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EATING BEHAVIOR DISORDERS, ANXIETY, DEPRESSION, AND BODY DISSATISFACTION: A COMPREHENSIVE ANALYSIS AMONG OBESE WOMEN

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Abstract
Obesity is one of the pressing issues in modern medicine and psychology, directly linked not only to metabolic syndromes but also to mental health disorders. Studies indicate that individuals with excess weight may exhibit high levels of eating behavior disorders (emotional, external, and restrictive), as well as anxiety, depression, and body image dissatisfaction. Obese women who have not undergone bariatric surgery represent a particularly vulnerable group to these factors. An in-depth study of their psychological state is crucial for developing individualized treatment and psychoprophylaxis plans.

Keywords: Obesity, eating disorders, emotional eating, anxiety, depression, dissatisfaction with body shape

Introduction

According to the World Health Organization, 16% of the world's population (890 million people) were living with obesity in 2022. Five percent of global deaths were caused by obesity and related diseases. The prevalence of obesity among adults has more than doubled since 1990, while it has quadrupled among

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adolescents. In 2022, more than 160 million children were suffering from obesity [2].

Obesity is a widespread chronic multisystem disorder associated with a reduction in life expectancy due to a number of adverse health effects. Epidemiological data link indicators of body weight and central fat distribution with an increased risk of type 2 diabetes mellitus [8], hypertension, fatty liver disease, cardiovascular diseases (including myocardial infarction, heart failure, atrial fibrillation, and stroke), obstructive sleep apnea, osteoarthritis, mental disorders, and certain types of cancer [1].

In addition, obesity is associated with numerous mental disorders, including mood disorders, anxiety disorders, personality disorders, attention deficit hyperactivity disorder, compulsive overeating, psychological trauma, bipolar disorder, and schizophrenia. Depression and anxiety are the most common [7] conditions that co-occur with obesity and serious mental illnesses. Obesity, however, may be more closely linked to genetic predisposition and the medications being taken [9].

Studies have shown elevated levels of depression in obese individuals, which is even more pronounced in those with metabolic syndrome. As mentioned above, stress can lead to overeating, obesity, and mental health issues such as post-traumatic stress disorder and depression. Depression in obese people may result from psychological problems related to shame about their appearance, common factors like experiencing cruel treatment in childhood, or factors affecting the brain, such as changes in the gastrointestinal microbiome due to diet [1].

Historically, obesity and eating behavior disorders have been viewed as separate conditions and studied based on various theoretical approaches. However, there is growing evidence of an increasing prevalence of eating behavior disorders among obese individuals. This confirms the need to assess their interconnected nature. To do so, it is crucial to understand their interrelationship, recognizing that obesity may manifest as a precursor or a subsequent condition leading to the development of eating behavior disorders. Additionally, they may interact simultaneously, with obesity potentially being a primary or secondary disorder [4].

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Eating behavior is a set of reactions aimed at searching for, selecting, and consuming food to replenish the body's energy reserves, accumulate "building" materials, and achieve psychological satisfaction from its consumption. Three types of eating pattern disorders are distinguished: external, emotional, and restrictive [6]. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), eating disorders (ED) are serious mental illnesses that affect physical, mental, and social functioning. These disorders are characterized by persistent disturbances in eating behavior associated with anxious thoughts and feelings. DSM-5 describes various diagnostic categories, including anorexia nervosa (AN), bulimia nervosa (BN), binge-eating disorder (BED), avoidant/restrictive food intake disorder (ARFID), other specified feeding or eating disorders (OSFED), pica, and rumination disorder [4].

In addition, cases of dissatisfaction with one's body weight are also increasing among obese patients. Body image, defined as self-perception of body structure, body shape, or body mass index (BMI), can influence weight control. If the actual self-perception of body image is far from the ideal, this situation may trigger weight control efforts. This can be explained by Higgins' Regulatory Focus Theory (RFT). This theory examines the interrelationship between human motivation and goal pursuit [3].

Purpose

To determine the relationship between eating behavior, anxiety, depressive symptoms, and body image perception in obese women who have not undergone surgical treatment.

This study involved a total of 94 women suffering from obesity who had not undergone bariatric surgery. All participants were clinically diagnosed with obesity.

The selection criteria included: presence of an obesity diagnosis and absence of bariatric surgery. Individuals with severe psychiatric disorders, serious somatic disorders, or a history of bariatric surgery were excluded.

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The following psychometric tools were employed in the study:

• DEBQ (Dutch Eating Behavior Questionnaire) - for assessing 3 types of eating behavior (restrictive, emotional, and external eating).

• HADS (Hospital Anxiety and Depression Scale) - for evaluating symptoms of anxiety and depression.

• BIDQ (Body Image Disturbance Questionnaire) - to determine the level of body image dissatisfaction.

Results

The results of the study show that when distributed by age groups, patients aged 20-29 years comprised 11 individuals with an average age of 27.82±1.08 years, while 54 participants were in the 30-39 age range with an average age of 35.09±2.84 years. There were 25 participants aged 40-49 years, with an average age of 43.84±2.62 years, while 4 patients were aged 50 years and older, with an average age of 51±0 years.

According to the results obtained, out of 94 subjects examined, 40 (42.5%) participants were found to eat three meals a day, while the remaining 46 (51.1%) participants ate four meals a day. Among the remaining 36 (38.2%) patients, type 2 diabetes mellitus was diagnosed as a comorbid somatic condition. The main contributing factor for this is considered to be their existing third-degree obesity. While these patients regularly visited an endocrinologist, 40 (42.5%) of the examined subjects attended dietitian consultations and weight loss courses due to obesity. The obtained results also show that 16 (17.02%) participants sought consultations with a psychologist.

Results of Eating Behavior Questionnaire (DEBQ)

According to the assessment results, the level of Restrained Eating (restrictive type) averaged 2.40 ± 0.72, indicating the presence of calorie restriction efforts in a significant portion of participants. The level of Emotional Eating was 1.53 ± 0.50, suggesting that some patients are prone to increased food intake during states of emotional stress, anxiety, or depression. The level of External Eating was 2.60 ± 0.64, indicating participants' tendency to initiate eating behavior in response to visual, olfactory, or auditory stimuli.

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Results of Affective Symptoms (HADS)

The average anxiety level was 8.48 ± 4.59, while the level of depressive symptoms was 7.96 ± 3.31. These indicators confirm that a significant portion of patients suffering from obesity are susceptible to affective disorders, particularly anxiety and depressive states.

Body Image Dissatisfaction (BIDQ) Results

The average BIDQ score was 9.04 ± 3.45, indicating the presence of negative attitudes towards body structure, dysmorphic ideas, psychosocial withdrawal, and excessive attention to appearance in most patients. (Table 1)

Table 1

Indicator	Mean	SD	Min	Mediana	Max
DEBQ - Restraint	2.40	0.72	1.0	2.40	4.1
DEBQ - Emotional	1.53	0.50	1.0	1.38	3.38
DEBQ - External	2.60	0.64	1.1	2.60	4.3
HADS - Anxiety	8.48	4.59	1.0	7.00	17.0
HADS - Depression	7.96	3.31	2.0	8.00	16.0
BIDQ - Total Score	9.04	3.45	0.0	7.50	17.0

Results of correlation analysis

Within the framework of the study, the relationships between eating behavior, affective disorders (anxiety and depressive symptoms), and body image dissatisfaction levels were assessed based on Pearson's correlation coefficient.

The analysis results primarily revealed a moderate positive correlation ($r = +0.47$, $p < 0.01$) between emotional eating and anxiety, indicating a direct relationship between these variables. This suggests that patients with high anxiety tend to increase their food intake in response to emotional stress.

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There is also a moderate positive correlation ($r = +0.42$, $p < 0.01$) between emotional eating and depressive symptoms, which means that the level of emotional eating also increases as depressive states intensify.

A moderately strong positive correlation ($r = +0.51$, $p < 0.01$) was observed between BIDQ (body image dissatisfaction) and anxiety. This means that as the level of body image dissatisfaction increases, the patient's level of anxiety also rises.

The correlation between BIDQ and depressive symptoms was ($r = +0.49$, $p < 0.01$), which also indicated a positive and statistically significant relationship.

Overall, correlation analyses revealed complex interactions among eating behaviors, affective symptoms, and body image. Based on these relationships, it can be emphasized that not only physiological but also psychological factors play an important role in obesity. Cognitive-emotional disturbances significantly influence eating behaviors and psychological discomfort associated with body image.

Conclusion

The conducted research allowed for a comprehensive assessment of the psychological state, eating behavior, and body image perception of patients suffering from obesity who had not undergone bariatric surgery. Results obtained using standard psychometric tools such as DEBQ, HADS, and BIDQ demonstrated that obesity is not merely a somatic problem, but a condition closely intertwined with a wide range of psychological and psychopathological factors.

Among the 94 patients studied, restricted, emotional, and external stimulus-driven eating behaviors were manifested to varying degrees;

- Anxiety and depressive symptoms were recorded at moderate to high levels;
- Body image dissatisfaction was prevalent in many cases, accompanied by negative emotional attitudes towards oneself, social withdrawal, and discontent.

Statistical analyses revealed that the level of emotional eating was positively correlated with affective symptoms, indicating that psychological stress conditions are one of the primary factors in obesity-related eating disorders.

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The degree of body image dissatisfaction is directly correlated with anxiety and depressive states, indicating that patients' mental health requires serious psychological assistance.

These findings suggest that psychological components should not be overlooked in the assessment and treatment of obesity. Especially for patients who have not opted for bariatric surgery, an emotional approach, psychotherapeutic strategies, and psycho-educational programs can serve as important additional therapeutic directions.

Thus, the research results recommend the following in clinical practice:

• Early detection of eating disorders,

• Assessment of psychological discomfort associated with body image,

• Use of tools such as DEBQ, HADS, and BIDQ in the diagnosis and treatment of affective disorders.

This approach plays a crucial role in developing a multidisciplinary approach to working with obese patients, advancing comprehensive diagnostics, and enhancing integrative therapy methods.

References

1. Bremner JD, Moazzami K, Wittbrodt MT, Nye JA, Lima BB, Gillespie CF, Rapaport MH, Pearce BD, Shah AJ, Vaccarino V. Diet, Stress and Mental Health. Nutrients. 2020 Aug 13;12(8):2428.

2. Blüher M. An overview of obesity-related complications:The epidemiological evidence linking body weight and other markers of obesity to adverse health outcomes. Diabetes Obes Metab. 2025 Apr;27 Suppl 2 (Suppl 2):3-19.

3. Bouzas C, Bibiloni MDM, Tur JA. Relationship between Body Image and Body Weight Control in Overweight ≥55-Year-Old Adults: A Systematic Review. Int J Environ Res Public Health. 2019 May 9;16(9):1622.

4. Camacho-Barcia L, Giel KE, Jiménez-Murcia S, Álvarez Pitti J, Micali N, Lucas I, Miranda-Olivos R, Munguia L, Tena-Sempere M, Zipfel S, Fernández-Aranda F. Eating disorders and obesity: bridging clinical, neurobiological, and therapeutic perspectives. Trends Mol Med. 2024 Apr;30(4):361-379.

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5. Camacho-Barcia L, Giel KE, Jiménez-Murcia S, Álvarez Pitti J, Micali N, Lucas I, Miranda-Olivos R, Munguia L, Tena-Sempere M, Zipfel S, Fernández-Aranda F. Eating disorders and obesity: bridging clinical, neurobiological, and therapeutic perspectives. Trends Mol Med. 2024 Apr;30(4):361-379.
6. Kvitkova L.V., Smakotina S.A., Sotnikova Yu.M., Zinchuk S.F. From the individual characteristics of eating behavior and chronotype to the formation of abdominal obesity. Endokrinologiya: novosti, mneniya, obuchenie [Endocrinology: News, Opinions, Training]. 2019; 8 (3): 22–29.
7. McElroy SL, Guerdjikova AI, Mori N, Keck PE. Managing comorbid obesity and depression through clinical pharmacotherapies. Expert Opin Pharmacother. 2016 Aug;17(12):1599-610.
8. Piché ME, Poirier P, Lemieux I, Després JP. Overview of Epidemiology and Contribution of Obesity and Body Fat Distribution to Cardiovascular Disease: An Update. Prog Cardiovasc Dis. 2018 Jul-Aug;61(2):103-113.
9. Perry C, Guillory TS, Dilks SS. Obesity and Psychiatric Disorders. Nurs Clin North Am. 2021 Dec;56(4):553-563.