organization (WHO)'s ICD included a chapter on mental and behavioral disorders that was influenced a good deal by the DSM. At the same time, the chapter demonstrated the WHO's commitment to a system that is used in multiple settings by non-specialist health workers; the guidelines are briefer and more similar to prototypes.<sup>3</sup> The 11th edition of the ICD, released to WHO member states this year and to be officially approved by the World Health Assembly in May 2019, has expanded and systematized this approach.<sup>4</sup> The ICD-11 has also devoted considerable efforts to exploring and expanding the relevant evidence base; this revision aims to consolidate the important position of this classification system in global practice.<sup>5,6</sup>

What are the implications of these developments in psychiatric nosology for services and research in low- and middle-income countries, where the large majority of the world's population resides, and which experience the large majority of the burden of disease due to mental illness? Although the DSM system is produced by a single professional organization in a single high-income country, the APA made substantial efforts to increase international participation in DSM-5 development. The ICD system is used globally to record medical (including psychiatric) diagnoses; such data play a key role in informing decision-making in the context of health policy.

Despite the global impact of these two systems, psychiatric nosology has received criticism not only from contemporary neuroscience, but also from the emerging field of global mental health.<sup>7</sup> Both clinical neuroscience and global mental health have emphasized that psychiatric diagnosis should not be conceptualized in terms of essentialist categories; biological mechanisms lead

to a spectrum of symptoms, and health services need to respond to the various stages of mental illness by providing stepped levels of care. Frameworks such as the Research Domain Criteria (RDoC) place specific emphasis on these underlying biological mechanisms and the symptom spectrums that they underpin.<sup>8</sup>

Against the background of these debates and controversies, we hold that the mental, behavioral and neurodevelopmental disorders chapter of ICD-11 represents an important step forward for the field of global mental health in general, and for services and research in lowand middle-income contexts in particular. This is for three important reasons:

First, ICD-11 has drawn on key strengths embodied in DSM and in RDoC. DSM-IV made an important contribution by emphasizing that nosological decision-making needs to be underpinned by evidence. This emphasis was maintained both by the Scientific Review Committee of DSM-5 and by the ICD-11 Working Groups. While a good deal of nosological evidence focuses on issues of diagnostic reliability, DSM-5 emphasized the potential value of neuroscience for diagnostic validation, and a translational vision lies at the core of RDoC. During the DSM-5 process, it became clear that there was insufficient evidence for neuroscience to lead to a paradigm shift in psychiatric nosology. Nevertheless, neuroscience influenced decisions such as the meta-structure of the DSM-5 classification, and DSM-5 and ICD-11 collaborated to ensure adoption of a similar meta-structure across both systems.2

Second, ICD-11 has avoided some of the key limitations of DSM and RDoC. DSM products are expensive and lead to significant profits for the APA. In contrast, ICD products are freely available across the globe; this increases the likelihood that they will be used in a broad range of settings to improve diagnosis and treatment. RDoC constructs are complex, and best suited for investigation in research-intensive academic settings. In contrast, ICD constructs are user-friendly and better suited for adoption by non-specialists in primary care settings across the world. From the perspective of global mental health, ICD-11 clearly represents the most viable

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#### 4 DJ Stein & GM Reed

solution for mental health practice and research in diverse settings across countries. The fact that ICD-11 is founded on a rigorous and global evidence base contributes to the confidence with which it can be endorsed.

Third, ICD-11 has maintained its own unique identity and vision. Critics of psychiatric nosology may argue that the very existence of different approaches to classification speaks to failures in the field. This criticism fails to appreciate that psychiatric nosology is not solely about identifying essentialist categories; rather, classification aims to be fit for purpose.9 In a highly specialized research setting, a classification system that emphasizes rigorous diagnostic criteria and subtle disorder subtypes may be useful. However, in a wide range of global settings, a system that provides more flexible guidance and is somewhat less granular is more likely to be perceived as acceptable and feasible, is more likely to be adopted, and is more likely to lead to improved patient outcomes. The unique and important emphasis of ICD-11 on clinical utility across different countries ensures that it will be a core tool for global mental health. Certainly, such clinical utility rests on a foundation of diagnostic reliability and validity; but it also builds on these pillars in an important way.

Taken together, then, the mental and behavioral disorders chapter in ICD-11 represents an important step forwards for psychiatric nosology and for global mental health. Further work is certainly needed to improve the reliability, validity, and clinical utility of the meta-structure and diagnostic entities in both DSM-5 and ICD-11. RDoC and other neuroscience-influenced efforts may also play an important role in the future, as may approaches influenced by public mental health. Nevertheless, it is timely to celebrate the iterative progress that has been made with this edition of the ICD.

## **Disclosure**

The authors alone are responsible for the views expressed in this article, which do not necessarily represent the decisions, policy, or views of the World Health Organization.

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