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Binge Eating Disorder: Formation and Impact

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Abstract: This article provides a detailed understanding of binge eating disorder (BED), its causes, symptoms, and treatment options. A serious condition called binge eating disorder can cause both physical and psychological discomfort. A summary of past and current literature describes the symptoms, etiology of binge eating disorder, social influence, treatment, and future research directions. A serious mental disease known as binge eating disorder is characterized by frequent episodes with binge eating. A sense of lack of control over its food is a common factor in binge eating episodes, which are frequently accompanied by emotions of shame, guilt, and anxiety. The disorder is related to several psychological and physical health problems and can significantly negatively impact the quality of life. Binge eating disorder is assumed to be the result of a complex combination of psychological, biological, and societal factors, while the specific origin is unknown. Treatment for binge eating disorder typically involves a combination of psychotherapy, medication, and lifestyle changes. Finally, the paper discusses suggestions for future research directions, exploring whether social norms influence the incidence of binge eating disorders. This article suggests that future research should focus on how social norms can influence the development of binge eating disorders to develop more effective interventions.

Keywords: Binge eating disorder, Obesity, Overeating, Eating disorder, Depression, Impact, Treatment

1. Introduction

In the recently released DSM-5, an eating disorder not otherwise specified, binge eating disorder (BED), is distinguished as a newly acknowledged dysfunction. Patients with BED, in contrast to those who suffer from other types of eating disorders, do not engage in compensatory eating behaviors such as frequent vomiting or extensive physical activity. However, after consuming a large amount of food or eating, it will be accompanied by problems in both one's mental health and physical health. Many studies have shown that people with BED are accompanied mainly by depressive symptoms [1]. Meanwhile, using the 90-item Derogatis Symptom Checklist (SCL-90), studies show that those with BED scored highly on impulsivity tests but poorly on self-esteem tests. According to some research, those who have been diagnosed with BED and patients who do not have this condition use self-assessments of psychopathology and body image disorder. Patients identified as having BED had a considerably elevated prevalence of a wide variety of mental

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illnesses, one of which was anxiety [2]. Research has revealed that BED can coexist with other medical conditions, including obesity, diabetes, hypertension, dyslipidemia, sleep difficulties, pain issues, and others [3].

There are numerous BED therapy options, but because of the various treatment emphasizes, they can be categorized into the following three groups: Behavioral therapy is first, followed by cognitive therapy, and then simultaneous symptom improvement. Medications such as anti-epileptic medicines, antidepressants, and appetite suppressants can be utilized in addition to these three therapies. Protein supplementation can also improve binge eating symptoms [4]. In the following sections, this paper will go into greater detail regarding the three effective therapies and the applications for which they are most commonly employed.

This page will provide a high-level review of the causes of BED, the damage it causes, and treatment options. The goals of this article are to (1) provide the reader with a more profound comprehension of BED, (2) evaluate the research that has already been conducted on BED; and (3) offer some suggestions for the path that BED research should take in the future.

2. Literature Review

2.1. Connotation

2.1.1. Definition

The DSM-5 describes persistent overeating as the primary symptom of binge eating disorder (BED). Overeating, for instance, eating more in any two hours than most people do in the same time frame and on similar occasions. People who are diagnosed with BED feel unable to control their eating. (e.g., feeling unable to control one's appetite, stop eating, or how much one eats). However, it is essential to note that overeating does not fully count as BED. At least three or more conditions must be met to be diagnosed with BED. 1) Eating considerably faster than anticipated; 2) eating until you feel uncomfortable full; 3) eating a lot when you're not hungry; 4) eating alone because you're guilty of how much you ate; and 5) feeling sick to your stomach, depressed, or even guilty after overeating.

Patients who have BED have significant distress after binge eating. The number of episodes per year correlates directly with the severity of BED. Concurrent BED levels can increase to reflect other symptoms and dysfunction [5]. The average mild frequency is 1-3 incidents per week. Four to seven episodes each week, on average, is moderate frequency. The average number of severe episodes each week is between 8 and 13. The average weekly occurrence of severe symptoms was 14 or more episodes [5].

2.1.2. Distribution

According to many pieces of research findings, the number of people suffering from eating disorders (including BED) is significantly higher in developed nations. According to the research, elementary and secondary school girls and female college students have an increased risk of suffering from eating disorders. According to several research findings, certain occupations, such as modeling and ballet dancing, have a much higher prevalence of individuals with eating problems compared to other professions. Eating disorders are more likely to occur in people whose jobs require them to adhere to strict body image standards.

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2.2. Etiology

2.2.1. Biological Influences

So far, there are limited genetic studies on BED, but there are still some research and experiments on the impact of genes on BED. Overheating is more likely to occur in people who strongly dislike diets that are high in calories. The main reason is that mesolimbic dopamine plays a role in rewarding behavior. The authors contend that the demand for appetizing food to encourage eating behavior may be increased through either food or drug reinforcement (e.g., two dopamine receptor genes, NKK1 and DRD2). According to the study, patients with BED have greater levels of mutations in the melanocortin four receptor (MC4R) gene and the E5HT-Transporter-linked polymorphic region (5-HttLPR) [6]. Nevertheless, the study's tiny sample size made it constrained.

There is still little literature on detailed neurobiological studies of BED, and many authors have proposed that large-scale studies are needed to provide theoretical support. The most recent studies, however, have demonstrated that BED is related to anomalies in the frontal lobe and neurons. The study has shown that the severity of BED and the abnormal neural activity of patients with BED are associated with decreased activity in the frontostriatal circuits. Using fMRI, researchers have found that the degree of taste response is relatively tiny in BED patients before and after eating, which can contribute to binge eating [7]. Because the network that regulates the control of food impulses is dispersed throughout the brain, other studies have revealed that disordered eating behavior can also be influenced by nerves in the brain.

2.2.2. Psychological Factors/Developmental Factors

Several studies have revealed a significant correlation between BED and family factors in all research that has been done on BED. The findings of the research indicate that a significant number of children who have BED come from homes where there is constant taunting about weight and where the parents are emotionally irresponsible. However, the research also revealed that factors such as parental weight, education level, socioeconomic status, and parental race or ethnicity were not linked to BED in children. Although academics have explored whether or not parents' eating methods affect children suffering from BED, it is impossible to provide scientific conclusions due to a paucity of literature pertinent to the topic. Some studies have also suggested the effect of family functioning (FF) on BED, showing that there is significantly less emotional engagement in families of adolescents with BED compared with non-BED. However, FF values between them are within normal ranges [8]. However, it is essential to note that members of the family of all teenagers with BED have lower emotional levels than families without BED. This indicates that although the FF value is average, families with adolescents with BED are challenged to meet family members' emotional and security needs.

Moreover, it lacks flexibility in the autonomy of family members [8]. Parenting style was also an essential factor among family factors, with patients with BED reporting lower maternal and paternal care than healthy subjects. A "ruthlessly controlled" parenting style was more common in BED families. In summary, the results of the above literature show that BED has a strong relationship with family factors.

Differences in cultures are another element that can influence BED. The cultural and social environment in which a person was brought up will significantly impact how much attention they pay to the way they eat and their body shape. Both the physical environment and societal expectations can affect BED, and different nations and cultures all over the world exhibit distinctive patterns of eating disorders along with a plethora of different symptoms.

Compared with other eating disorders, the literature on BED was relatively small in the past, but

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more and more researchers have begun to study BED. Patients diagnosed with BED continue to get treatment throughout their lives, even though the estimated cumulative incidence of BED remains consistently high. The prevalence of BED in recessive individuals is higher than anticipated. At least half of the 5248 volunteers met some diagnostic criteria for BED [9]. People suffering from BED are accompanied by impaired control of body mass index (BMI) and associated negative emotions [10].

2.2.3. Gender Factors

Different from other eating disorders, men also account for a large proportion of people suffering from BED. In the study of Reagan and Hersch [10], although the number of women suffering from BED is still higher than that of men, there is no significant difference in the number between them. However, this effect of gender on BED is because various gender roles are expected of men and women. When men overeat, they may experience a range of negative emotions, including hopelessness and aggression. Women who fail at dieting may do so because they consume too much. Women who binge eat may be more inclined than their male counterparts to engage in excessive dieting or other behaviors designed to compensate for their weight.

2.3. Impact

The prominent harm of BED is usually accompanied by obvious health problems, obesity, and some psychological diseases, mainly depression. Consuming excessive food is the primary contributor to obesity in BED patients. Because binge eating disorder is not followed by emetic behavior following excessive eating, as is the case with bulimia nervosa, most individuals with binge eating disorder display indications of obesity. Even though more men than women suffer from binge eating disorder (BED), the gender disparity between those who have BED and those who have other types of eating disorders is not even as significant as it is with binge eating disorders. The vast bulk of the currently available research focuses primarily on suicide as a possible explanation for injuries inflicted on oneself. There is some pertinent material; however, even this reveals that the suicide rate among BED patients is gradually climbing, even though there is some literature. According to data from the literature, at least one suicidal behavior attempt was made during the illness by 19% of samples that fulfilled the requirements for a narrow BED and 59% of patients who met the criteria for a broad BED [11]. In addition, several studies have shown that female BED patients have a significantly larger propensity to engage in behaviors that cause them injury to themselves.

2.4. Treatment

This paper will focus on BED's behavioral, cognitive, and concomitant therapy. An excessive amount of food consumption is thought to be one of the primary contributors to BED by behavior therapy. Modifying and improving overeating behaviors may be a useful treatment option for BED. Standard behavioral therapies include behavioral weight loss, which helps patients with BED gradually control their diet and weight behaviorally [4]—for example, consuming only certain foods and limiting the amount consumed while eating selectively. In addition to direct interventions on binge eating, some therapists consider binge eating to be maladaptive. People who suffer from BED have a propensity to overeat to alleviate the depression or other destructive emotions they experience. As a consequence of this, the treatment known as dialectical behavior therapy is founded on this paradigm. Therapists intervene by reducing the feelings that trigger binge eating in BED patients and allowing BED patients to adapt to these emotions.

Patients who suffer from BED may indulge in binge eating due to erroneous perceptions regarding their weight and body type. This can lead to significant health complications.

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Consequently, the essential aspect of behavioral therapy treatment is to correct the inaccurate cognitions BED patients have about themselves and encourage BED patients to have a more positive attitude toward themselves.

Some therapists also believe that patients with BED may suffer from other psychological and adjustment disorders, such as depressive tendencies and social maladjustment. Therefore, a treatment known as concurrent therapy alleviates the symptoms that co-occur. Interpersonal psychotherapy is a treatment based on this idea. This kind of therapy helps patients to combine emotions and interpersonal interaction, alleviates the degree of depression and social maladjustment of patients by improving interpersonal relationships, and reduces binge eating behavior.

Numerous research has looked into the effectiveness of topiramate in preventing binge eating when it comes to BED medication. Topiramate led to a considerable reduction in both hunger and weight in those patients who took the medication. Studies have shown that in data from an experiment, 9 out of 13 obese patients showed a reduction in overeating after using this drug [12].

3. Future Implication

For future research on BED, there is expected to be more literature on the treatment of BED and the evaluation of the effectiveness and impact of treatment. Because BED is an eating disorder that has been with people for a long time. At the same time, how to carry out early intervention and prevention of BED is also necessary. Whether age affects the prevalence of BED is not reflected in this literature. Future studies can also focus on the age group with a high incidence of BED. There are few studies on the brain and genetic factors in patients with BED. Future research can focus on this aspect in depth. Although some literature has studied the influence of cultural background on BED, the survey data are too scattered, and there is no direction to summarize. Future research could look at the number of people with BED in Eastern and Western cultures or whether specific social criteria affect the number of people with BED.

4. Conclusions

This article is a compilation of the information gathered concerning the symptoms, effects, and treatments of binge eating disorder. BED refers to a period during which one consumes an excessive amount of food, typically followed by emotional impact. Most people who have BED are obese and suffer from various functional impairments, including gastrointestinal and esophageal abnormalities, among others. Concomitant psychological problems and adjustment disorders, such as depression and difficulty with interpersonal communication, are common in those who suffer from BED. At the moment, two different approaches can be taken to treat BED: one is psychotherapy, and the other is medicine.

The etiology of BED is discussed in this body of literature as well. Even though there hasn't been a lot of research done on the brain or genes both have been proven to be involved in the emergence of BED. In addition to this, the environment of the family has a role. Many homes with children with BED suffer issues in parenting, emotional communication, and taunting surrounding their children's body image, according to several studies that have been conducted on the topic. Even though more men than women suffer from binge eating disorder (BED), the gender disparity between those who have BED and those who have other types of eating disorders is not even as significant as it is with binge eating disorders. BED affects a more significant percentage of the population in nations with more rigorous cultural norms or preconceived views about ideal body types. These countries also have more people with preconceived beliefs about ideal body types.

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