

## Balancing validity, utility and public health considerations in disorders due to addictive behaviours

The concept of “behavioural (non-chemical) addictions” was introduced close to three decades ago, and a growing body of literature has emerged more recently on this and related constructs<sup>1,2</sup>. Simultaneously, some authors have noted that the classification of behavioural addictions requires further effort<sup>3,4</sup>. Here we provide an update on this area, emphasizing recent work undertaken during the development of the ICD-11, and addressing the question of whether it is useful to have a separate section on disorders due to addictive behaviours in this classification.

Both the DSM and ICD systems have long avoided the term “addiction” in favor of the construct of “substance dependence”. However, the DSM-5 includes gambling disorder in its chapter on substance-related and addictive disorders, and provides criteria for Internet gaming disorder, considering it an entity requiring further study, and highlighting its similarities to substance use disorders<sup>5-7</sup>. In the draft ICD-11, the World Health Organization has introduced the concept of “disorders due to addictive behaviours” to include gambling and gaming disorders<sup>2,8</sup>. These disorders are characterized by impaired control over engagement in the addictive behaviour, the behaviour occupying a central role in the person’s life, and continued engagement in the behaviour despite adverse consequences, with associated distress or significant impairment in personal, family, social, and other important areas of functioning<sup>2,8</sup>.

An important focus during the development of DSM-5 was on diagnostic validators. Certainly, there is some evidence for overlap between substance use disorders and disorders due to addictive behaviours, such as gambling disorder, on key validators including comorbidity, biological mechanisms, and treatment response<sup>5-7</sup>. For gaming disorder, there is increasing information on clinical and neurobiological features. For a wide range of other putative behavioural addictions, less evidence exists. Further, several of these conditions may also demonstrate overlap with impulse control disorders (in DSM-IV and ICD-10), including comorbidity, biological mechanisms, and treatment response<sup>9</sup>.

The groups working on ICD-11 recognize the importance of validators of mental and behavioural disorders, given that a classification system with greater diagnostic validity may well lead to improved treatment outcomes. At the same time, ICD-11 workgroups have focused in particular on clinical utility and public health considerations in their deliberations, with an explicit focus on improving primary care in non-specialist settings, consistent with the ICD-11’s emphasis on global mental health. Fine-grained differentiations of disorders and disorder subtypes, even if supported by empirical work on diagnostic validity, are arguably not as useful in contexts where non-specialists provide care. However, associated dis-

ability and impairment are key issues in this perspective, supporting the inclusion of gambling and gaming disorders in ICD-11<sup>2,8</sup>.

There are multiple reasons why the recognition of disorders due to addictive behaviours and their inclusion in the nosology together with substance use disorders may contribute to improving public health. Importantly, a public health framework for prevention and management of substance use disorders may well be applicable to gambling disorder, gaming disorder, and perhaps some other disorders due to addictive behaviours (although the draft ICD-11 suggests that it may be premature to include in the classification any other disorder due to addictive behaviours outside of gambling and gaming disorders).

A public health framework to considering disorders due to addictive behaviours arguably has a number of specific advantages. In particular, it places appropriate attention on: a) the spectrum from leisure-related behaviour without any harms to health through to behaviour associated with significant impairment; b) the need for high-quality surveys of prevalence and costs of these behaviours and disorders, and c) the utility of evidence-based policy-making to reduce harm.

Although some may be concerned about the medicalization of ordinary living and lifestyle choices, such a framework overtly recognizes that some behaviours with addictive potential are not necessarily and may never become a clinical disorder, and it emphasizes that prevention and reduction of health and social burden associated with disorders due to addictive behaviours may be achieved in meaningful ways by interventions outside the health sector.

Several other criticisms of the constructs of behavioural disorders or disorders due to addictive behaviours may be raised for discussion. We have previously pointed out in this journal that additional work is needed to make strong claims about diagnostic validity<sup>9</sup>, and the draft ICD-11 currently also lists gambling and gaming disorders in the section on “impulse control disorders”. Relatedly, there is a reasonable concern that the boundaries of this category may be inappropriately extended beyond gambling and gaming disorder to include many other types of human activity. Some of these arguments overlap with those which emphasize the dangers of a reductionist medical model of substance use disorders.

While cognizant of the importance of these issues, our view is that the potentially large burden of disease due to behavioural addictions requires a proportionate response, and that the optimal framework is a public health one.

Here we have outlined reasons why a public health framework that is useful for substance use disorders may also be usefully applied to gambling disorder, gaming disorder and, potentially, other health conditions due to addictive behav-

ious. This argument provides support for including substance use disorders, gambling disorder and gaming disorder in a single section of the chapter on mental, behavioural or neurodevelopmental disorders in ICD-11.

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## Evidence of the clinical utility of a prolonged grief disorder diagnosis

A substantial body of research has shown that prolonged grief disorder (PGD), characterized by persistent and severe separation distress, constitutes a disorder distinct from bereavement-related major depressive disorder (MDD) and post-traumatic stress disorder (PTSD)<sup>1</sup>. Reviewing the available evidence, the work group covering the Disorders Specifically Associated With Stress section in the ICD-11 decided to slate PGD for inclusion as a new stress response syndrome<sup>2</sup>. Still, mental health professionals and laypersons have expressed concerns that diagnosing PGD represents a "medicalization" of normal grief reactions<sup>3</sup>. Fears of the overdiagnosis of normal responses remain<sup>4-6</sup>.

As a new disorder, it is of paramount importance to determine whether PGD is a clinically useful diagnosis. According to First<sup>7</sup>, a mental disorder or diagnostic system has clinical utility if it: a) helps communication, b) facilitates effective interventions, c) predicts management needs and outcomes, and d) differentiates disorder from non-disorder and comorbid disorders. Whereas a large body of evidence has demonstrated the construct, predictive and incremental validity of PGD, clinicians' perceptions of its clinical utility have yet to be tested experimentally.

To address this gap, our group recently completed a two-phase National Institute of Mental Health (NIMH)-funded randomized controlled trial in the US that evaluated the clinical utility of PGD by examining the impact of providing information about the diagnosis on clinicians' ability to differentially diagnose PGD in "virtual standardized patients" (VSPs). The use of VSPs allowed us to standardize clinical presentations, control influential confounding variables and patient charac-

teristics, and avoid burdening bereaved participants. Using VSPs (rather than written vignettes or clinicians selecting their own patients<sup>8</sup>, as has been done in prior studies) increased the external validity of this investigation.

In Phase 1 of the study, video-recorded case vignettes for the VSPs were developed with the input of seven bereavement experts. They reflected cases of PGD, normative grief not meeting criteria for PGD, MDD, and PTSD. Four blinded, expert diagnosticians were asked to review the VSPs and evaluate the cases to establish "gold" or "criterion" standard diagnoses. There was full agreement on 12 of the cases, which were included in Phase 2 of the study.

In Phase 2, clinicians (N=120 completers) were randomized to receive written information about PGD (informed) or not (not informed). Participants were asked about their background and experience working with the bereaved, and were invited to provide a diagnosis and treatment recommendations for four VSPs depicting normative grief, PGD, MDD and/or PTSD. Participants were also surveyed about PGD's clinical utility. Participants included psychiatrists (17%), psychologists (27%), social workers (43%), and other licensed clinicians (13%). They were 76% female and 66% White.

We found that clinicians provided with information about PGD, compared to those not receiving such information, were 4.5 times more likely to diagnose PGD accurately. There were no significant group differences in the likelihood of clinicians accurately diagnosing normative grief, MDD or PTSD, but there were significant between-group differences in treatment recommendations for PGD cases. Clinical utility ratings of the PGD diagnostic criteria were high, with the majority of clini-