The Influence of Socioeconomic Factors and Demographics on Eating Disorders

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Abstract

According to the American Psychological Association, eating disorders are characterized by a persistent disturbance of eating or eating-related behavior, leading to the altered consumption of food, and significantly impairing both physical and psychosocial functioning (2013). The most common eating disorders are anorexia nervosa, bulimia nervosa, and binge-eating disorder. The prevalence of the eating disorder impacts all demographics, although there are slight differences in the prevalence between them. However, socioeconomic status also has an influence in the development and continuation of an eating disorder. Socioeconomic status is the social standing of an individual based on factors such as income, education, employment, and social support. The prevalence of eating disorders are significantly influenced by socioeconomic factors.

Introduction

Common eating disorders such as anorexia nervosa (AN), bulimia nervosa (BN), and binge eating (BE) have a large effect on numerous subpopulations within the United States. There are many risk factors that play a role in the development of eating disorders which correlate with socioeconomic status (SES) and demographics. Bulimia is defined as recurrent inappropriate behavior such as self induced vomiting (Heaner et al., 2013). Most similar to bulimia, anorexia nervosa is the fear of gaining weight although already oftentimes underweight (Heaner et al., 2013). Furthermore, anorexia involves body dysmorphia and actions to reduce weight as well. Lastly, binge eating is the excess amount of food intake while feeling guilty and in most cases eating alone to avoid embarrassment. Amongst different racial and ethnic groups, income status and gender, eating disorders vary in occurrence.

Prevalence of Anorexia Nervosa

Eating disorders, specifically anorexia nervosa, have one of the highest mortality rates in comparison to other mental health disorders (Kaye, 2017). Mortality most commonly results from the deteriorating progression of the disease or by suicide. Patients with AN have a reported six-fold increase in suicide attempts when compared to the general population (Tomoko, 2019).

Anorexia nervosa has three essential characteristics that are present in clinical AN patients: a distorted perception of one's body, an intense fear of gaining weight, and consistent behavior to reduce the likelihood of gaining weight—resulting in periods of starvation and extreme weight loss. The progression and severity of the disease is dependent upon the patient's body mass index (BMI). The Centers for Disease Control and Prevention (CDC) has determined a BMI of 18.5 kg/m2 to be the lower limit of a healthy body weight for adults (2022).Therefore, a case of "mild" anorexia is identified with a BMI ≥ 17 kg/m2. Moderate anorexia ranges between a BMI of 16–16.99 kg/m2, severe anorexia is classified by a BMI 15–15.99 kg/m2, and an extreme case of AN presents itself in a patient with a BMI < 15 kg/m2 (American Psychiatric Association, 2013).

Regardless of their emaciated outward appearance, many AN patients believe themselves to be grossly overweight—displaying vital symptoms of body dysmorphia (American Psychiatric Association, 2013). Body dysmorphia is categorized as the obsessive disconnect between one's outward appearance and their perception of themselves. Likewise, AN patients employ various methods to further obsess about their perceived flaw (frequently checking their appearance in the mirror and excessively weighing themselves on a scale). Although many AN patients are aware of their thinness, oftentimes they are in denial about the severity and high risk implications of their behavior (American Psychiatric Association, 2013).

The prevalence of anorexia nervosa is greatly dependent on sex. The clinical population of AN patients typically reflect a 10:1 ratio of female-to-male patients (American Psychiatric Association, 2013). The lifetime prevalence of eating disorders has been estimated between 8.4% (3.3–18.6%) for women and 2.2% (0.8–6.5%) for men, globally. Amongst the variety of eating disorders, a lifetime prevalence of 4% of women and 0.3% of men will suffer from anorexia nervosa in their lifetimes (Galmiche et al., 2019). Amongst the small percentage of men who suffer from poor body image and disordered eating, queer men experienced higher rates of body dissatisfaction in comparison to heterosexual men. However, recent research has found increased levels of muscle dissatisfaction amongst heterosexual men which results in developing disordered eating habits. (Frederick & Essayli, 2016).

Alongside gender, age plays a role in one's likelihood of developing anorexia nervosa. Anorexia nervosa commonly originates between a period of young adolescence to young adulthood. The median age of onset for AN is reported to be 17.0 years (Loth et al., 2019). AN is rarely reported in the early stages of life (prepubescence) and late onset (women over the age of 40). However, despite age, anorexia nervosa is greatly dependent on "outside stressors" and is linked to the occurrence of stressful life events (American Psychiatric Association, 2013).

Race is another indicator of developing AN. Anorexia nervosa is highest amongst non-Hispanic White adolescent girls (Perez et al., 2016). Anorexia nervosa was less common among racial minorities, however, Hispanic girls had a higher AN rate than non-Hispanic Blacks. Likewise, Hispanics also were significantly less likely to seek help for AN than non-Hispanic Whites. The correlation between AN and non-Hispanic Whites can be attributed to the fact White women seek out help more often than their minority counterparts. Due to the lack of minorities reaching out for medical treatment, the documented demographic of clinical patients

with AN are largely White (Perez et al., 2016). However, prevalence aside, all racial/ethnic demographics are affected by anorexia nervosa.

Anorexia Nervosa and Socioeconomic Status

Anorexia nervosa is more prevalent in high-income, post-industrialized countries such as many countries in the EU, Australia, Japan, New Zealand, and the United States (American Psychiatric Association, 2013). However, the incidence of anorexia nervosa in most low/middle-income countries is uncertain due to food insecurity. Although AN is more common in high-income countries, individual SES does not contribute as much validity as once believed. Rather, eating disorders are equally distributed across SES (Mulders-Jones, 2017). Further studies are needed to better understand the relationship between SES and AN. With more research, the attributes associated with the "stereotypical anorexic patient" will be dismantled, allowing for those who do not conform to these stereotypes to receive a proper diagnosis and care.

Prevalence of Binge Eating

The prevalence of binge eating can vary depending on gender, race/ethnicity, and age. Binge eating is the most common eating disorder in the United States, primarily affecting young children, however, racial, ethnic and gender differences can impact the prevalence of BED (Lee-Winn et al., 2016). Data of female adolescents compared to male showed that 2.3% of girls suffer from BED while boys only .8% (Lee Winn et al., 2016). Children are most vulnerable to eating disorders as a result of pressure from media, school, and peers as there may be bullying or the perception of what a "perfect" physique looks like. The norms of body image directly reflect the outcome of women experiencing BE more frequently than men (Lee Winn et al., 2016). Most women report a "loss of control", however, men deny the severity of their binge eating disorder.

Men's ability to ignore the symptoms of BE may be a direct result of social conditioning and the harmful societal expectations of men (Lee Winn et al., 2016). In regards to racial and ethnic differences, Hispanics reported having the highest rate of BED amongst non-Hispanic Blacks and non-Hispanic Whites (Lee Winn et al., 2016). Hispanics proclaimed having a higher rate of loss control and distress while eating, that includes eating until uncomfortably full, eating alone due to embarrassment, being dissatisfied with body image. Black men and women reported less distress and concern for body weight and shape than Whites but not non-Hispanics (Goode et al., 2020). There isn't a large racial difference amidst Black and White women, however, studies primarily focus on White populations. The treatment of BE for African Americans concluded to be less accessible due to the lack of representation in trials resulting in more severe cases of BE for Black women (Goode et al., 2020). Asian Americans are often underrepresented as well by reason of cultural differences in symptom experience or reporting (Lee-Winn et al., 2014). Asian Americans are more likely to report symptoms of binge eating, however, acquire less treatment due to the cultural differences (Lee-Winn et al., 2014). The prevalence of binge eating is greatly affected by age, race, gender and SES.

Socioeconomics of Binge Eating

In addition, there is a direct relationship between binge eating symptoms and social class/median income of a household. Adolescents of a higher socioeconomic status are more likely to face BE than children of a lower status, however, food insecurity: the limited access to nutrition and quality foods, is the main cause for people of a lower class experiencing binge eating (West et al., 2019). The percentage of developing a binge eating disorder due to family teasing of weight, dissatisfaction with body, dieting, and overweight/obesity was greater amongst the higher income status than those of a lower income status (West et al., 2019). However, body

dissatisfaction and dieting was higher in lower socioeconomic young adults and children, but was not the direct reasoning for the development of a binge eating disorder. People of higher SES perceive being overweight as a direct result of low SES. Such rhetoric increases the harmful sentiments behind fatphobia (West et al., 2019). Lower income households tend to live in an environment where less nutritious foods are accessible and/or in reach. As a result of poor nutrition and food intake, detrimental health outcomes (obesity and diabetes) are highly reported (Grace et al., 2018). 15.6 million households in the United States experience food insecurity and are at risk of binge eating disorders. Those of low income have access to food-stamps that could contribute to the statistics of overweight children and adults due to the amount of food purchased at a time (West et al., 2019). The overconsumption of food could subject people to lose control over their food intake. More affordable nutritious food surrounding low income communities could drastically reduce the relationship between low socioeconomic status and binge eating.

Prevalence of Bulimia Nervosa

Bulimia Nervosa is an eating disorder in which patients overeat and then use compensatory mechanisms, such as self-induced vomiting, laxatives, or prolonged periods of starvation. There is a higher prevalence of Bulimia in certain populations in regards to sex, race, and age. The lifetime prevalence shows a female-to-male ratio of 3:1, and average age of onset 16–17 years. Prior to the DSM-5 criteria, the overall accepted lifetime prevalence among young females was 1%; however, with the new criteria of decreased frequency of symptoms to once per week, the new proposed lifetime prevalence appears to be 2.3% (Costello & Weiselberg, 2017). There is higher prevalence in females (0.9-1.5%) than in males (0.1-0.5%). In terms of race, the rates are highest in the Hispanic/Latino population (2%), second highest among African-Americans and lowest in non-Latino whites at (0.51%), which is very different from the

relative ratio of ethnicities reported for anorexia nervosa (Costello & Weiselberg, 2017) . There is a strong correlation between certain demographic factors and bulimia nervosa.

Socioeconomics of Bulimia Nervosa

Outside of demographic factors, many socioeconomic factors such as income, educational status, employment and social support can affect people's dietary habits. Therefore, it is likely for there to be a strong correlation between BN and socioeconomic factors. Similarly to Binge Eating Disorder, BN can be attributed to food insecurity. There is a greater risk of food insecurity for people going through financial hardship. Food insecurity can change dietary patterns because of perceptions of the amount or quality of food available to members of a household. A previous study of 503 adults seeking food from food pantries reported that food-insecurity severity was associated with binge-eating frequency, eating-disorder psychopathology, and compensatory-behavior frequency (vomiting, laxative/diuretic use, and excessive exercise; Becker, Middlemass, Taylor, Johnson, & Gomez, 2017). This could be caused by a lack of physical access to foods (such as a lack of supermarkets in a low income neighborhood), or because of economic status (not being able to afford groceries).

Social support is also a meaningful factor that can be associated with the development and maintenance of eating disorders. Social support is defined as the resources provided by one's social network with the intention to increase one's coping ability. Empirical evidence suggests a lack of social support among individuals with clinical and subclinical bulimia nervosa. Findings from several longitudinal studies demonstrate the predictive role of social support with regards to bulimic symptoms. For example, Bodell, Smith, Holm-Denoma, Gordon, and Joiner (2011) found that undergraduate students with lower social support experienced greater bulimic symptoms when faced with negative life events. Moreover, the predictive role of social support

was specific to bulimic symptoms and not restrictive eating, depression, or anxiety symptoms, which again, suggests the relevance of social support to bulimic symptoms as compared to other psychiatric symptoms (Kwan & Gordon, 2016). However, in Kwan's and Gordon's study, it was revealed that higher social support was associated with greater calorie consumption through lower stress perception among individuals with high dietary restraint. This implies that even in those with social support, there is still a likelihood of bulimic tendencies. Regardless, beliefs about personal responsibility for the illness have been found to be higher for eating disorders than other mental illnesses in college students, community samples, and among medical professionals (McLean et al., 2013). Many people believe that those with eating disorders use their illness for attention-seeking purposes, and that it's easy to recover from an illness such as bulimia. These beliefs only further amplify bulimic behaviors and inhibit those with BN from seeking help.

Conclusion

Eating disorders such as anorexia nervosa, binge-eating disorder, and bulimia nervosa are complex mental health conditions that affect all demographics. Anorexia nervosa, binge eating disorder, and bulimia nervosa are the most common types of eating disorders, each presenting unique manifestations and diagnostic criteria. The prevalence of such eating disorders largely depend upon one's age, gender, race, and socioeconomic status. Binge eating and Bulimia affects all subgroups, but occurs most amongst those who experience pressure from societal norms, struggle with mental health prior or have limited access within education and food quality, these being the few examples of populations that often suffer from eating disorders. However, people experiencing patterns of disordered eating who do not fit the stereotypes associated with their illness, deserve just as much support and treatment as their counterparts. Early recognition of the

onset of these diseases is crucial to sustaining a journey to recovery. With a combination of therapies including psychological and medical interventions, accompanied by social support—recovery is possible.

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