Epidemiology of eating disorders in persons other than the high-risk group of young Western females

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Most studies on the epidemiology of eating disorders have focused on young females in Western countries, being the high-risk group for the development of eating disorders. However, eating disorders do occur in older women and in men and they also do occur in persons in nonwestern countries, as the reviews in this issue show [Raevuori et al. (pp. 426–430), Mangweth-Matzek et al. (pp. 431–435), Pike et al. (pp. 436–442)]. Disordered eating behavior and eating disorders also do occur more frequently among obese people and even more among severely obese people waiting for weight loss surgery than among healthy weight people [Marcus and Wildes (pp. 443–447), Green et al. (pp. 448–452)]. The five articles on eating disorders in this journal review new findings on eating disorders and disturbed eating behavior among these nontraditional groups, such as men, older women, persons in nonwestern countries and obese persons [Raevuori et al. (pp. 426–430), Mangweth-Matzek et al. (pp. 431–435), Pike et al. (pp. 436–442), Marcus and Wildes (pp. 443–447), Green et al. (pp. 448–452)].

Last year, the articles in the eating disorder section in this journal addressed the changes in the Diagnostic and statistical manual of mental disorders (5th ed) regarding feeding and eating disorder criteria compared with those in DSM-IV [1,2]. Throughout the DSM-5, the influence of development, sex and culture on the presentation of psychiatric disorders was given more attention than in any previous edition of the DSM [2], which might facilitate the classification of eating disorders among men, older women and among people in nonwestern countries. In DSM-5, the diagnostic criteria for anorexia nervosa and bulimia nervosa were broadened, and binge eating disorder was included as an official diagnostic entity [1]. This has particular relevance for men and older women, whose eating disorder symptoms tend not to fit into stringent categories [Raevuori et al. (pp. 426–430), Mangweth-Matzek et al. (pp. 431–435)]. Compared with DSM-IV, DSM-5 allows more eating disorders in men to be identified by a specific diagnosis, instead of a residual category such as ‘eating disorder not otherwise specified’ [Raevuori et al. (pp. 426–430)]. For example, the elimination of the amenorrhea requirement [1] and more permissive wording of the weight criterion might facilitate a diagnosis of anorexia nervosa in men [Raevuori et al. (pp. 426–430)]. Anorexia nervosa – usually considered as the prototype of an eating disorder, but a relatively rare disorder in the general population – was already included in DSM-I in 1952. Obesity – at the other end of the weight spectrum as anorexia nervosa and a relatively common condition – has never been classified in the DSM-system. In fact, the DSM-5 Eating Disorders Work Group was asked to consider whether obesity should be included in the DSM as a mental disorder, but concluded that there was insufficient evidence to include obesity [3]. Obesity is a heterogeneous and potentially harmful condition that is caused by a complex interplay of host and environmental factors, but it is not necessarily a mental disorder [3,4]. Although there are many pathways to obesity, there is substantial evidence that disordered eating can be a significant factor in its development and maintenance [Marcus and Wildes (pp. 443–447)].

Raevuori et al. (pp. 426–430) estimate the lifetime prevalence of anorexia nervosa among men as 0.2–0.3%, bulimia nervosa as 0.1–0.5% and binge eating disorder as a minimum 1% up to as high as 3%. Epidemiological studies report rate ratios of

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lifetime prevalence in men vs. women for anorexia nervosa as 1:3–1:12 and for bulimia nervosa 1:5–1:18; in binge eating disorder the men to women rate ratio is more equal, 1:2–1:6.

Contrary to earlier suggestions, no differences in eating disorder symptoms, such as binge eating, vomiting or laxative abuse, were observed between the sexes, but men tended to score lower on eating disorder symptom measures than women. In men, high rates of premorbid overweight and higher BMI’s at various stages of eating disorders have been confirmed repeatedly. Higher age and lower BMI at admission, and restrictive subtype of anorexia nervosa predicted higher risk of fatal outcome for anorexia nervosa in men [Raevuori et al. (pp. 426–430)].

Mangweth et al. (pp. 431–435) address the epidemiology, features and potential treatment of eating disorders and related body-image concerns in middle-aged and elderly women. Recent epidemiological studies suggest that pathological eating behaviors and frank eating disorders are surprisingly common in older women, as are associated body-image disturbances. In a community study of middle-aged (40–60 years) Austrian women, no cases of anorexia nervosa were detected, but 4.6% of the women reported other eating disorders as defined by DSM-IV criteria (bulimia nervosa, binge eating disorder and eating disorder not otherwise specified) and another 4.8% reported subthreshold eating disorders [4]. The prevalence of such conditions in older women has likely increased in recent decades. On many indices of disordered eating and body image, older women with eating abnormalities resemble younger women with similar conditions, although older women exhibit certain unique concerns, such as dealing with menopause and with aging.

Pike et al. (pp. 436–442) highlight four recent trends that reflect the changing landscape of culture and eating disorders: first, stabilization of the incidence of anorexia nervosa and possibly lower incidence rates of bulimia nervosa in North America and Northern Europe, second, increasing rates of eating disorders in Asia, third, increasing rates of eating disorders in the Arab region and fourth, increasing rates of binge eating and bulimia nervosa in Hispanic and Black American minority groups in North America. Interestingly, it appears that both in Asia and in the Arab region, a greater number of men report eating and weight concerns compared with Western men. The tendencies that predispose both men and women to develop an eating disorder, namely unhealthy dieting practices, restrictive eating, body preferences rooted in the ‘thin ideal’, body weight and body shape dissatisfaction and weight misperception are increasing in many parts of the world, like in the Arab region.

The prevalence of obesity has increased dramatically over the last several decades with corresponding increases in obesity-related morbidities and associated health costs. Marcus and Wildes (pp. 443–447) describe the rapidly advancing research on the association between disordered eating and obesity and discuss two areas of ongoing investigation: first, binge eating and binge eating disorder and second, ‘food addiction’. There is substantial evidence that recurrent binge eating and binge eating disorder are associated with psychiatric comorbidity and obesity. The relation between food addiction or vulnerability to overeating highly palatable foods due to dysregulation in the neurocircuits associated with reward and obesity is supported by research using animal models, but there have been mixed findings from human research.

Green et al. (pp. 448–452) report on eating disorders and other psychopathology before and after bariatric surgery. In a large study among patients up to 30 days prior to bariatric surgery, the prevalence of loss of control eating was 43%, of night eating syndrome 18%, of binge eating disorder 16% and of bulimia nervosa 2% [5]. Weight loss and the effects of weight loss on medical comorbidities are the most common primary outcomes in bariatric surgery, but the surgical treatment of obesity also generally results in marked improved psychological functioning. However, a significant minority of patients after bariatric surgery experience problems such as reoccurring or new onset psychiatric disorders, alcohol or substance abuse, or eating disordered behaviors and occasionally even anorexia nervosa or bulimia nervosa can emerge postsurgery.

In conclusion, eating disorders do occur beyond the well known high-risk group of young women in often surprisingly high rates among men, older women, persons in nonwestern countries and obese persons. As the five review articles on eating disorders point out, the characteristics of the disturbed eating behavior in these groups might be somewhat different from the prototypical disordered eating by young women with anorexia nervosa, but it is important that these nontraditional groups with eating disorders are also detected and properly treated. Knowing that the detection rates even among young women with eating disorders are low [6], this forms still a great challenge for our field.

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Conflicts of interest

The author has no conflicts of interest; he has been a member of the DSM-5 Eating Disorders Work Group.

REFERENCES