

Psychology of Abnormal Eating Behaviors in Neurology

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Eating disorders (anorexia nervosa, bulimia nervosa, and binge eating disorder) are regarded as psychiatric syndromes that have some relationship to obesity. This review describes current clinical and scientific knowledge concerning the clinical descriptions of these disorders, etiology of each disorder, diagnostic signs, and treatment approaches that have been found to be efficacious. Anorexia nervosa is a very serious eating disorder that is associated with severe medical complications. Anorexia nervosa is very difficult to successfully treat, even when intensive inpatient methods are used. Bulimia nervosa and binge eating disorder are typically less severe eating disorders and are more easily treated using outpatient therapy. Pharmacotherapy has not been found to be an effective treatment for anorexia nervosa, but it has been used successfully with bulimia nervosa and binge eating disorder. Psychotherapy approaches have been successfully employed for all three eating disorders.

Symptoms

- Extreme thinness (emaciation)
- A relentless pursuit of thinness and unwillingness to maintain a normal or healthy weight
- Intense fear of gaining weight
- Distorted body image, a self-esteem that is heavily influenced by perceptions of body weight and shape, or a denial of the seriousness of low body weight
- Lack of menstruation among girls and women
- Extremely restricted eating.

Treatment

Individual, group, and/or family psychotherapy

- Medical care and monitoring
- Nutritional counseling
- Restoring the person to a healthy weight
- Treating the psychological issues related to the eating disorder
- Reducing or eliminating behaviors or thoughts that lead to insufficient eating and preventing relapse.
- Eating disorders are serious, biologically influenced medical illnesses marked by severe disturbances to one's eating behaviors. Although many people may be concerned about

their health, weight, or appearance from time to time, some people become fixated or obsessed with weight loss, body weight or shape, and controlling their food intake. These may be signs of an eating disorder.

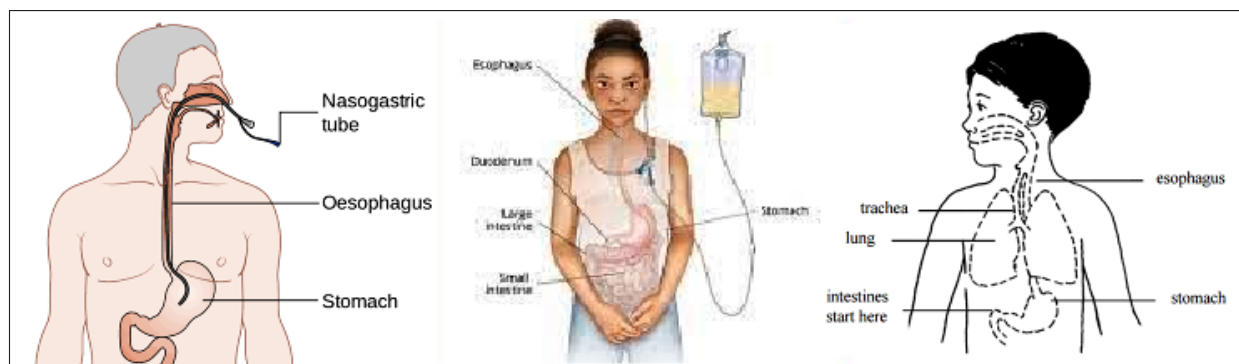
- Eating disorders are not a choice. These disorders can affect a person's physical and mental health. In some cases, they can be life-threatening. With treatment, however, people can recover completely from eating disorders.
- Who is at risk for eating disorders?
- Eating disorders can affect people of all ages, racial/ethnic backgrounds, body weights, and genders. Although eating disorders often appear during the teen years or young adulthood, they may also develop during childhood or later in life (40 years and older).
- Remember: People with eating disorders may appear healthy, yet be extremely ill.
- The exact cause of eating disorders is not fully understood, but research suggests a combination of genetic, biological, behavioral, psychological, and social factors can raise a person's risk.
- What are the common types of eating disorders?
- Common eating disorders include anorexia nervosa, bulimia nervosa, binge-eating disorder, and avoidant restrictive food intake disorder. Each of these disorders is associated with different but sometimes overlapping symptoms. People exhibiting any combination of these symptoms may have an eating disorder and should be evaluated by a health care provider.
- What is anorexia nervosa?
- Anorexia nervosa is a condition where people avoid food, severely restrict food, or eat very small quantities of only certain foods. They also may weigh themselves repeatedly. Even when dangerously underweight, they may see themselves as overweight.



Eating disorders are among the most common psychosomatic diseases and are often associated with negative health consequences. The use of yoga as a treatment method in eating disorders is controversial discussed. The interviewee was a 38 year old female patient suffering on anorexia nervosa and various psychosomatic-psychiatric diagnoses in her medical history. The patient reported that yoga recovered the soul contact

which she lost and she had learned to perceive and feel herself again. She stated that yoga helped her to find access to her body and its needs and to cope with her traumatic experiences. She also reported that attitudes have changed in relation to her stomach in the treatment of her anorexia. The case report confirmed the positive effect of yoga on eating disorders. Research should pay particular attention to taking into account the influence of individual's co-morbidities, as eating disorders usually occur in association with co-morbidities [1].

Individuals with anorexia nervosa have a fear of being overweight or being seen as such, although they are in fact underweight [2,3]. The DSM-5 describes this perceptual symptom as "disturbance in the way in which one's body weight or shape is experienced" [4]. In research and clinical settings, this symptom is called "body image disturbance" [5]. Individuals with anorexia nervosa also often deny that they have a problem with low weight [6]. They may weigh themselves frequently, eat small amounts, and only eat certain foods [2]. Some exercise excessively, force themselves to vomit (in the "anorexia purging" subtype), or use laxatives to lose weight and control body shapes, and/or binge eat [2]. Medical complications may include osteoporosis, infertility, and heart damage, along with the cessation of menstrual periods [2,6]. In extreme cases, patients with anorexia nervosa who continually refuse significant dietary intake and weight restoration interventions, and are declared incompetent to make decisions by a psychiatrist, may be fed by force under restraint via nasogastric tube after asking their parents or proxies to make the decision for them [7,8].



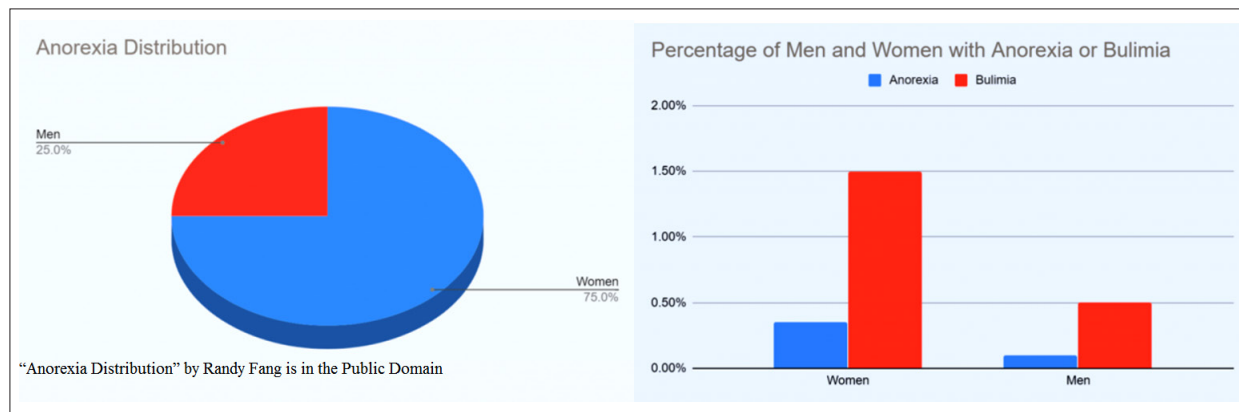
The cause of anorexia is currently unknown. There appear to be some genetic components with identical twins more often affected than fraternal twins [3]. Cultural factors also appear to play a role, with societies that value thinness having higher rates of the disease.[4] Additionally, it occurs more commonly among those involved in activities that value thinness, such as high-level athletics, modeling, and dancing [6,9]. Anorexia often begins following a major life-change or stress-inducing event [6].

Treatment of anorexia involves restoring the patient back to a healthy weight, treating their underlying psychological problems, and addressing behaviors that promote the problem.[1] While medications do not help with weight gain, they may be used to help with associated anxiety or depression [2]. Different therapy methods may be useful, such as cognitive behavioral therapy or an approach where parents assume responsibility for feeding their child, known as Maudsley family therapy [2,10]. Sometimes people require admission to a hospital to restore weight [4].

Evidence for benefit from nasogastric tube feeding is unclear; such an intervention may be highly distressing for both anorexia patients and healthcare staff when administered against the patient's will under restraint [11,12]. Some people with anorexia will have a single episode and recover while others may have recurring episodes over years [4]. Many complications improve or resolve with the regaining of weight [4].

It is estimated to occur in 0.3% to 4.3% of women and 0.2% to 1% of men in Western countries at some point in their life [13]. About 0.4% of young women are affected in a given year and it is estimated to occur ten times more commonly among women than men [6,13]. Often it begins during the teen years or young adulthood [2]. While anorexia became more commonly diagnosed during the 20th century, it is unclear if this was due to an increase in its frequency or simply better diagnosis [3]. In 2013, it directly resulted in about 600 deaths globally, up from 400 deaths in 1990 [14]. Eating disorders also increase a person's

risk of death from a wide range of other causes, including suicide [2,13]. About 5% of people with anorexia die from complications over a ten-year period [6,15].



How do Men Generally Get Eating Disorders Compared to Women?

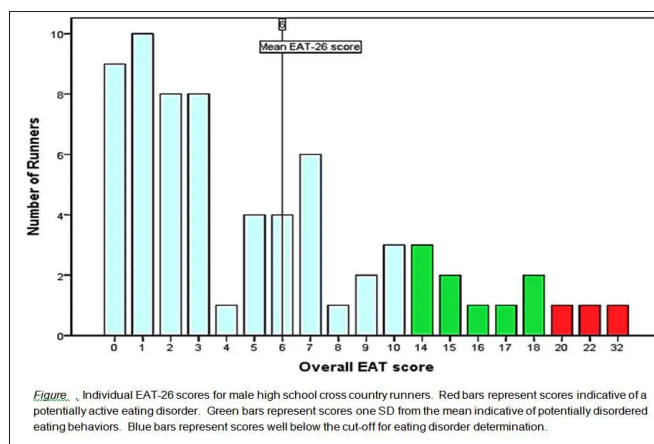
It is no surprise that most men’s ideal body is a large, muscular body. In contrast, women generally set their goals to achieve a thin, toned body. Social media impacts how individuals feel about their bodies as well. In a study observing social media use and body satisfaction, it was observed that higher social media usage tends to be paired with a lower body satisfaction [16]. Low body satisfaction is also linked to higher rates of eating disorders. The cultural differences of ideal body types result in women developing more eating disorders. While men tend to consume more foods, women attempt to limit their calories, and both can be done so in very unhealthy ways [16].

to these diseases since there are plenty who struggle with them. Worldwide, approximately 70 million individuals suffer from an eating disorder, and roughly a third of those individuals are male (American Addiction Centers, n.d.). This number may be surprisingly high for men, but this may be because of social stigmas revolving around men and these disorders. An ideal, strong physique is greatly related to eating disorders in men. Men concerned with their body appearance are more likely to undergo harmful dietary practices, such as purging [18]. In a survey conducted by the British Journal of Psychiatry, roughly 8% of men concerned with their physical appearance reported extreme dietary practices [19]. Women generally have higher standards and pressure to be attractive. A higher percentage of women are concerned with their body image than men [19].

The prevalence of eating disorders in men is much lower than in women. However, this does not mean men are not susceptible

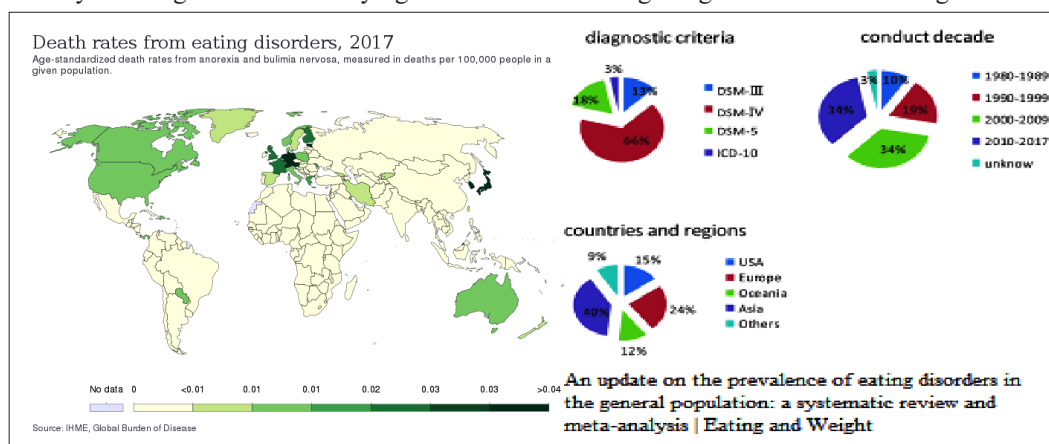


Aside from social media and other influences, eating disorders are more common in women than men because of brain differences. In a study using virtual reality, women who looked down and saw an obese or overly skinny virtual body experienced higher levels of emotions such as anger or fear [20]. Women with anorexia also have different levels of chemicals in the brain (Engel, n.d.). These differing levels of chemicals can cause overactive and repetitive behaviors that fuel the repetitive habits of eating disorders (Engel, n.d.). Women are also more likely to experience negative emotions when discussing body image and eating disorders [21]. These factors prove that eating disorders are not only a disease caused by social factors but are also influenced by individual factors



Prevalence of Eating Disorders in Men and Women

Anorexia is seen in roughly 0.35% of all women and seen in roughly 0.1% of all men [22]. Roughly 1% to 2% of all females will have anorexia at least once in their lifetime, while it is around .1% to .3% in males [22]. Males contribute to 25% of the anorexic population but actually have higher chances of dying to the disease due to getting treatment at later stages.



References

1. Thomas Ostermann, Hannah Vogel, Christina Starke, Holger Cramer. Effectiveness of yoga in eating disorders - A case report *Complementary Therapies in Medicine*. 42: 145-148.
2. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (5th ed.)*. Arlington, VA: American Psychiatric Association. 2013. 329-354.
3. Clinic, Clevelandclinic. "Eating Disorders". <https://my.clevelandclinic.org>. Clevelandclinic. 2022.
4. Mc Namee M. *Sport, Medicine, Ethics*. Routledge. 2014. 115.
5. Levinson, Cheri A, Brosco Leigh C, Ram Shruti Shankar, Pruitt Alex, Russell Street, et al. "Obsessions are strongly related to eating disorder symptoms in anorexia nervosa and atypical anorexia nervosa". *Eating Behaviors*. 2019. 34: 101298.
6. Rikani AA, Choudhry Z, Choudhry AM, Ikram H, Asghar MW, et al. "A critique of the literature on etiology of eating disorders". *Annals of Neurosciences*. 2013. 20: 157-161.
7. Schaumberg Katherine, Welch Elisabeth, Breithaupt Lauren, Hübel Christopher, Baker Jessica H, et al. "The Science Behind the Academy for Eating Disorders' Nine Truths About Eating Disorders". *European Eating Disorders Review*. 2017. 25: 432-450.
8. *Eating Disorder Statistics*. National Eating Disorders Association. 22 August 2019.
9. Arcelus J, Witcomb GL, Mitchell A. "Prevalence of eating disorders amongst dancers: a systemic review and meta-analysis". *European Eating Disorders Review*. 2014. 22: 92-101.
10. Pike KM, Hoek HW, Dunne PE. "Cultural trends and eating disorders". *Current Opinion in Psychiatry*. 2014. 27: 436-442.
11. Nolen-Hoeksma S. *Abnormal Psychology (6th ed.)*. US: McGraw-Hill. 2014. 339.
12. Sweeting H, Walker L, MacLean A, Patterson C, Räisänen U, et al. "Prevalence of eating disorders in males: a review of rates reported in academic research and UK mass media". *International Journal of Men's Health*. 2015. 14.
13. Mash EJ, Wolfe DA. "Eating Disorders and Related Conditions". *Abnormal Child Psychology*. Belmont, CA: Wadsworth: Cengage Learning. 2010. 415-426.
14. Fisher MM, Rosen DS, Ornstein RM, Mammel KA, Katzman DK, et al. "Characteristics of avoidant/restrictive food intake disorder in children and adolescents: a "new disorder" in DSM-5". *The Journal of Adolescent Health*. 2014. 55: 49-52.
15. Bang Lasse, Kristensen Unn Beate, Wisting Line, Stedal Kristin, Garte Marianne, et al. "Presence of eating disorder symptoms in patients with obsessive-compulsive disorder". *BMC Psychiatry*. 2020. 20: 36.
16. Strother E, Lemberg R, Stanford SC, Turberville D. *Eating disorders in men: Underdiagnosed, undertreated, and misunderstood*. *Eating Disorders*. 2012. 20: 346-355.
17. Robinson KJ, Mountford VA, Sperlinger DJ. *Being men with eating disorders: Perspectives of male eating disorder service-users*. *Journal of Health Psychology*. 18: 176-186.
18. Reas DL, Stedal K. *Eating disorders in men aged midlife and beyond*. *Maturitas*. 2015. 81: 248-255.
19. Murray SB, Griffiths S, Mond JM. *Evolving eating disorder psychopathology: Conceptualizing muscularity-oriented disordered eating*. *British Journal of Psychiatry*. 208: 414-415.
20. Whiteman H. *Why are women more vulnerable to eating disorders? Brain study sheds light*. *Medical News Today*. <https://www.medicalnewstoday.com/articles/313466#Using-virtual-reality-to-assess-the-brains-response-to-body-appearance> 2016.
21. Shirao N, Okamoto Y, Mantani T, Okamoto Y, Yamawaki S. *Gender differences in brain activity generated by unpleasant word stimuli concerning body image: an fMRI study*. *British Journal of Psychiatry*. 2005. 186: 48-53.
22. *Statistics & Research on Eating Disorders*. <https://www.nationaleatingdisorders.org/statistics-research-eating-disorders> 2019.