KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 26 June 2024
Revised 25 July 2024
Accepted 01 August 2024
Published online 01 January 2025

KMAN Counseling & Psychology Nexus

Volume 3, pp 1-10

E-ISSN: 3041-9026

Obesity and Eating Disorders: Evidences for Differentiation

Amelia. Rizzo[1*], Elisabetta. Costantino[2], Domy. Peronace[3], Rossella. Alfa[4], Daniele. Di Pauli[5]

[1] Adjunct Professor in Clinical Psychology, Social Psychology and Organizational Psychology. Department of Clinical and Experimental Medicine; Department of Cognitive Sciences, Psychological, Educational, and Cultural Studies, University of Messina, Italy
[2] Master Degree Doctor in Clinical and Health Psychology in the life cycle. Department of Clinical and Ex-perimental Medicine, University of Messina, Italy
[3] Junior Doctor in Clinical and Preventive Psychological Sciences and Techniques. Department of Clinical and Experimental Medicine, University of Messina, Italy
[4] Psychologist, Psychotherapist, PhD. CRPG Center for Group Psychoanalytic Research, IIPG Italian Institute of Group Psychoanalysis, Messina, Italy
[5] Psychologist, CBT Psychotherapist. Trainer at the Specialistic School of Cognitive Psychotherapy, Verona, Italy

*** Corresponding author email address**: amrizzo@unime.it

A r t i c l e I n f o

Article type:
Original Research
Section:
Health Psychology

How to cite this article:
Rizzo, A., Costantino, E., Peronace, D., Alfa, R., & Di Pauli, D. (2025). Obesity and Eating Disorders: Evidences for Differentiation. *KMAN Conseling and Psychology Nexus*, *3*, 1-10.
http://doi.org/10.61838/kman.hp.psynexus.3.1

A B S T R A C T

Excess weight is often incorrectly linked to pathological eating behaviors without considering the complexity of underlying causes. The aim of this study is to explore the intersections between obesity and Eating Disorders (ED), with particular reference to the Binge Eating Disorder (BED). This study analyzed (1) the presence of BED in a population of 293 italian adult individuals affected by obesity using the Binge Eating Questionnaire and (2) the correlations between body weight (BMI) and eating behavior (Eating Disorder Questionnaire). A non-probability convenience sampling method was used. Selection was based on a demographic form, ensuring only individuals meeting the criteria were recruited: aged 18-65 years, with a BMI of ≥ 30, willing to complete the questionnaire, and who accepted the informed consent. Chi square and Pearson's correlations revealed that only 12% of the sample met the criteria for an ED and that the body mass index was not correlated with pathological eating behavior with the exception for body dissatisfaction ($p<.001$). The study suggests that only a modest percentage of individuals with obesity have comorbid ED, and that weight is correlated with a state of distress (internalized stigma?) that may constitute a maintenance factor hindering health behaviors. This study highlights the need for differentiated and personalized clinical and therapeutic interventions.

Keywords: *Obesity, Eating Disorder, Weight Stigma, Health.*

1. Introduction

In recent decades, eating disorders (EDs) and obesity have become increasingly significant in public health contexts, with substantial implications for individual quality of life and global healthcare systems (Stunkard, 2011). Although both conditions involve a complex relationship with food and body weight, it is essential to underline that there are crucial distinctions between the two (Perpina & Roncero, 2016). This study aims to explore the differences between obesity and eating disorders in detail, focusing on clinical manifestations, psychological attitudes, and implications for physical and mental health.

Eating disorders refer to a range of psychological conditions characterized by irregular eating patterns and distorted thoughts regarding food, body weight, and body image. This category includes anorexia nervosa, bulimia nervosa, binge eating disorder (BED), and other related disorders (Rizzo, Alfa, et al., 2024; Tarchi et al., 2024; Tarchi et al., 2023). Conversely, obesity is a complex medical condition characterized by excessive body fat accumulation, which increases the risk of various health problems, including cardiovascular diseases, type 2 diabetes, and musculoskeletal disorders (Rizzo & Sitibondo, 2023).

A fundamental distinction between the two is evident in their clinical and psychological manifestations. In eating disorders, patients exhibit inappropriate and dysfunctional attitudes towards food, often accompanied by anxiety, fear, and guilt. Individuals with anorexia nervosa or bulimia nervosa, for instance, may develop a distorted perception of food, rigidly classifying it as "good" or "bad" and adopting false beliefs about nutrition. These individuals may also experience anger or anxiety in response to hunger and struggle to manage their emotions related to eating (Mento et al., 2023).

In contrast, in cases of obesity, such psychological disorders concerning food are not necessarily present. While obese individuals may face challenges related to weight control and eating behavior management, these are not necessarily accompanied by anxiety, fear, or guilt as seen in eating disorders (Mento et al., 2022). Instead, the causes of obesity may stem from a combination of genetic, environmental, behavioral, and emotional factors, significantly differing from the dynamics underlying ED (Mento, Silvestri, Bruno, et al., 2021; Mento, Silvestri, Muscatello, et al., 2021).

The implications for physical and mental health differ considerably between obesity and eating disorders. Both conditions can have severe health consequences, but the pathways through which they impact health diverge (Perpina & Roncero, 2016; Stunkard, 2011). For example, obesity is closely associated with a range of chronic medical conditions such as type 2 diabetes, heart disease, and hypertension, which can significantly reduce quality and expectancy of life (Mento, Rizzo, et al., 2021). On the other hand, eating disorders can lead to severe physical complications like electrolyte imbalances, gastrointestinal disturbances (Rizzo, Alfa, et al., 2024), amenorrhea and fertility problems (Navabinejad et al., 2024), cardiac issues, alongside significant mental health implications (Mento et al., 2017) such as depression, anxiety, and social isolation.

Binge Eating Disorder (BED) can also be found among individuals of normal weight but is predominantly observed in those with obesity. This correlation is attributable to the fact that binge eating episodes, not counterbalanced by regular weight control behaviors, occur in an environment characterized by excessive and disorganized food consumption. In populations seeking treatment for obesity, a percentage ranging from 9% to 29% meets the diagnostic criteria for BED, with an incidence of binge episodes varying between 9% and 29%. Among individuals with a BMI over 50 undergoing bariatric surgery, BED can be detected in up to 50% of cases (Setayesh et al., 2018).

BED differs from obesity for several main reasons (Cuzzolaro & Donini, 2011; Dalle Grave et al., 2020; Di Pauli, 2016; Mento et al., 2017; Rossi et al., 2022). Not all individuals affected by obesity present BED. In experimental settings related to food consumption, those with BED tend to consume more calories than individuals with obesity but without BED. Individuals with obesity and BED generally exhibit higher levels of sedentary behavior compared to those who are merely obese. Subjects with obesity and BED are more likely to place excessive importance on their weight and physical shape compared to those only affected by obesity. Furthermore, patients with BED experience greater functional and psychological distress, lower quality of life, and higher prevalence of psychiatric disorders than obese individuals without the disorder (Cuzzolaro & Donini, 2011).

Although obesity and eating disorders share some aspects related to body weight and food, it is crucial to recognize the substantial distinctions between the two conditions (Mento et al., 2017; Rossi et al., 2022).

The bias that leads to thinking that a patient with excess weight and obesity might have an eating disorder is based on a series of prejudices and stereotypes rooted in both common

perception and medical practice. This phenomenon is fueled by a simplistic association between weight and diet, which views obesity as a direct result of poor eating habits or excessive food consumption. This reductive view overlooks the complexity of obesity, which involves genetic factors, metabolic conditions, underlying medical issues, and psychological aspects (Di Pauli, 2016).

Social stigma plays a significant role in this bias. Society tends to stigmatize individuals with obesity, associating their weight with a lack of willpower, laziness, or lack of self-discipline. This stigma does not spare healthcare professionals, who can be influenced by implicit biases, leading them to judge patients based on their physical appearance rather than a thorough evaluation of their health conditions (Mond & Gill, 2024).

In medical practice, these prejudices can lead to hasty diagnoses. Under the pressure of time and limited resources, doctors may be inclined to make quick diagnoses based on physical appearances, resulting in an overdiagnosis of eating disorders in obese patients. This approach risks overlooking other important symptoms or medical conditions, focusing exclusively on weight and food intake.

The consequences of this bias are serious. Inappropriate treatments may be prescribed, focusing on weight loss rather than the patient's overall health (Meyer et al., 2023). This can include drastic diets or unnecessary surgical interventions, which have potential negative effects on the patient's physical and mental health. Additionally, stigmatization and bias can worsen the patient's self-esteem and anxiety issues, creating a negative cycle that further deteriorates their mental health.

Based on the reviewed literature, it becomes evident that obesity constitutes a multifactorial, chronic, and relapsing pathology, independent of the cluster of eating disorders, which requires an olistic assessment (Mallik et al., 2023). Nonetheless, overlap is possible. Understanding these differences is essential to providing effective and targeted interventions that can improve the health and well-being of patients affected by these conditions.

Given these premises, the objectives of the present study are:

- RQ1: Determine the prevalence of Binge Eating Disorder (BED) in a population of individuals affected by obesity.

- RQ2: Examine the correlations between Body Mass Index (BMI) and eating behavior.

To answer the research questions, two hypotheses were formulated:

- H1: Is there a significant prevalence of BED in a sample of individuals with obesity?

- H2: Are there statistically significant correlations between BMI and eating behavior that vary based on the presence of BED in subjects with obesity?

2. Methods and Materials

The study aimed to recruit Italian adult individuals affected by obesity through an online survey, opened in January 2023 and closed in June 2023. A questionnaire was designed using Google Forms, including an informed consent section. Specifically, an anagraphic sheet, self-assessment scales and questionnaires were administered, allowing for a multidimensional clinical evaluation of the psychological characteristics relevant to eating disorders.

Participants had to read and accept the research purpose and ethical information before accessing the survey. The survey was distributed via social media, particularly in groups and pages dedicated to people with obesity or those awaiting surgical treatment. Selection was based on a demographic form, ensuring only individuals meeting the criteria were recruited: aged 18-65 years, with a BMI of $\geq$ 30, willing to complete the questionnaire, and who accepted the informed consent. A non-probability convenience sampling method was used, as participants were recruited through dedicated social media groups, representing an easily accessible sample interested in the study topic. The final sample was automatically selected based on the demographic form.

Ethical considerations included data confidentiality, voluntary participation with the option to withdraw without consequences, and ensuring participants were fully aware of the study's purpose and data handling. All information collected in this research have been treated in compliance with Italian regulations on personal data protection (Legislative Decree 196/2003) and Article 9 of the Italian Psychologists' Code of Ethics. Personal data have been handled with the utmost confidentiality and used solely for research purposes. Participants had the right to exercise their rights under Legislative Decree 101/2018, which adapts the Personal Data Protection Code to EU Regulation 2016/679, at any time. Furthermore, being an online survey the study was conducted following the 'Ethical Guidelines 3.0 for Internet Research' published by the Association of Internet Researchers (AoIR).

2.1. Measures

The instruments used to assess the presence of eating disorders were:

2.1.1. Binge Scale Questionnaire (BSQ)

This scale is used for the assessment of bulimia. Created by Hawkins and Clement in 1980, it defines "binge eating" as a period during which the subject consumes an indefinite and excessive amount of food, aware that it is abnormal behavior but unable to control it. The scale consists of 19 items, with scores ranging from 0 = absent to 3 = severe, which evaluate the frequency, duration, and characteristics of bulimic episodes, the accompanying feelings, and the presence or absence of compensatory practices. The score is weighted and varies for each item. The severity of bulimia is measured based on the scores of the first 9 items; the remaining 10 provide a clearer picture of bulimic behavior. The total is between 0 and 23, scores above 9 indicate the presence of binge symptoms. The scale has good internal validity and test-retest reliability. It is useful as a self-assessment tool because binge eating occurs in a private context, making subjective judgment valuable for evaluating cognitive, emotional, and behavioral parameters (Hawkins & Clement, 1980). In the present study, the Cronbach's Alpha value for the Italian version of BSQ was 0.867.

2.1.2. Eating Disorder Inventory (EDI)

A multidimensional tool, the EDI (Garner et al., 1983) is extremely useful for assessing eating disorders, which are multidimensional disorders. The instrument consists of 64 items grouped into 8 subscales. The first 3 subscales explore attitudes and behaviors related to weight, eating, and body appearance, while the remaining 5 subscales focus on more general psychological traits that are clinically relevant for eating disorders. Each item is evaluated based on the frequency (always, very often, often, sometimes, rarely, never) with which the subject experiences that behavior or symptom. The maximum score is 3, attributed to the response "always," 2 to "very often," and 1 to "often"; the remaining responses score 0. In the present study, the Cronbach's Alpha value for the Italian version of EDI was 0.873.

2.2. Statistical Analysis

A descriptive evaluation was conducted to identify the number of subjects meeting the criteria for an eating disorder diagnosis. All protocols with missing data were excluded to apply parametric statistics, resulting in a total of 210 valid cases. The data analysis was conducted using SPSS version 27.0 (SPSS Inc., Chicago, IL), with a significance level set at $p < 0.05$. Descriptive statistics were presented as mean ± standard deviation or median ± first-third quartile, as appropriate, while categorical variables were expressed as frequencies and percentages. Correlational analysis (Pearson's correlation) was performed to evaluate the possible correlation between BMI and Eating Disorders.

3. Findings and Results

The sample consisted in 293 participants, comprised of 91 males and 202 females, indicating a gender prevalence of 69% female. The mean age of the participants was 40.78 years (SD=11.27). Regarding educational attainment, 38% of the participants held a high school diploma. In terms of employment status, 50% were employed, while 48% were not employed. The degree of obesity among participants showed that 69.50% were classified as having second-degree obesity, and 30.50% had third-degree obesity. The average weight for men was 137.28 kg (SD=20.24), while for women it was 113.55 kg (SD=17.08). The average BMI was 45.10 (SD=7.00) for men and 43.26 (SD=6.11) for women. Notably, 85% of the participants had previously attempted diets without success.

Table 1 presents aggregated results from a questionnaire measuring various psychological dimensions related to eating disorders using the EDI. The dimensions considered include Drive for Thinness, Bulimia, Body Dissatisfaction, Ineffectiveness, Perfectionism, Interpersonal Distrust, Interoceptive Awareness, and Maturity Fears. Each dimension reports the minimum and maximum observed scores, mean scores, and standard deviations (SD).

KMAN-CPN
KMAN-Counseling & Psychology Nexus
E-ISSN: 3041-9026

Table 1

Descriptive Statistics of the Sample (N=210)

Dimension	Min.	Max.	Mean of sums	SD	N. of items	Mean / n. of item *
Drive for Thinness	0	21	8.23	4.91	7	1.17
Bulimia	0	15	2.73	3.39	7	0.39
Body Dissatisfaction	3	27	16.67	6.24	9	1.85
Ineffectiveness	0	22	3.84	4.85	10	0.38
Perfectionism	0	14	4.53	3.51	6	0.75
Interpersonal Distrust	0	17	4.81	3.97	7	0.68
Interoceptive Awareness	0	22	4.45	4.85	10	0.44
Maturity Fears	0	22	7.94	4.66	8	0.99
Total	9	114	49.56	24.12	64	0.77

Legend: *EDI score: 0-3

Table 1 reflects a variety of experiences and attitudes related to eating disorders among participants. The variability in scores indicated by standard deviations underscores the importance of individualized approaches in treating and interpreting these disorders. High scores in specific areas like *Body Dissatisfaction* (M_{sum}=16.67; SD=6.24) highlight potential areas of clinical focus.

The scores obtained from the Binge Eating Disorder assessment using the BSQ ranged from a minimum of 0 to a maximum of 18, with average values around 2.96 (standard deviation 4.14). We divided the sample into groups with or without binge eating disorder based on the cut-off score obtained from the Binge Eating Scale, where a score greater than 9 indicates the presence of binge eating disorder. To verify if the independent variables produce significant variability, values were compared by gender and degree of obesity.

The comparison of means showed no statistically significant differences between males and females or between patients with second or third-class obesity. To evaluate the incidence of BED in the reference population, a contingency table was created with the degree of obesity on the x-axis and the presence of an eating disorder on the y-axis, resulting in four different conditions:

- Subjects with first-class obesity without an eating disorder
- Subjects with first-class obesity with an eating disorder
- Subjects with second-class obesity without an eating disorder
- Subjects with second-class obesity with an eating disorder

Table 2

Contingency Table for Obesity Degree and Eating Disorders

Obesity Degree	Negative for ED	Positive for ED	Total
First-Class Obesity	57	8	65
Second-Class Obesity	127	18	145
Total	184	26	210

Note: 0 cells (0,0%) have expected count less than 5. The minimum expected count is 8,05.
Symmetric Measures; χ^2 = .983 Significance p<.001.

Table 2 shows that out of 65 subjects with first-class obesity, only 8 have comorbid eating disorders. Out of 145 subjects with second-class obesity, 18 present comorbid eating disorders. The results indicate that approximately 12% of the sample has an eating disorder.

Pearson's Correlations between body mass index and the subscales of the Eating Disorder Inventory were calculated to study the relationship between BMI and EDI. The results show a significant relationship between higher BMI and greater body dissatisfaction. Conversely, there are no significant relationships between the components of the eating disorders questionnaire and the BMI based on weight.

KMAN-CPN KMAN-Counseling & Psychology Nexus
E-ISSN: 3041-9026

Table 3

Correlation Table with BMI

Dimension	Pearson Correlation	Significance (two-tailed)
Drive for Thinness	0.075	0.280
Bulimia	-0.023	0.741
Body Dissatisfaction	0.159*	0.021
Ineffectiveness	0.015	0.829
Perfectionism	-0.056	0.419
Interpersonal Distrust	0.030	0.667
Interoceptive Awareness	-0.034	0.624
Maturity Fears	0.042	0.544

*The correlation is significant at the 0.05 level (two-tailed).

This data suggests that among the dimensions considered, only body dissatisfaction has a statistically significant relationship with BMI in the analyzed sample ($p < .03$).

This finding was confirmed by an analysis of variance (ANOVA), where BMI was inserted as a predictor and the total EDI score as the dependent variable. The regression model indicated that the influence of BMI on eating behavior is not significant. The analysis indicates that there are no statistically significant differences between groups across all eight dimensions. The F-values range from 0.746 to 1.318, with "Body Dissatisfaction" being the closest to significance ($p = .088$).

Furthermore, the ANOVA results indicate that *weight* does not have a statistically significant impact on any of the eating behavior dimensions evaluated, including bulimia, body dissatisfaction, ineffectiveness, perfectionism, interpersonal distrust, interoceptive awareness, and maturity fears. All p-values are above the significance threshold of 0.05.

4. Discussion and Conclusion

The aim of this work was to estimate how many subjects in a large sample meet the criteria for an eating disorder. Specifically, to study the incidence of the eating disorder, the sample was divided into subjects with and without BED. Additionally, correlations between body mass index and eating behavior were examined.

Within the entire sample, there is a high level of *body dissatisfaction*. Individuals suffering from obesity experience negative emotions due to the difficulty of overcoming this condition. The 85% of the subjects in the sample have tried one or more diets without achieving significant results. These individuals have made numerous efforts without obtaining the desired results, finding themselves in a vicious cycle of failures leading to a sense of frustration.

Body image dissatisfaction is influenced both by the individual's perception of themselves and the strong impact of social stigma (Kyle et al., 2019; Puhl et al., 2020; Setayesh et al., 2018). The comparison of means showed no statistically significant differences between males and females or between patients with second or third-class obesity. Other studies, however, indicate a clear gender asymmetry (Alvarenga et al., 2014). Between 2007 and 2017, a review by Mancini and colleagues (2018) selected 54 studies from the literature confirming a female majority among subjects with eating disorders (Mancini et al., 2018). It is noteworthy that only in recent years has more attention been paid to EDs in men, indicating a need to expand studies in this area.

Our findings clearly shows that approximately 12% of the sample comprises patients with eating disorders. The prevalence of eating disorders in the entire Italian population is 1% for subjects suffering from bulimia nervosa and 3% for subjects with binge eating disorder. These percentages rise in the 15 to 25-year age group (Setayesh et al., 2018).

The results indicate a significant relationship between higher BMI and greater body dissatisfaction. Conversely, *no significant relationships were found* between the components of the eating disorders questionnaire and BMI based on weight. Eating disorders are complex and multifactorial, influenced by a combination of genetic, environmental, psychological, and social factors. BMI alone may not be a sufficient predictor of behaviors and attitudes related to these disorders. The triggers for bulimia,

perfectionism, and other eating disorder dimensions may be more related to individual psychological and emotional states rather than BMI (Barry et al., 2003). For instance, interpersonal distrust and ineffectiveness might be more closely linked to personal experiences and personality traits. Body dissatisfaction and other eating disorder dimensions might have distinct underlying mechanisms. For example, while body dissatisfaction is directly related to societal pressures and stigma associated with higher BMI, other dimensions like bulimia and perfectionism might be influenced by factors unrelated to BMI, such as perfectionistic tendencies or emotional regulation issues (Mento et al., 2017).

A study by Calugi et al. (2023) investigated the possible relationships between the core psychopathology of eating disorders, measured using the Eating Disorder Examination interview, and variables representing weight stigma internalization, detected by items from the Weight Bias Internalization Scale using network analysis (Calugi et al., 2023). The analysis, conducted on a sample of 2113 patients awaiting residential rehabilitation treatment for excess weight management at the Villa Garda Care Home, showed that body dissatisfaction, weight control, and eating behavior appear to play a central role in the relationship between the variables constituting the psychopathology of eating disorders and the internalization of weight stigma (Haines & Neumark-Sztainer, 2006).

Similarly, Marshall, Latner & Masuda (2020) examined the link between internalized weight bias and disordered eating by analyzing the mediating role of drive for thinness and body image avoidance. Using a sample of 225 female university students, the researchers confirmed that internalized weight bias is positively associated with disordered eating and that drive for thinness and body image avoidance play a significant mediating role in this relationship (Marshall et al., 2020).

The study has several limitations that should be acknowledged. The reliance on self-reported data may introduce biases, affecting the accuracy of the findings. The sample, recruited through social media groups dedicated to individuals with obesity or awaiting surgical treatment, may not be representative of the broader population, limiting generalizability. The cross-sectional design restricts the ability to draw causal inferences, necessitating longitudinal studies to explore the relationship between BMI and eating behaviors over time. Additionally, the demographic characteristics of the sample were not fully controlled, potentially limiting the variability needed to detect significant relationships. The sensitivity of the measurement tools used may also be insufficient to detect subtle differences related to BMI. Focusing primarily on BMI as an indicator of obesity overlooks other important factors like body composition and metabolic health. Furthermore, the cultural context of the study, conducted in Italy, may limit the applicability of the findings to other settings. Lastly, the study did not extensively explore other psychological and social factors that could influence eating behaviors. Future research should address these limitations by using more diverse samples, longitudinal designs, and comprehensive measurement tools.

Obesity and eating disorders are different and independent pathologies that can co-occur (comorbidity). The pervasive assumption that individuals with eating disorders exhibit extreme deviations in body weight results in the frequent underestimation of these conditions. Contrary to this misconception, eating disorders are not confined to individuals with severe body weight abnormalities; they can manifest across a broad spectrum of body types and weight ranges.

Our findings indicate that not all individuals with obesity suffer from an eating disorder. The pathogenesis of obesity is multifactorial, encompassing genetic, environmental, behavioral, and contextual factors, all contributing to the clinical presentation of obesity. Obesity is a pathological condition, not a personal choice (Di Pauli, 2016; Rossi et al., 2022); therefore, it is crucial to undertake rigorous scientific and clinical research to identify the underlying causes of weight alteration. While interventions may be necessary, these should not serve as grounds for attributing blame to the affected individuals.

Widespread beliefs and negative attitudes influence the thoughts of those suffering from obesity, who absorb all this from the environment and internalize it. Weight is not so much linked to eating behavior but to body dissatisfaction. Body dissatisfaction is a dimension closely related to internalized stigma (Mento, Rizzo, et al., 2021; Mento et al., 2022; Mento et al., 2023; Mento, Silvestri, Bruno, et al., 2021; Mento, Silvestri, Muscatello, et al., 2021; Rossi et al., 2022). Individuals internalize judgmental attitudes conveyed through verbal and non-verbal communication. The emotional well-being of those subjected to stigma is significantly impaired, leading to conditioned and often maladaptive choices. Such individuals become victims of discrimination and prejudice. There is a common misconception that harsh and stigmatizing behavior can prompt individuals to recognize their situation and change;

however, the opposite is true. Weight stigma exacerbates the individual's vulnerability. One of the most detrimental effects of weight stigma is its internalization; individuals with obesity come to believe that pervasive stereotypes are true. This internalized stigma makes it challenging to seek help, as feelings of guilt lead individuals to feel responsible for their condition.

A clearer understanding of the nature of eating disorders and the multifactorial nature of obesity pathology helps differentiate the two distinct clinical pictures, and allows for identifying the necessary tailored treatment for both the patient with obesity and the patient with EDs. Some myths still present among healthcare workers must be demystified.

Even among health professionals, the idea that the person is primarily responsible for their excess weight seems rooted, leading to a weakening of the therapeutic alliance (Giampà, 2024; Rizzo, Alfa, et al., 2024). The patient will not trust the healthcare staff, will be inclined to refuse care, or will seek alternative and harmful methods to overcome the obstacle. It is crucial to learn to improve, pay attention to communication and empathy, value verbal and non-verbal messages, starting from the attitude and the environment provided. To ensure a welcoming and prejudice-free setting (Rizzo, Alfa, et al., 2024; Rizzo, Calandi, et al., 2024a, 2024b; Rizzo, Gatto, et al., 2024; Rizzo, Mautone, et al., 2024), the therapist must regularly investigate their beliefs towards the patient. It is necessary to work to create a welcoming, non-judgmental, and non-stigmatizing environment, avoiding inferences and hasty conclusions that are counterproductive for overall well-being.

Authors' Contributions

Conceptualization: Amelia RIZZO and Daniele DI PAULI; methodology: Amelia RIZZO, Rossella ALFA; software: Amelia RIZZO; validation: Rossella ALFA, Daniele DI PAULI; formal analysis: Amelia RIZZO, Elisabetta COSTANTINO; investigation: Amelia RIZZO, Elisabetta COSTANTINO; resources: Domy PERONACE, Elisabetta COSTANTINO; data curation: Amelia RIZZO, Elisabetta COSTANTINO; writing—original draft preparation: Amelia RIZZO, Elisabetta COSTANTINO; writing—review and editing: Domy PERONACE, Rossella ALFA, Daniele DI PAULI; visualization: Rossella ALFA; supervision: XX. All authors have read and agreed to the published version of the manuscript.

Declaration

None.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. The present survey followed "The Internet Research: Ethical Guidelines 3.0" issued by the Association of Internet Researchers (AoIR), approved by the AoIR membership on October 6, 2019, available at the following link: https://aoir.org/reports/ethics3.pdf .

References

Alvarenga, M. D., Koritar, P., Pisciolaro, F., Mancini, M., Cordás, T. A., & Scagliusi, F. B. (2014). Eating attitudes of anorexia nervosa, bulimia nervosa, binge eating disorder, and obesity without eating disorder female patients: Differences and similarities. *Physiology & Behavior*, *131*, 99–104. https://doi.org/10.1016/j.physbeh.2014.04.032

Barry, D. T., Grilo, C. M., & Masheb, R. M. (2003). Comparison of patients with bulimia nervosa, obese patients with binge eating disorder, and nonobese patients with binge eating disorder. *The Journal of Nervous and Mental Disease*, *191*(9), 589–594. https://doi.org/10.1097/01.nmd.0000087185.95446.65

Calugi, S., Segattini, B., Cattaneo, G., Chimini, M., Dalle Grave, A., Dametti, L., Molgora, M., & Dalle Grave, R. (2023). Weight bias internalization and eating disorder psychopathology in treatment-seeking patients with obesity. *Nutrients*, *15*(13), 2932. https://doi.org/10.3390/nu15132932

Cuzzolaro, M., & Donini, L. (2011). Disturbi dell'alimentazione e obesità. Differenze e intersezioni. In M. G. Gentile (Ed.), *Aggiornamenti in nutrizione clinica* (Vol. 19, pp. 31–40). https://iris.uniroma1.it/handle/11573/415700

Dalle Grave, R., Sartirana, M., & Calugi, S. (2020). Disturbo da binge-eating - Un update. *Italian Journal of Eating Disorders and Obesity*. https://doi.org/10.32044/ijedo.2023.04

Di Pauli, D. (2016). Where's Icarus? Stigma based on weight that no one wants to see. A candid answer to "A candid discussion of obesity". *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*, *21*(3), 349–351. https://doi.org/10.1007/s40519-016-0294-4

Garner, D. M., Olmsted, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, *2*(2), 15–34. https://doi.org/10.1002/1098-108X(198321)2:2

Giampà, A. (2024). Embodied online therapy": The efficacy of somatic and psychological treatment delivered digitally. *Advances in Medicine, Psychology, and Public Health*, *1*(3), 164–169. https://doi.org/10.5281/zenodo.10901015

Haines, J., & Neumark-Sztainer, D. (2006). Prevention of obesity and eating disorders: A consideration of shared risk factors. *Health Education Research*, *21*(6), 770–782. https://doi.org/10.1093/her/cyl094

Hawkins, R. C., & Clement, P. F. (1980). Development and construct validation of a self-report measure of binge eating tendencies. *Addictive behaviors*, *5*(3), 219–226. https://doi.org/10.1016/0306-4603(80)90042-8

Kyle, T. K., Nadglowski, J., Dumas, N., & Pauli, D. (2019). Public presumptions that severe childhood obesity is simply caused by bad habits. *Conscien Health: Obesity Week, Las Vegas*. https://conscienhealth.org/wp-content/uploads/2019/11/Presumptions.pdf

Mallik, R., Carpenter, J., & Zalin, A. (2023). Assessment of obesity. *Clinical Medicine*, *23*(4), 299–303. https://doi.org/10.7861/clinmed.2023-0148

Mancini, G., Biolcati, R., Pupi, V., Andrei, F., Grutta, S., Lo Baido, R., & Trombini, E. (2018). I disturbi della nutrizione e dell'alimentazione nei maschi: una panoramica sulle ricerche nel periodo 2007-2017. *Rivista di Psichiatria*, *53*(4), 177–191. https://doi.org/10.1708/2954.29694

Marshall, R. D., Latner, J. D., & Masuda, A. (2020). Internalized weight bias and disordered eating: The mediating role of body image avoidance and drive for thinness. *Frontiers in psychology*, *10*, 502296. https://doi.org/10.3389/fpsyg.2019.02926

Mento, C., Le Donne, M., Crisafulli, S., Rizzo, A., & Settineri, S. (2017). BMI at early puerperium: Body image, eating attitudes, and mood states. *Journal of Obstetrics and Gynaecology*, *37*(4), 428–434. https://doi.org/10.1080/01443615.2016.1250727

Mento, C., Rizzo, A., Bruno, A., Arnone, F., Caracciolo, M. L., Muscatello, M. R., Navarra, G., Zoccali, R. A., & Pandolfo, G. (2021). Pre-operative psychological assessment in obese patients, candidates for bariatric surgery. *Euromediterranean Biomedical Journal*, *16*. https://doi.org/10.3269/1970-5492.2021.16.8

Mento, C., Rizzo, A., Bruno, A., Silvestri, M. C., Cedro, C., Komaei, I., Navarra, G., & Muscatello, M. R. (2022). Sex differences in emotions and eating behaviors among people affected by obesity. *Brain Sciences*, *12*(12). https://doi.org/10.3390/brainsci12121663

Mento, C., Rizzo, A., Liga, F., Zito, C., Bruno, A., Muscatello, M. R., Tanaka, Y., Kawai, T., & Silvestri, M. C. (2023). Eating behaviors and body self-esteem in couple's satisfaction during COVID-19 quarantine. *Nutrition and Health*. https://doi.org/10.1177/02601060231166162

Mento, C., Silvestri, M. C., Bruno, A., Muscatello, M. R., Celona, G., Rizzo, A., Navarra, G., & Zoccali, R. A. (2021). Body image and obese identity in bariatric patients. *Psychological factors and clinical management. Nova Science Publisher*. https://iris.unime.it/handle/11570/3187545

Mento, C., Silvestri, M. C., Muscatello, M. R., Rizzo, A., Celebre, L., Cedro, C., Zoccali, R. A., Navarra, G., & Bruno, A. (2021). The role of body image in obese identity changes post bariatric surgery. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*. https://doi.org/10.1007/s40519-021-01270-w

Meyer, L., Gram, E. G., Brodersen, J. B., & Køster-Rasmussen, R. (2023). 54 Overdiagnosis in overweight. In: Royal Society of Medicine.

Mond, J. M., & Gill, T. (2024). Eating Disorders and Obesity. In *Handbook of Obesity, Two-Volume Set* (pp. 1–384). CRC Press. https://doi.org/10.1201/9781003437734-43

Navabinejad, S., Rizzo, A., & Kiliçaslan, F. (2024). Exploring The Psychological Impact of Miscarriage on Women. *Psychology of Woman Journal*, *5*(2), 59–65. https://doi.org/10.61838/kman.pwj.5.2.9

Perpina, C., & Roncero, M. (2016). Similarities and differences between eating disorders and obese patients in a virtual environment for normalizing eating patterns. *Comprehensive Psychiatry*, *67*, 39–45. https://doi.org/10.1016/j.comppsych.2016.02.012

Puhl, R. M., Himmelstein, M. S., & Pearl, R. L. (2020). Weight stigma as a psychosocial contributor to obesity. *American psychologist*, *75*(2), 274–289. https://doi.org/10.1037/amp0000538

Rizzo, A., Alfa, R., Piccolo, M. C., Giuffrida, A., Spina, G. S., Currò, V., & Caracciolo, M. L. (2024). Binge eating and personality traits: A gender-specific analysis among patients affected by obesity. *Advances in Medicine, Psychology, and Public Health*, *1*(1), 6–11. https://doi.org/10.5281/zenodo.10597085

Rizzo, A., Calandi, L., Faranda, M., Rosano, M. G., & Vinci, E. (2024a). *The link between stigmatization, mental health, disability, and quality of life*. Authorea Preprint. https://doi.org/10.22541/au.171987267.76573027/v1

Rizzo, A., Calandi, L., Faranda, M., Rosano, M. G., & Vinci, E. (2024b). Stigma against mental illness and mental health: The role of social media. In *SciELO Preprints*. https://doi.org/10.1590/SciELOPreprints.8985

Rizzo, A., Gatto, E., Calandi, L., & Alfa, R. (2024). Embodied Online Therapy. In: Nova Science Publishers.

Rizzo, A., Mautone, A., Sitibondo, A., Nucera, G., Tarchi, L., Khabbache, H., Ait Ali, D., Ouazizi, K., Szarpak, Ł., Pruc, M., Yıldırım, M., & Chirico, F. (2024). VISCERAL SENSITIVITY INDEX (VSI-IT): Italian Adaptation and Validation. *Eur. J. Investig. Health Psychol. Educ*, *14*, 1953–1968. https://doi.org/10.3390/ejihpe14070130

Rizzo, A., & Sitibondo, A. (2023). Obesity and life history: The hypothesis of psychological phenotypes. *Psych*, *5*(3), 866–875. https://doi.org/10.3390/psych5030057

Rossi, A. A., Manzoni, G. M., Pietrabissa, G., Pauli, D., Mannarini, S., & Castelnuovo, G. (2022). Weight stigma in patients with overweight and obesity: Validation of the Italian Weight Self-Stigma Questionnaire (WSSQ. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*, *27*(7), 2459–2472. https://doi.org/10.1007/s40519-022-01385-8

Setayesh, T., Nersesyan, A., Mišík, M., Ferk, F., Langie, S., Andrade, V. M., Haslberger, A., & Knasmueller, S. (2018). Impact of obesity and overweight on DNA stability: Few facts and many hypotheses. *Mutation Research/Reviews in Mutation Research*, *777*, 64–91. https://doi.org/10.1016/j.mrrev.2018.07.001Get

Stunkard, A. J. (2011). Eating disorders and obesity. *Psychiatric Clinics*, *34*(4), 765–771. https://doi.org/10.1016/j.psc.2011.08.010

Tarchi, L., Castellini, G., & Ricca, V. (2024). Zipf's law: Divergence from general content in online communities of peers affected by attention-deficit/hyperactivity disorder (ADHD) and anorexia nervosa. *Advances in Medicine, Psychology, and Public Health*, *1*(2), 82–91. https://doi.org/10.5281/zenodo.10637481

Tarchi, L., Rossi, E., Faldi, M., Cassioli, E., Ricca, V., & Castellini, G. (2023). Linking Embodiment Disorder and Bulimia Nervosa. In *Eating Disorders* (pp. 843–861). Springer International Publishing. https://doi.org/10.5281/zenodo.10637481

E-ISSN: 3041-9026