

ADHD and Eating Disorders

By Stephen V. Faraone, PhD

A relatively new area of ADHD research has been examining the association between ADHD and eating disorders (i.e., anorexia nervosa, bulimia nervosa and binge eating disorder). Nazar and colleagues conducted a systematic review and meta-analysis of extant studies. They found only twelve studies that assessed the presence of eating disorders among people with ADHD and five that examined the prevalence of ADHD among patients with eating disorders. Although there were few studies, the total number of people studied was large, 4,013 ADHD cases and 29,404 controls for the first set of studies and 1,044 eating disorder cases and 11,292 controls for the second set of studies. The meta-analyses of these data found that ADHD people had a 3.8 fold increased risk for an eating disorder compared with non-ADHD controls. The level of risk was similar for each of the eating disorders. Consistent with this, their second meta-analysis found that people with eating disorders had a 2.6 fold increased risk for ADHD compared with controls who did not have an eating disorder. The risk for ADHD was highest for those with binge eating disorder (5.8 fold increased risk compared with controls). This bi-directional association between ADHD and eating disorders provides converging evidence that this association is real and, given its magnitude, clinically significant. The results were similar for males and females and for pediatric and adult populations. We cannot tell from these data why ADHD is associated with eating disorders. Nazar et al. note that other work implicates both impulsivity and inattention in promoting bulimic symptoms whereas inattention and hyperactivity are associated with craving. The association may also be due to the neurocognitive deficits of ADHD, which could lead to a distorted sense of self awareness and body image. Given that ADHD is also associated with obesity, it is possible that some obese ADHD patients have an underlying eating disorder, such as binge eating, which has been associated to obesity in prospective studies. Also, lisdexamphetamine is FDA approved for treating both binge eating and ADHD, which suggests the possibility that the two conditions share an underlying etiology involving the dopamine system. We do not know if treating ADHD would reduce the risk for eating disorders as that hypothesis has not yet been tested. But such an effect would seem likely if ADHD behaviors mediate the association between the two disorders.

REFERENCE

Nazar, B. P., Bernardes, C., Peachey, G., Sergeant, J., Mattos, P. & Treasure, J. (2016). The risk of eating disorders comorbid with attention-deficit/hyperactivity disorder: A systematic review and meta-analysis. *Int J Eat Disord* **49**, 1045-1057.