

Use of Medications and Other Treatments for Obesity: Multidisciplinary and Individualized Management

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<https://orcid.org/0000-0002-4105-9768>**Abstract**

Obesity is a chronic and multifactorial disease that requires comprehensive therapeutic approaches combining lifestyle interventions, pharmacological treatments, behavioral strategies, and, when indicated, surgical procedures. The increasing prevalence of obesity and its association with chronic noncommunicable diseases have intensified the need for healthcare models capable of providing effective, continuous, and individualized management. Pharmacological therapies have expanded the possibilities for obesity treatment, offering additional resources for individuals who do not achieve adequate outcomes through lifestyle interventions alone. The use of medications for obesity management represents an important component of modern therapeutic strategies, but their effectiveness depends on appropriate clinical evaluation, individualized decision-making, monitoring, and integration with multidisciplinary care. Treatment should not be limited to weight reduction but should aim to improve metabolic health, quality of life, functional capacity, and prevention of obesity-related complications. This academic essay discusses the use of medications and other therapeutic approaches for obesity management, emphasizing multidisciplinary and individualized care. The discussion explores pharmacological treatment, behavioral interventions, nutritional strategies, physical activity, surgical approaches, and challenges related to healthcare organization. The manuscript argues that effective obesity treatment requires integrated approaches that combine scientific evidence, patient preferences, professional collaboration, and long-term follow-up.

Keywords: obesity treatment; pharmacotherapy; multidisciplinary care; individualized management; chronic disease; public health.

1. Introduction

Obesity represents one of the most significant health challenges of contemporary societies due to its increasing prevalence and its association with multiple chronic diseases. Excess body weight is related to metabolic disorders, cardiovascular conditions, diabetes mellitus, respiratory diseases, psychological impacts, and reduced quality of life. Because obesity involves complex interactions between biological, environmental, behavioral, and social factors, its management requires comprehensive and long-term strategies.

Historically, obesity treatment focused mainly on lifestyle modifications, particularly changes in dietary patterns and physical activity levels. Although these interventions remain fundamental components of care, evidence has demonstrated that many individuals experience difficulties maintaining long-term weight reduction due to physiological adaptations, environmental barriers, and social determinants. This context has encouraged the development of additional therapeutic options, including pharmacological treatments and surgical approaches.

The expansion of obesity treatments has transformed clinical management by providing new possibilities for individuals who require additional support beyond lifestyle interventions. However, the

availability of medications and other therapeutic technologies does not eliminate the need for comprehensive care. Effective treatment requires appropriate assessment, individualized planning, multidisciplinary collaboration, and continuous monitoring to ensure safety, adherence, and meaningful health improvements.

Considering the increasing importance of therapeutic innovations and comprehensive obesity management, this essay seeks to answer the following research question: How can medications and other therapeutic approaches contribute to effective obesity management through multidisciplinary and individualized care strategies?

2. Methodology

This manuscript is structured as an academic essay based on critical reflection and theoretical analysis of scientific literature addressing obesity treatment, pharmacological therapies, multidisciplinary care, individualized interventions, and healthcare organization. The objective is to discuss contemporary therapeutic approaches and their implications for comprehensive obesity management.

The discussion is organized into three thematic sections. The first section examines pharmacological treatments and other therapeutic approaches used in obesity management. The second section discusses individualized and multidisciplinary care, emphasizing the integration of different healthcare professionals and patient-centered strategies. The third section analyzes challenges and future perspectives for strengthening integrated obesity treatment models.

To preserve argumentative continuity and facilitate reading fluency, references are not included throughout the body of the manuscript. All scientific concepts and theoretical discussions presented in this essay are supported by academic literature and institutional documents, which are presented exclusively in the reference section according to the American Psychological Association (APA, 7th edition) formatting guidelines.

3. Development

3.1 Pharmacological Treatment and Other Therapeutic Approaches for Obesity Management

The treatment of obesity has undergone significant transformations with the recognition that this condition requires long-term and multifaceted management. While lifestyle interventions remain the foundation of obesity care, advances in pharmacology and other therapeutic approaches have expanded the possibilities for individuals who require additional support to achieve clinically meaningful improvements.

These strategies represent important complements to behavioral interventions rather than replacements for healthy lifestyle changes.

Pharmacological treatment for obesity aims to support weight reduction, improve metabolic health, and reduce the risk of obesity-related complications. Unlike medications developed solely for short-term weight loss, contemporary anti-obesity therapies are increasingly designed within a chronic disease management framework. This perspective recognizes that obesity frequently requires prolonged treatment and continuous monitoring, similar to other chronic conditions.

The decision to initiate pharmacological therapy should consider individual characteristics, including the degree of excess adiposity, presence of comorbidities, previous treatment attempts, health risks, and patient preferences. A personalized approach is essential because obesity affects individuals differently, and therapeutic responses may vary according to biological, behavioral, and social factors.

Several classes of medications have been developed to support obesity treatment through different mechanisms of action. Some therapies influence appetite regulation, satiety, energy balance, or metabolic pathways involved in weight regulation. Understanding these mechanisms allows healthcare professionals to select treatments according to individual clinical profiles and therapeutic objectives.

The emergence of newer anti-obesity medications has changed expectations regarding achievable outcomes in obesity treatment. Some therapies have demonstrated greater effectiveness compared with previous options, particularly when combined with lifestyle interventions. However, their use requires careful evaluation of benefits, risks, contraindications, accessibility, and long-term sustainability.

Medication alone is insufficient for effective obesity management. Pharmacological interventions should be integrated into comprehensive treatment plans that include nutritional guidance, physical activity promotion, behavioral strategies, and regular healthcare follow-up. Without addressing lifestyle factors and underlying determinants, medication effects may be limited and difficult to maintain over time.

Nutritional interventions continue to represent a central component of obesity treatment regardless of pharmacological therapy. Effective nutritional management should focus on improving dietary quality, developing sustainable eating patterns, and considering cultural, socioeconomic, and individual factors. Restrictive approaches that ignore personal circumstances may reduce adherence and negatively affect long-term outcomes.

Physical activity represents another essential therapeutic component. Exercise contributes not only to weight management but also to improvements in cardiovascular health, insulin sensitivity, functional capacity, and mental well-being. Individualized physical activity plans are necessary to accommodate differences in physical condition, preferences, limitations, and access to resources.

Behavioral interventions contribute significantly to obesity treatment by addressing factors that influence eating patterns, activity levels, motivation, and treatment adherence. Techniques based on behavioral change, self-monitoring, goal setting, and problem-solving can help individuals develop strategies for maintaining healthier habits throughout the treatment process.

Bariatric surgery represents another important therapeutic option for individuals with severe obesity or significant obesity-related complications. Surgical procedures can produce substantial weight reduction and improvements in metabolic conditions when appropriately indicated. However, surgery should be understood as part of a comprehensive treatment pathway rather than an isolated intervention.

The success of surgical approaches depends on multidisciplinary evaluation and long-term follow-up. Nutritional monitoring, psychological support, medical assessment, and lifestyle adaptation are necessary before and after surgery. Without continuous care, individuals may experience nutritional deficiencies, psychological difficulties, or challenges related to maintaining health improvements.

The integration of different therapeutic modalities reflects the complexity of obesity management. Some individuals may benefit primarily from lifestyle interventions, while others require medications, specialized programs, or surgical procedures. Healthcare professionals must evaluate each case individually and develop treatment plans aligned with clinical needs and personal circumstances.

The expansion of therapeutic options also raises important questions regarding healthcare access and equity. New medications and advanced treatments may be associated with high costs and limited availability, potentially increasing disparities between populations. Public health systems must consider strategies to ensure that effective treatments are accessible according to healthcare needs rather than socioeconomic advantages.

Healthcare organization influences the effectiveness of obesity treatment. Fragmented services may prevent individuals from receiving continuous and coordinated care. Integrated healthcare networks involving Primary Health Care, specialized services, nutrition professionals, psychologists, physical activity specialists, and other professionals are essential for ensuring comprehensive management.

Therefore, pharmacological and other therapeutic approaches should be understood as components of a broader obesity care model. The most effective strategies combine scientific advances with individualized planning, multidisciplinary collaboration, and long-term follow-up. By integrating different treatment options, healthcare systems can provide more effective responses to obesity as a chronic disease.

3.2 Individualized and Multidisciplinary Care in Obesity Treatment

Individualized care represents one of the fundamental principles of contemporary obesity management because the condition presents significant variability among affected individuals. Differences in genetic factors, metabolic characteristics, lifestyle patterns, psychological conditions, socioeconomic circumstances, and previous treatment experiences influence how each person develops obesity and responds to interventions. Therefore, standardized approaches are often insufficient to address the complexity of obesity.

A patient-centered approach requires that treatment decisions consider individual goals, preferences, expectations, and healthcare needs. Rather than focusing exclusively on numerical weight reduction, obesity management should prioritize improvements in overall health, prevention of complications, functional capacity, and quality of life. This perspective strengthens therapeutic relationships and encourages greater engagement with long-term care.

Multidisciplinary care is essential because obesity involves multiple dimensions that cannot be adequately addressed by a single professional perspective. Physicians, nutritionists, psychologists, nurses, physical activity professionals, pharmacists, social workers, and other specialists contribute complementary knowledge to the management process. Collaboration among these professionals allows more comprehensive assessment and intervention.

The physician's role within obesity treatment includes clinical evaluation, diagnosis of associated conditions, assessment of therapeutic options, medication management, and monitoring of health outcomes. However, effective obesity care requires moving beyond a purely medicalized approach and incorporating broader strategies that address behavioral and social dimensions.

Nutrition professionals play a central role by helping individuals develop healthier and sustainable eating patterns. Their work involves evaluating dietary habits, identifying nutritional challenges, adapting recommendations to cultural and socioeconomic realities, and supporting behavioral changes. Nutritional care should promote health improvements rather than reinforce restrictive or unrealistic expectations.

Psychological support is particularly relevant in obesity management because emotional factors frequently influence eating behaviors, motivation, treatment adherence, and quality of life. Conditions such as anxiety, depression, stress, body dissatisfaction, and experiences of stigma may affect treatment outcomes. Psychological interventions can assist individuals in developing coping strategies and improving self-management skills.

Physical activity professionals contribute by designing exercise strategies appropriate to individual capacities and health conditions. Many individuals with obesity experience physical limitations, previous

negative experiences with exercise, or environmental barriers that reduce participation. Personalized approaches help overcome these challenges and encourage sustainable incorporation of movement into daily life.

Nurses and other healthcare professionals involved in follow-up care have important responsibilities in monitoring progress, providing education, reinforcing treatment plans, and identifying difficulties throughout the therapeutic process. Continuous contact with healthcare teams can strengthen adherence and provide opportunities for early adjustments when necessary.

Primary Health Care plays a strategic role in coordinating individualized obesity management within healthcare systems. Because primary care maintains longitudinal relationships with individuals and communities, it provides an appropriate setting for prevention, early diagnosis, follow-up, and coordination with specialized services. This continuity is particularly important because obesity treatment often requires years of monitoring and adaptation.

The relationship between healthcare professionals and individuals undergoing obesity treatment is a determinant factor for success. Communication based on empathy, respect, and shared decision-making improves trust and engagement. Conversely, judgmental attitudes or unrealistic expectations may contribute to treatment abandonment and reinforce negative experiences associated with weight stigma.

Individualized management also requires consideration of social determinants of health. Factors such as income, employment conditions, food availability, housing, education, and social support influence the ability to adopt healthier behaviors. Treatment strategies that ignore these realities may place unrealistic demands on individuals and fail to address important barriers.

Family and community involvement can strengthen obesity management by creating supportive environments for lifestyle changes. Families influence eating patterns, daily routines, and emotional support. Community resources, social networks, and collective initiatives can also facilitate healthier behaviors and improve adherence to treatment recommendations.

The integration of pharmacological treatments into multidisciplinary care requires careful monitoring and collaboration among professionals. Medications may improve outcomes for some individuals, but their effectiveness depends on appropriate selection, adherence, management of adverse effects, and combination with behavioral interventions. The healthcare team must evaluate progress and adjust treatment strategies over time.

The same principle applies to surgical interventions, which require multidisciplinary preparation and follow-up. Individuals undergoing bariatric procedures need support related to nutritional adaptation,

psychological adjustment, lifestyle changes, and monitoring of long-term health outcomes. Surgery modifies physiological processes but does not eliminate the need for continuous care.

The future of obesity management depends increasingly on models that combine precision, personalization, and integration. Advances in clinical assessment, digital health, pharmacology, and behavioral science may allow more accurate identification of treatment needs and better matching between individuals and therapeutic strategies.

Therefore, multidisciplinary and individualized care represents the foundation for effective obesity treatment. By recognizing the complexity of obesity and integrating different areas of expertise, healthcare systems can move toward more comprehensive approaches that respect individual circumstances and promote sustainable improvements in health and well-being.

3.3 Challenges and Future Perspectives for Integrated Obesity Management

The development of integrated obesity management models remains a major challenge for healthcare systems due to the complexity of the disease and the multiple factors influencing treatment outcomes. Although significant advances have occurred in pharmacological therapies, clinical approaches, and multidisciplinary interventions, many individuals continue to experience difficulties accessing adequate care. Strengthening healthcare organization is therefore essential for transforming scientific advances into effective population-level strategies.

One of the main challenges in obesity treatment is ensuring continuity of care. Because obesity is a chronic disease, interventions cannot be limited to short-term programs or isolated consultations. Effective management requires long-term follow-up, regular reassessment, adaptation of treatment strategies, and sustained support from healthcare teams. Fragmented healthcare systems may compromise these processes and reduce treatment effectiveness.

Access to obesity treatments represents another important challenge, particularly regarding newer pharmacological therapies and specialized interventions. Differences in availability, cost, and healthcare infrastructure may create inequalities in treatment opportunities. Public health systems must develop strategies to ensure that therapeutic advances benefit populations according to clinical needs rather than socioeconomic conditions.

The incorporation of anti-obesity medications into healthcare systems requires careful planning. Beyond availability, healthcare professionals need appropriate training regarding indications, contraindications, monitoring, expected outcomes, and integration with lifestyle interventions. Without

adequate professional preparation, medications may be underused, misused, or considered as isolated solutions rather than components of comprehensive care.

Healthcare professionals also face challenges related to changing perceptions about obesity treatment. The persistence of weight stigma may influence clinical decisions, communication practices, and treatment approaches. Reducing stigma requires educational strategies that promote understanding of obesity as a chronic disease and encourage respectful interactions between professionals and individuals seeking care.

The organization of multidisciplinary teams remains a challenge in many healthcare settings. Differences in workforce availability, service structures, and resource distribution may limit access to comprehensive obesity care. Strengthening multidisciplinary models requires investment in professional training, healthcare planning, and integration between different levels of assistance.

Primary Health Care has significant potential to improve obesity management but requires adequate support to fulfill this role. Primary care teams need access to clinical protocols, continuing education, referral pathways, and resources for multidisciplinary collaboration. Strengthening primary care capacity can improve early identification, treatment initiation, and coordination of long-term care.

Digital health technologies represent an emerging opportunity for expanding obesity management strategies. Telemedicine, digital monitoring tools, remote consultations, and online educational resources may increase access to support and facilitate continuous follow-up. However, these technologies must be implemented carefully to ensure privacy, quality of care, and inclusion of individuals with limited digital access.

The future of obesity treatment is likely to involve increasingly personalized approaches based on individual characteristics. Advances in understanding genetic, metabolic, behavioral, and environmental factors may allow healthcare professionals to identify which interventions are most appropriate for specific individuals. Personalized treatment strategies may improve effectiveness and reduce unnecessary interventions.

Research into new pharmacological therapies continues to expand the possibilities for obesity management. Emerging treatments targeting appetite regulation, metabolism, and energy balance may provide additional options for individuals who require medical support. Nevertheless, future innovations should be evaluated not only according to effectiveness but also safety, affordability, accessibility, and long-term sustainability.

The integration of obesity treatment with chronic disease management represents another important perspective. Because obesity is closely associated with diabetes, cardiovascular diseases, and other

conditions, healthcare systems should avoid treating obesity separately from broader health strategies. Integrated approaches can improve efficiency and promote more comprehensive outcomes.

Prevention must remain a central component of obesity management. Although treatment advances are essential, reducing the future burden of obesity requires addressing environmental and social factors that influence weight gain. Policies promoting healthier food systems, physical activity, education, and equitable living conditions are necessary complements to clinical interventions.

Patient participation will continue to be a key element in successful obesity management. Individuals should be actively involved in decisions regarding treatment options, goals, and expectations. Shared decision-making improves autonomy and helps ensure that interventions align with personal circumstances, preferences, and values.

Health systems must also develop strategies to evaluate the effectiveness of obesity treatment programs. Monitoring outcomes beyond weight reduction, including metabolic health, quality of life, functional improvement, and patient satisfaction, provides a more comprehensive assessment of success. Evaluation supports continuous improvement of healthcare practices.

In Brazil, strengthening obesity management within the Unified Health System (SUS) requires integration between health promotion, Primary Health Care, specialized services, and multidisciplinary care networks. The availability of effective treatments must be accompanied by organizational strategies capable of ensuring continuity, equity, and comprehensive assistance.

Therefore, the future of obesity management depends on combining therapeutic innovation with healthcare system strengthening. Medications, behavioral interventions, surgical procedures, and multidisciplinary approaches should function as interconnected components of comprehensive care. By adopting individualized, equitable, and evidence-based strategies, healthcare systems can improve responses to obesity and support individuals in achieving better health outcomes.

4. Conclusion

The management of obesity as a chronic disease requires a comprehensive therapeutic approach that integrates medications, lifestyle interventions, behavioral strategies, and multidisciplinary care. Pharmacological treatments and other advanced therapies have expanded the possibilities for individuals who require additional support, but their effectiveness depends on appropriate clinical evaluation, individualized decision-making, and continuous healthcare monitoring. Obesity treatment should therefore move beyond isolated interventions and adopt long-term strategies focused on improving health, preventing complications, and enhancing quality of life.

The future of obesity management depends on strengthening integrated healthcare models capable of combining scientific innovation with person-centered care. Within healthcare systems such as the Brazilian Unified Health System (SUS), expanding access to multidisciplinary teams, improving professional training, reducing stigma, and strengthening Primary Health Care are essential measures for ensuring comprehensive and equitable treatment. By recognizing individual differences and combining multiple therapeutic approaches, obesity care can become more effective, respectful, and aligned with the complexity of this chronic disease.

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