



EDITORIAL

Bridging the gap: psychiatry's role in the new era of obesity treatment

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Obesity is considered a chronic, relapsing disease characterized by excess body weight (defined as a body mass index [BMI] of ≥ 30 kg/m²). The prevalence of obesity is rising globally, and the disease is considered one of the greatest public health concerns that impacts the world today. Its causes are multifactorial and include genetic predisposition and behavioral, metabolic, and hormonal influences. Obesity is viewed as a difficult-to-treat medical condition. The backbone of its management involves a range of dietary and lifestyle modifications and other potential interventions, including behavioral therapy, surgery, and medications. However, despite the variety of available treatments, outcomes remain unsatisfactory due to high rates of weight regain.¹

The interface between obesity and psychiatry is complex and multifaceted.^{2,3} Several hypotheses to explain the relationship between obesity and mental disorders have been suggested: a) A bidirectional relationship with shared biological and neurochemical factors, such as neurotransmitter imbalances, contributing to both conditions; b) Genetic factors which may contribute to both obesity and certain mental disorders, leading to a shared genetic vulnerability; c) Individuals with obesity often face societal stigma, which can lead to low self-esteem and negative body image, which in turn contribute to the development of mental disorders; d) Certain eating/behavioral disorders, such as binge eating disorder, bulimia nervosa, or emotional eating, can contribute to unhealthy eating patterns and weight gain⁴. Obesity has been associated with cognitive deficits that may contribute to difficulties in self-regulation, decision-making, and impulse control, both affecting weight management and mental health; and f) Shared traumatic or invalidating formative life experiences, which are known risk factors for both mental health problems and obesity.

In the persistent search for effective solutions to tackle obesity, a new frontier has emerged, reshaping the scenery of intervention strategies. The dynamic relationship between psychiatry and obesity has taken center

stage, with recent advances in pharmacological interventions offering a promising avenue for those struggling with excess weight.⁵ One of the innovative aspects of this new era in obesity treatment is the advent of medications targeting appetite control and metabolic regulation. These medications not only provide a powerful tool for weight management but also open the door to a more comprehensive understanding of the intricate relationship between the mind and the body in the context of obesity.

Furthermore, new advances in understanding the pathophysiology of obesity have shed light on the complex interplay between hedonic eating, the reward system, and disordered eating (including loss of control overeating). Hedonic eating, characterized by the consumption of food for pleasure rather than energy need, is a key contributor to overeating and obesity. The brain's reward system, particularly the mesolimbic dopamine pathway, plays a pivotal role in mediating the pleasurable aspects of eating. Dysregulation in this system can lead to an increased drive for hedonic eating, contributing to weight gain. Recognizing the importance of these neural circuits has paved the way for targeted therapies aimed at modulating the reward system to combat obesity.^{3,6}

The advent of new anti-obesity agents, including naltrexone/bupropion, liraglutide, semaglutide, tirzepatide, and other agents under development, has injected new hope into the realm of weight management. These medications, each with its unique mechanism of action, offer diverse and targeted approaches to address the complexities of obesity.⁵ Additionally, some of these new agents have an unprecedented level of efficacy, producing weight losses far beyond those observed so far, and could raise the bar for pharmacological obesity treatment.

Naltrexone/bupropion combination therapy addresses the reward system by acting on opioid and dopaminergic pathways. Naltrexone, an opioid receptor antagonist, may potentially counteract the rewarding effects of food, while the antidepressant bupropion, a dopamine and

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norepinephrine reuptake inhibitor, contributes to appetite control and weight loss. This dual-action approach represents a significant advancement in pharmacological interventions for obesity, in theory targeting both hedonic eating and underlying neurobiological factors.⁵ GLP-1 receptor agonists (liraglutide and semaglutide), originally developed for diabetes management, have emerged as promising agents for obesity treatment due to their effects on appetite regulation and metabolism. The interface between the use of GLP-1 receptor agonists and psychiatry is intriguing, as these agents have demonstrated potential benefits beyond weight loss. GLP-1 receptors are present not only in the periphery but also in the central nervous system, potentially impacting areas associated with mood and reward.⁷ Tirzepatide, a dual glucose-dependent insulinotropic polypeptide (GIP) and GLP-1 receptor agonist, was recently approved by FDA for the treatment of obesity. This agent combines influences on appetite and glucose regulation. Its dual action not only aids weight loss but also touches on metabolic regulation, hypothetically impacting mood and mental well-being.⁵

Nevertheless, the integration of these novel psychopharmacological interventions in obesity treatment is complex. The central action of these agents means that clinicians must be alert to the occurrence of some complications, such as the potential emergence of psychiatric adverse events.

Beyond the pharmacological interventions mentioned, cognitive-behavioral therapies and mindfulness-based approaches are being explored to address the emotional and psychological factors contributing to obesity. This multimodal approach acknowledges the intricate interplay between mental health and obesity, paving the way for personalized and comprehensive treatment strategies. Behavioral interventions have also evolved, incorporating technology-driven solutions to enhance adherence and outcomes: mobile applications, wearable devices, and virtual support communities are being harnessed to promote lifestyle modifications and sustained weight loss.⁸

The frequent comorbidity between overweight/obesity and some mental disorders indicates that health professionals involved in the treatment of weight disorders should explore the presence of certain psychiatric disorders when taking a medical history. Another group that requires special attention are those individuals with obesity and eating disorders and body image disturbances. This subgroup may need specific guidance related to their eating disordered behavior in association with the treatment of obesity. However, these aspects should not be a limitation for the treatment of obesity, but rather suggest a greater need for an interface between psychiatry and clinical medicine.^{9,10}

As we stand at the crossroads of psychiatry and obesity treatment, the collaborative efforts between psychiatric and other medical professionals hold immense promise. This evolving relationship paves the way for a more nuanced, individualized, and empathetic approach to obesity management.⁹ The integration of psychopharmacological interventions and behavioral treatments

underscores the acknowledgment that addressing obesity goes beyond the physical realm, recognizing the profound impact of mental health on one's relationship with food. Through this comprehensive lens, we face a new chapter in the quest for effective and comprehensive obesity treatment.

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Author contributions

JCA: Conceptualization, Writing – original draft, Writing – review & editing.

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