

# **Editorial**

# Evolving eating disorder psychopathology: conceptualising muscularity-oriented disordered eating

Stuart B. Murray, Scott Griffiths and Jonathan M. Mond

# **Summary**

Eating disorders, once thought to be largely confined to females, are increasingly common in males. However, the presentation of disordered eating among males is often distinct to that observed in females and this diversity is not accommodated in current classification schemes. Here, we consider the diagnostic and clinical challenges presented by these distinctive presentations.

### **Declaration of interest**

None

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Eating disorders are thought to be among the most gendered of all psychiatric disorders, with clinical depictions typically referring to an emaciated female relentlessly restricting food intake in pursuit of a thinner body. Relatively less is known about eating disorders in males, which due to their apparent rarity and atypicality have been largely excluded from epidemiological studies and treatment trials. For instance, less than 1% of research on anorexia nervosa has been conducted in males. This is despite findings from recent epidemiological studies indicating marked increases in the prevalence of eating disorder behaviour among males, such that certain behaviours are now as common, or nearly as common, in males as in females and are associated with similarly high levels of distress and disability.<sup>1</sup>

At the same time, the population prevalence of eating disorder behaviour in males far outweighs the treated prevalence, <sup>1</sup> suggesting that (a) males are particularly unlikely to seek treatment for eating disorder-related problems, (b) eating disorder problems in males are particularly unlikely to be detected by health professionals, or (c) both. Concerning potential barriers to help-seeking, stigmatisation and stereotyping abound. This includes stigma faced by all individuals with eating disorders, such as the notion of eating disorders being self-inflicted, and stigma towards men with eating disorders in particular, such as men with eating disorders being seen to be effeminate.<sup>2</sup> Stigma of this kind is associated with greater psychopathology, longer duration of illness and greater self-stigma associated with help-seeking.<sup>2</sup>

When seeking treatment, males with eating disorders are less likely than females with these disorders to receive an accurate diagnosis or, worse still, may face the explicit dismissal of their eating disorder symptoms on the basis of their gender. This likely reflects poor awareness and understanding of the presentation of eating disorders in males among health professionals, the individuals themselves and the public.<sup>3</sup> It also likely reflects, in part, the use of a diagnostic classification scheme and assessment instruments that were developed based on stereotypic female presentations, which may not be appropriate for males. This disconnect between the

male experience of disordered eating and the likelihood of appropriate diagnosis and treatment is problematic.

# The complexities of disordered eating in males

The recent upsurge in eating disorder behaviour among males likely reflects a broader increase in the prevalence of body dissatisfaction – a key risk factor for eating disorder psychopathology – in both males and females. As with eating disorder behaviour, gender differences in the prevalence and adverse consequences of body dissatisfaction are diminishing, 1 although a key enduring difference is that body dissatisfaction among males is typically characterised by a drive for muscularity rather than a drive for thinness.<sup>4</sup> Indeed, the 'ideal' male body has become increasingly muscular, with current action figure toys possessing greater dimensions of muscularity than the largest human bodybuilders.4 This ideal is central to the relationship between body dissatisfaction and eating disorder behaviour as this manifests in males. The latter includes, for instance, the use of steroids to increase muscle mass rather than the thinness-oriented dietary restraint characteristic of females with eating disorders.

In parallel with increasing preoccupation with body weight and shape among males, there has been an increase in muscularity-oriented eating and exercise practices. For example, more than 90% of adolescent boys in general community settings report exercising primarily to increase muscle mass or tone, two-thirds report specific changes in dietary intake to increase muscle size or tone, and up to 15% report using muscle-enhancing substances including anabolic steroids.<sup>5</sup> Additionally, about 8% of young men report being very concerned with their muscularity and use unhealthy means, including potentially dangerous dietary practices, in pursuit of their desired level of muscularity.<sup>6</sup>

In fact, muscularity concerns among males typically span two dimensions, namely: (a) muscularity; and (b) leanness, the latter being thought to enhance the visibility of muscularity. As such, profiles of muscularity-oriented disordered eating may shift between 'bulking' and 'cutting' phases that entail, respectively, overregulation of protein consumption and restriction of dietary fats and carbohydrates. The occurrence of extreme muscularity-enhancing measures, such as anabolic steroid use, may now be as common, if not more common, in young men as the occurrence of extreme weight-control behaviours such as purging in young

females.<sup>6</sup> Further, clinical data suggest that muscularity-oriented eating and exercise behaviours (i.e. muscle dysmorphia) are comparable, in terms of the distress and disability that they engender, to the weight-control behaviours characteristic of eating disorders in females.<sup>7</sup>

## **Moving forward**

It is apparent that multiple body ideals, ranging from very thin to very muscular, may motivate disordered eating, the manifestation of which depends on which body ideal is most highly valued. This is consistent with a transdiagnostic view of eating disorder pathology in which the core psychopathology is the overvaluation of shape and weight, and that various manifestations of behaviour – extreme dietary restriction, purging, binge eating – are thought to derive, directly or indirectly, from this core feature. This includes, potentially, the muscularity-oriented disordered eating and weight-control behaviours that current male body ideals give rise to.

The problem is that current classification schemes for eating disorder do not accommodate the extreme forms of body image disturbance and weight-control behaviours most likely to occur in males. Instead, diagnostic criteria - and the measures designed to assess these - continue to focus on body image disturbance and behaviour as these typically occur in young women, i.e. thinnessoriented disturbance and behaviours. In DSM-5, muscle dysmorphia and variants of this disorder are categorised as a subtype of body dysmorphic disorder within the 'Obsessive Compulsive and Related Disorders' category.9 In other words, wholly different diagnoses may be assigned to individuals with the same symptom profile depending on gender and symptom polarity. Relocation of body dysmorphic disorder to an 'Obsessive Compulsive and Related Disorders' category has similarly been proposed for the upcoming ICD-11, although in ICD-11 there will be no mention of muscle dysmorphia.<sup>10</sup>

These schemes not only marginalise males afflicted with muscularity-oriented eating disorder behaviours, but also reinforce the popular impression that eating disorders in males are uncommon. This may be particularly problematic given the hegemonic masculine gender roles often embedded in the pursuit of muscularity, and the consequent reluctance on the part of individuals to discuss concerns. Further, this ongoing diagnostic disparity hinders efforts to elucidate similarities in the core psychopathology underlying different manifestations of male eating disorder behaviour in epidemiological studies. Males may present with stereotypic, thinness-oriented presentations of anorexia nervosa and bulimia nervosa. Indeed, the prevalence of these presentations may also be increasing and individuals with these disorders also face unique challenges in terms of diagnosis and treatment. Nevertheless, a far greater proportion of males with body image disturbance report concerns with muscularity.

Periodic revisions of psychiatric classification schemes are necessary in adapting to evolving symptom presentations. This may be particularly true in the context of eating disorders, which may be more inherently tied to changing sociocultural trends than other psychiatric disorders. The delineation of bulimia nervosa as a diagnostic category separate from anorexia nervosa and, more recently, the emergence of binge eating disorder as a diagnosis separate from bulimia nervosa, has allowed for more nuanced clinical treatments. Changes to the classification of eating disorders in DSM-5 will further improve clinical utility, in particular by reducing the proportion of cases falling into the residual DSM-IV category of 'Eating Disorders 'Not Otherwise Specified'" (in DSM-5, 'Feeding and Eating Disorders Not Elsewhere Classified'). Making classification schemes for eating

disorders less 'female centric' was not, however, a priority for the DSM-5 Eating Disorders Work Group and there has been little progress in this regard.

There is, in our view, an urgent need to improve the clinical utility of current diagnostic frameworks as these relate to male eating disorders by broadening the conceptualisation of eating disorders to include pathological behaviours that emanate from a drive for muscularity. Inclusion of a note to the effect that the overvaluation of an idealised body type may give rise to both thinness- and muscularity-related pathology in the preamble to the eating disorder sections of both the DSM and ICD would be a good start. Reference to muscle dysmorphia in the eating disorder sections of these schemes would also be helpful. If, as has been proposed, the DSM is a 'living document', then such changes need not wait for the publication of DSM-6. In the case of the ICD, there is still time to incorporate such changes prior to the publication of ICD-11.

It could be argued that better clinical and epidemiological data are needed before considering a change of this kind. Certainly, there is a paucity of good epidemiological data bearing on the prevalence and correlates of muscle dysmorphia and its variants. However, changes to diagnostic criteria are needed to provide an incentive for relevant research. The inclusion of binge eating disorder as a provisional diagnosis in DSM-IV is a case in point. This is important not only from a clinical utility perspective but also because classification schemes for mental health problems have a pervasive and profound effect on the knowledge, beliefs and behaviours of individuals with eating disorders, the public and health professionals.

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