



## THE TRIVIALIZATION OF THE USE OF MOUNJARO AND OZEMPIC AS RAPID WEIGHT LOSS MEDICATIONS

# A BANALIZAÇÃO DO USO DE MOUNJARO E OZEMPIC COMO MEDICAMENTOS DE EMAGRECIMENTO RÁPIDO

LA BANALIZACIÓN DEL USO DE MOUNJARO Y OZEMPIC COMO MEDICAMENTOS PARA EL ADELGAZAMIENTO RÁPIDO



https://doi.org/10.56238/edimpacto2025.087-022

Danier Renato Reisdorfer Avello<sup>1</sup>, Rafael dos Santos Nardotto<sup>2</sup>, Thyago Furtado de Freitas<sup>3</sup>

## **ABSTRACT**

Obesity constitutes a global public health challenge, and glucagon-like peptide-1 receptor agonists (GLP-1 RA), such as Mounjaro and Ozempic, emerge as effective therapeutic alternatives. This study critically analyzes the trivialization process of using these medications as rapid weight loss strategies, identifying contributing factors and implications for public health. The research characterizes itself as exploratory with a qualitative nature, grounded in systematic bibliographic review of national and international scientific literature, with searches in recognized databases from 2020 to 2025. Results demonstrate that, although GLP-1 RA show proven efficacy in weight reduction in specific populations, their social appropriation for aesthetic purposes, disconnected from formal therapeutic indications, configures a complex phenomenon that articulates pharmacological, ethical, social, and regulatory dimensions. Risks associated with inappropriate use include gastrointestinal, metabolic, perioperative adverse effects, and potential impacts on male fertility. The study concludes that the trivialization of these medications reflects cultural structures that value thinness as synonymous with success, amplified by media campaigns and promises of quick solutions, compromising healthcare integrity and equity in treatment access.

Keywords: GLP-1 Receptor Agonists. Medication Trivialization. Obesity. Indiscriminate Use.

## **RESUMO**

A obesidade constitui um desafio global de saúde pública, e os agonistas do receptor do peptídeo semelhante ao glucagon tipo 1 (glucagon-like peptide-1 receptor agonists – GLP-1 RA), como Mounjaro e Ozempic, emergem como alternativas terapêuticas eficazes. Este estudo analisa criticamente o processo de banalização do uso desses medicamentos como estratégias de emagrecimento rápido, identificando fatores contribuintes e implicações para a saúde pública. A pesquisa caracteriza-se como exploratória de natureza qualitativa,

<sup>&</sup>lt;sup>1</sup> Master's degree of Science in Health and Life Sciences. E-mail: dr.danier@hotmail.com Lattes: http://lattes.cnpq.br/5931689755858898

<sup>&</sup>lt;sup>2</sup> Master's Degree in Education. Universidade Estadual do Norte do Paraná (UENP). Orcid: https://orcid.org/0000-0002-7106-3231

<sup>&</sup>lt;sup>3</sup> Postgraduate certificate in adult intensive care. AMIB/AMB. Lattes: http://lattes.cnpq.br/4762930570411832



fundamentada em revisão bibliográfica sistemática de literatura científica nacional e internacional, com busca em bases de dados reconhecidas no período de 2020 a 2025. Os resultados evidenciam que, embora os GLP-1 RA demonstrem eficácia comprovada na redução ponderal em populações específicas, sua apropriação social para fins estéticos, desvinculada de indicações terapêuticas formais, configura um fenômeno complexo que articula dimensões farmacológicas, éticas, sociais e regulatórias. Os riscos associados ao uso inadequado incluem efeitos adversos gastrointestinais, metabólicos, perioperatórios e potenciais impactos sobre a fertilidade masculina. Conclui-se que a banalização desses medicamentos reflete estruturas culturais que valorizam a magreza como sinônimo de sucesso, amplificadas por campanhas midiáticas e pela promessa de soluções rápidas, comprometendo a integridade do cuidado em saúde e a equidade no acesso a tratamentos.

**Palavras-chave:** Agonistas do Receptor GLP-1. Banalização Medicamentosa. Obesidade. Uso Indiscriminado.

## RESUMEN

La obesidad constituye un desafío global de salud pública, y los agonistas del receptor del péptido similar al glucagón tipo 1 (glucagon-like peptide-1 receptor agonists – GLP-1 RA), como Mounjaro y Ozempic, emergen como alternativas terapéuticas eficaces. Este estudio analiza críticamente el proceso de banalización del uso de estos medicamentos como estrategias de adelgazamiento rápido, identificando factores contribuyentes e implicaciones para la salud pública. La investigación se caracteriza como exploratoria de naturaleza cualitativa, fundamentada en una revisión bibliográfica sistemática de la literatura científica nacional e internacional, con búsqueda en bases de datos reconocidas en el período de 2020 a 2025. Los resultados evidencian que, aunque los GLP-1 RA demuestran eficacia comprobada en la reducción ponderal en poblaciones específicas, su apropiación social con fines estéticos, desvinculada de indicaciones terapéuticas formales, configura un fenómeno complejo que articula dimensiones farmacológicas, éticas, sociales y regulatorias. Los riesgos asociados al uso inadecuado incluyen efectos adversos gastrointestinales, metabólicos y perioperatorios, así como posibles impactos sobre la fertilidad masculina. Se concluye que la banalización de estos medicamentos refleja estructuras culturales que valoran la delgadez como sinónimo de éxito, amplificadas por campañas mediáticas y por la promesa de soluciones rápidas, comprometiendo la integridad del cuidado en salud y la equidad en el acceso a los tratamientos.

**Palabras clave:** Agonistas del Receptor GLP-1. Banalización Medicamentosa. Obesidad. Uso Indiscriminado.



## 1 INTRODUCTION

Obesity is one of the greatest public health challenges of the twenty-first century, affecting millions of people on a global scale and generating consequences that transcend the clinical dimension to reach social, economic, and psychological spheres. In this context, the pharmaceutical industry has developed innovative drugs aimed at glycemic control and weight reduction, among which *glucagon-like peptide-1 receptor agonists* (GLP-1 RA), such as semaglutide (marketed under the brand names Ozempic and Wegovy) and tirzepatide (Mounjaro), stand out. Originally approved for the treatment of type 2 diabetes mellitus, these drugs have demonstrated significant efficacy in promoting weight loss, which has triggered a phenomenon of social appropriation that goes beyond the established therapeutic indications. The question that arises is not only whether these drugs work, but to what extent their uncontrolled popularization compromises patient safety and the integrity of the health system.

The accelerated dissemination of the use of Mounjaro and Ozempic for aesthetic purposes, driven by social media campaigns, celebrity endorsements, and the search for quick results, configures a process of trivialization that deserves critical analysis. Berning *et al.* (2025, p. e2457232) show that "public awareness of obesity drugs has increased significantly, with peaks of interest correlated with media events and digital marketing campaigns". This phenomenon reveals a transformation in the social perception of these drugs, which are no longer understood as therapeutic instruments to become consumer products associated with unattainable aesthetic standards. The medicalization of the body, in this sense, does not represent only an individual choice, but reflects cultural structures that value thinness as synonymous with success, health, and social acceptance.

At the same time, the scientific literature has documented the risks associated with the indiscriminate use of these drugs. Bezerra *et al.* (2024, p. e5289) warn that "inappropriate use of Ozempic for weight loss can result in serious adverse effects, including gastrointestinal disorders, hypoglycemia, pancreatitis, and kidney complications." Such evidence demonstrates that the absence of specialized medical follow-up and self-medication transform potentially beneficial substances into concrete threats to health. The question that emerges is not whether we should use these drugs, but under what conditions and for which patient profiles their use is justified in an ethical and safe manner.

In addition to the clinical risks, the trivialization of the use of RAGLP-1 raises concerns related to equity in access to treatments. The growing demand for these drugs for non-therapeutic purposes has generated shortages in pharmacies, harming diabetic patients who depend on these substances for metabolic control. Abutaima *et al.* (2024, p. e0314407) note



that "knowledge about GLP-1 receptor agonists for weight loss is widespread, but often unaccompanied by adequate understanding of indications, contraindications, and adverse effects". This gap between superficial knowledge and in-depth technical understanding reveals a systemic flaw in health education, which allows the perpetuation of risky practices and the commodification of medical treatments.

The relevance of this study lies in the need to understand the multiple dimensions of this phenomenon, which articulates pharmacological, ethical, social and regulatory aspects. The analysis of the trivialization of the use of Mounjaro and Ozempic is not limited to a moralistic critique or a corporate defense of the medical profession, but seeks to identify the mechanisms that sustain this practice and to propose ways for a rational, safe and equitable use of these drugs. In a scenario where aesthetic pressure overrides clinical rationality, it becomes imperative to question which social, economic, and media forces operate in the construction of this demand and what strategies can be implemented to mitigate the associated harms.

The general objective of this study is to critically analyze the process of trivialization of the use of Mounjaro and Ozempic as rapid weight loss drugs, identifying the factors that contribute to this practice and its implications for public health. As specific objectives, it is proposed: (a) to characterize the pharmacological profile of GLP-1 receptor agonists and their approved therapeutic indications; (b) to examine the sociocultural and media factors that drive the non-prescription use of these drugs; (c) to identify the clinical risks associated with the indiscriminate use of semaglutide and tirzepatide; (d) discuss the ethical and regulatory implications of inappropriate prescription and self-medication; (e) to propose guidelines for the promotion of the rational use of these drugs in the context of Brazilian public health.

To achieve these objectives, this work is structured in five main sections. After this introduction, the second section presents the theoretical framework, addressing the mechanisms of action of GLP-1 RA, the scientific evidence on its efficacy and safety, and the regulatory frameworks that guide its prescription. The third section describes the methodology used, detailing the procedures of bibliographic review and document analysis. The fourth section presents the results and the discussion, articulating the findings of the literature with the central questions of the research. Finally, the fifth section brings the final considerations, synthesizing the main conclusions and pointing out paths for future investigations. This analytical path aims not only to diagnose the problem, but to contribute to the construction of a culture of responsible use of medicines, in which science, ethics and collective well-being prevail over commercial interests and aesthetic pressures.



## **2 THEORETICAL FOUNDATION**

Understanding the pharmacological mechanisms and clinical implications of *glucagon-like peptide-1 receptor agonists* (GLP-1 RA) requires an analysis that transcends the mere description of their therapeutic effects. It is necessary to question not only what these drugs do, but how their action fits into a broader context of metabolic regulation, sensory perception, and clinical practices. Tirzepatide and semaglutide, representatives of this pharmacological class, act by mimicking endogenous incretin hormones, promoting insulin secretion in a glucose-dependent manner, suppressing glucagon release, and delaying gastric emptying. These mechanisms, although well documented, do not explain in isolation the magnitude of the effects observed in weight reduction, which suggests the existence of additional avenues of action that deserve in-depth investigation.

Jastreboff *et al.* (2023, p. 613) demonstrate that "tirzepatide, administered once a week, resulted in significant reductions in body weight in people with type 2 diabetes and obesity, surpassing the results obtained with placebo". This finding not only validates the efficacy of the drug, but also raises questions about the limits of its application. To what extent does the proven efficacy in specific populations justify the extrapolation of its use to individuals without metabolic comorbidities? The answer to this question lies not exclusively in clinical trial data, but in understanding the physiological differences between populations and the risks associated with use in unapproved contexts. Efficacy, when disconnected from safety and clinical adequacy, becomes a dangerous argument for therapeutic trivialization.

In addition to the direct metabolic effects, RA GLP-1 exerts an influence on taste perception and appetite regulation, dimensions often neglected in the traditional pharmacological literature. Kapan *et al.* (2025, p. 5008) show that "incretin-based therapy is associated with changes in taste perception and appetite regulation in obese and overweight individuals". This finding reveals that weight loss induced by these drugs does not result exclusively from peripheral hormonal mechanisms, but involves modifications in the sensory and behavioral experience related to food. The question that emerges is whether these changes represent a desirable therapeutic effect or a potentially problematic interference in the individual's relationship with food. The medicalization of taste, in this sense, can generate psychological and social consequences that go beyond the scope of classical pharmacology.

The growing popularization of GLP-1 RA also poses challenges to the field of anesthesiology, particularly in the perioperative context. Brennan *et al.* (2025, p. 42) warn that "anesthesiologists' perioperative practice patterns regarding GLP-1 agonist drugs vary significantly, reflecting uncertainties about the appropriate management of these drugs prior to surgical procedures." This variability in clinical management reveals a gap in specialized



medical knowledge, which can compromise patient safety. The delay in gastric emptying induced by these drugs increases the risk of pulmonary aspiration during anesthesia, which requires clear protocols for discontinuing or maintaining treatment in the preoperative period. The absence of consensus in this field is not just a technical issue, but reflects the speed with which these drugs have been incorporated into clinical practice, outpacing the capacity of health systems to develop robust evidence-based guidelines.

A critical review of the literature reveals that the efficacy of GLP-1 RA, although undeniable, cannot be dissociated from a comprehensive understanding of its adverse effects and limitations. The significant weight reduction observed in controlled clinical trials often occurs under ideal conditions of monitoring, nutritional follow-up, and psychological support, elements that are rarely replicable in daily clinical practice. When these drugs are used outside of structured protocols, especially by individuals without formal therapeutic indication, the risks of adverse events increase exponentially. Hypoglycemia, although less frequent in monotherapy, becomes a real concern when there is concomitant use of other hypoglycemic agents or in contexts of prolonged fasting. In addition, gastrointestinal effects, which include nausea, vomiting, diarrhea, and constipation, can significantly compromise users' quality of life, leading to discontinuation of treatment or persistence in poor management practices.

The theoretical perspective that underpins this study recognizes that the trivialization of the use of Mounjaro and Ozempic is not an isolated phenomenon, but part of a broader process of medicalization of everyday life. The transformation of bodily characteristics into treatable medical conditions reflects a cultural logic that values pharmacological intervention as a quick solution to complex issues involving eating habits, physical activity, mental health, and social determinants of obesity. In this context, GLP-1 RA become symbols of a promise of body control that, although technically feasible, ignores the ethical, psychological, and social dimensions of health care. The central question is not whether these drugs work, but for whom, under what conditions, and with what long-term consequences.

The reviewed literature also points to the need for a multidisciplinary approach to obesity management, which integrates pharmacological, nutritional, psychological, and behavioral interventions. GLP-1 RA, when used alone, offer limited and temporary results, since discontinuation of treatment often results in regain of lost weight. This finding challenges the simplistic narrative that these drugs represent a definitive solution to obesity and reinforces the importance of long-term strategies that promote sustainable lifestyle changes. The exclusive dependence on pharmacological interventions, in addition to being unsustainable from an economic and logistical point of view, perpetuates a reductionist view



of health that disregards the complexity of the factors involved in the regulation of body weight.

Finally, the theoretical foundation of this study recognizes that the analysis of the trivialization of the use of GLP-1 RA requires a critical stance that is not limited to the description of scientific evidence, but that interrogates the social, economic and cultural structures that sustain this practice. The popularization of these drugs is not a natural or inevitable phenomenon, but the result of deliberate choices by diverse actors, including the pharmaceutical industry, health professionals, the media, and consumers. Understanding these dynamics is essential for the formulation of public policies and clinical guidelines that promote the rational, safe, and equitable use of these drugs, ensuring that therapeutic advances benefit those who really need them, without generating new risks or deepening existing inequalities in access to health.

## 3 METHODOLOGY

This study is characterized as an exploratory research of a qualitative nature, based on a systematic bibliographic review of the national and international scientific literature. The methodological approach adopted is justified by the need to comprehensively and critically understand the phenomenon of the trivialization of the use of Mounjaro and Ozempic as rapid weight loss drugs, articulating pharmacological, clinical, social and regulatory evidence. The choice for a literature review allows not only to map the current state of knowledge on the subject, but also to identify gaps, contradictions and emerging trends in the specialized literature, offering a solid basis for the proposed critical analysis.

The research is classified as exploratory in terms of its objectives, since it seeks to deepen the understanding of a relatively recent phenomenon that is still little systematized in the Brazilian academic literature. As for the approach, it is characterized as qualitative, prioritizing the interpretative analysis of textual data, the identification of discursive patterns and the construction of arguments based on scientific evidence. The applied nature of the study is manifested in the intention to generate knowledge that can support public policies, clinical guidelines, and health education strategies aimed at the rational use of GLP-1 receptor agonists. Kawai *et al.* Sánchez et al. (2020) investigate the structural basis for GLP-1 receptor activation by orally active non-peptide agonists, highlighting the complexity of the molecular mechanisms involved in the action of these drugs, which reinforces the need for an in-depth understanding before their indiscriminate use.

Data collection was carried out through a systematic search in internationally recognized scientific databases, including PubMed, Scopus, Web of Science, SciELO, and



Google Scholar, in the period between January 2020 and March 2025. The temporal delimitation is justified by the need to capture recent studies that reflect the current context of popularization of these drugs, especially after the approval of semaglutide for the treatment of obesity in 2021 and the subsequent explosion of public and media interest. The descriptors used in the search included terms in Portuguese and English, such as: "semaglutide", "tirzepatide", "Ozempic", "Mounjaro", "GLP-1 agonists", "weight loss", "obesity", "indiscriminate use", "adverse effects", "trivialization", "medicalization", combined through Boolean operators (AND, OR, NOT) to refine the results and ensure the relevance of the selected studies.

The inclusion criteria established for the selection of studies were: scientific articles published in peer-reviewed journals, theses and dissertations from recognized graduate programs, technical documents from regulatory agencies (ANVISA, FDA, EMA), clinical guidelines from specialized medical societies, and studies that addressed pharmacological, clinical, epidemiological, social, or regulatory aspects related to the use of GLP-1 RA. Duplicate studies, conference abstracts without full text available, opinion articles without empirical basis, and publications that did not meet the established criteria of methodological rigor were excluded. Leite *et al.* (2023) analyze the weight loss associated with the use of semaglutide, describing its efficacy and mechanism of action, which contributes to the understanding of the pharmacological foundations that support the popularization of these drugs.

The analysis of the collected data was conducted using the thematic content analysis technique, which consists of identifying, coding, and categorizing recurrent patterns in the selected texts. Initially, an exploratory reading of all the recovered documents was carried out, followed by a selective reading to identify passages relevant to the research objectives. Subsequently, the analytical reading was carried out, in which the contents were organized into emerging thematic categories, such as: mechanisms of action of GLP-1 RA, evidence of efficacy and safety, sociocultural factors associated with trivialization, clinical risks of inappropriate use, ethical and regulatory aspects, and strategies to promote rational use. Each category was submitted to interpretative analysis, seeking to establish relationships between different theoretical perspectives and identify convergences, divergences and gaps in current knowledge.

Data triangulation was used as a strategy to increase the validity and reliability of the findings. This technique consists of comparing and cross-referencing information from different sources, methods, and theoretical perspectives, allowing a more robust and multifaceted understanding of the phenomenon investigated. In the context of this study,



triangulation involved the articulation of pharmacological (experimental studies and clinical trials), epidemiological (observational and post-market surveillance studies), social (research on public perception and consumption behavior), and regulatory (analysis of access and prescription policies) evidence. Liu *et al.* (2025) examine the coverage and prior authorization policies for semaglutide and tirzepatide in Medicare Part D plans, revealing access barriers that impact equity in the use of these drugs, which adds a critical dimension to the analysis of the phenomenon.

Ethical aspects were carefully considered throughout the research process. As this is a literature review, the study did not involve primary data collection with human beings, dispensing with submission to the Research Ethics Committee. However, fundamental ethical principles were observed, including the proper citation of all sources consulted, respect for copyright, transparency in the description of methodological procedures, and integrity in the presentation and interpretation of results. Any form of plagiarism, fabrication, or falsification of data was avoided, and all citations were rigorously checked for authenticity and accuracy. The critical stance adopted in the analysis of the data did not imply moral judgments about individuals who use these medications, but rather a reasoned reflection on the social, economic, and cultural structures that sustain potentially risky practices.

Methodological limitations inherent to the design of this study are recognized. The first of these refers to the possibility of publication bias, since studies with positive results tend to be published more frequently than those with negative or inconclusive results, which can generate a distorted view of the efficacy and safety of GLP-1 RA. The second limitation is related to the heterogeneity of the included studies, which employ different methodologies, populations, and outcomes, making direct comparisons and generalizations difficult. The third limitation concerns the rapid evolution of knowledge in this area, with new studies being published continuously, which makes any literature review potentially outdated in the short term. Finally, the absence of primary data collected specifically for this study limits the ability to explore contextual nuances and particularities of the Brazilian reality that may not be adequately represented in the international literature.

Despite these limitations, the methodology used is adequate to the proposed objectives, allowing a comprehensive, critical and reasoned analysis of the phenomenon of the trivialization of the use of Mounjaro and Ozempic. The systematic literature review, when conducted with methodological rigor, constitutes a powerful tool for the synthesis of existing knowledge, the identification of gaps and the formulation of future research questions. Thematic content analysis, in turn, enables the organization and interpretation of large volumes of textual information, revealing patterns and relationships that would not be evident



in superficial analyses. Data triangulation strengthens the validity of findings, reducing the risk of biased or one-sided interpretations. Taken together, these methodological procedures ensure that the results presented in this study are reliable, relevant, and capable of contributing to the advancement of scientific knowledge and to the formulation of evidence-based policies and practices.

 Table 1

 Academic References and Their Contributions to Research

Author	Title	Year	Contributions
AWAI, T. et al.			It elucidated the molecular structural
	Structural basis for GLP-1 receptor		basis by which a non-peptide oral
	activation by LY3502970, an orally	2020	agonist activates the GLP-1 receptor
	active nonpeptide agonist		contributing to the development of ora
			anti-obesity drugs.
SILVA, F.; ALVES, A.; PINTO, E.	Effect of a low-carb and low-calorie diet on weight loss in overweight or obese patients	2022	It evaluated the efficacy of dietary
			interventions (low-carbohydrate and
			low-calorie) in weight loss, offering a
			comparative basis for non-
			pharmacological therapies against
			obesity.
TAN, H.; DAMPIL, O.; MARQUEZ, M.			It consolidated evidence on the
	Efficacy and safety of semaglutide for		efficacy and safety of semaglutide fo
	weight loss in obesity without diabetes:	2022	weight loss in obese patients without
	a systematic review and meta-analysis		diabetes, reinforcing its therapeutic
			role in this population.
JASTREBOFF, A. et al.	Tirzepatide once weekly for the		In a robust clinical trial, it demonstrate
	treatment of obesity in people with type		the efficacy of tirzepatide in the
	2 diabetes (SURMOUNT-2): a double-	2023	treatment of obesity in patients with
	blind, randomised, multicentre, placebo-		type 2 diabetes, expanding the
	controlled, phase 3 trial		combined therapeutic options.
LEITE, A. et al.			He explained the physiological
	Weight loss associated with the use of		mechanisms of semaglutide and its
	semaglutide: efficacy and mechanism of	2023	efficacy in weight reduction, helping in
	action		the pharmacological understanding o
			its clinical use.
ABUTAIMA, R. et al.	Knowledge, attitudes, and practices		It investigated the knowledge and
	towards the use of GLP-1 receptor		practices of the Jordanian population
	agonists for weight loss among the	2024	on GLP-1 agonists for weight loss,
	general population in Jordan; a cross-		revealing educational gaps and risks
	sectional study		inappropriate use.



		1	
BEZERRA, T. et al.	Dangers and consequences of the indiscriminate use of Ozempic in weight loss	2024	He warned of the risks of off-label and unsupervised use of Ozempic (semaglutide) for aesthetic weight loss purposes, with a focus on public safety.
OLIVEIRA, L. et al.	Weight loss measures: a study on the association of dietary and drug measures	2024	It analyzed the synergy between dietary and pharmacological interventions in weight loss, proposing more effective integrated approaches.
PLESSIS, S.; OMOLAoye, T.; MAYA, W.	Potential impact of GLP-1 receptor agonists on male fertility: a fable of caution	2024	It raised cautious hypotheses about possible adverse effects of GLP-1 agonists on male fertility, suggesting the need for further investigation.
SILVA, M.; SILVA, P.	The use of semaglutide in the treatment of patients with obesity	2024	It reviewed the clinical application of semaglutide in the management of obesity, highlighting benefits and practical considerations in the Brazilian context.
SILVA, P. et al.	Pharmacological effect of tizerpatide on weight loss and its adverse effects: a systematic review	2024	It systematized evidence on the efficacy of tirzepatide for weight loss and its adverse event profile, supporting informed clinical decisions.
BERNING, P. et al.	Longitudinal analysis of obesity drug use and public awareness	2025	It analyzed temporal trends in anti- obesity drug use and public awareness, identifying correlations between media, access, and prescribing.
BRENNAN, M. et al.	Perioperative practice patterns of anaesthesiologists surrounding glucagon-like peptide-1 (GLP-1) agonist medications	2025	It mapped anesthetic procedures in patients using GLP-1 agonists, contributing to safe perioperative protocols.
LIU, X. et al.	Coverage and prior authorization policies for semaglutide and tirzepatide in Medicare Part D plans	2025	She evaluated administrative barriers and coverage policies in the USA for anti-obesity drugs, discussing equity in therapeutic access.
MIRANDA, A. et al.	Analysis of the use of Ozempic for weight loss and obesity treatment today:  an integrative review	2025	It synthesized the state of the art on the use of Ozempic in the treatment of obesity, integrating contemporary clinical, social and regulatory aspects.

Source: Elaborated by the authors.

The above table plays a key role in systematizing, chronologically and analytically, the main recent scientific contributions on the use of GLP-1 receptor agonists such as



semaglutide and tirzepatide in the context of obesity treatment. By organizing the studies by year, author, title, and central finding, it not only highlights the evolution of knowledge in the area (from molecular bases to clinical, social, and regulatory implications), but also highlights the growing complexity of the debate: which goes beyond pharmacological efficacy and encompasses safety, access, clinical practices, and risks of indiscriminate use. This synthesis allows the reader to identify gaps, trends, and empirical foundations that are essential to support future research or evidence-based interventions.

#### **4 RESULTS AND DISCUSSION**

The analysis of the scientific literature reveals a complex and multifaceted scenario regarding the use of GLP-1 receptor agonists for weight loss, characterized by robust evidence of clinical efficacy, but also by growing concerns about the risks associated with the inappropriate use and trivialization of these drugs. Miranda *et al.* (2025) analyze the use of Ozempic for weight loss and obesity treatment today, showing that, although the drug demonstrates significant efficacy in controlled clinical trials, its use outside structured protocols and without adequate medical monitoring has generated adverse consequences that deserve attention. This finding points to a fundamental tension between proven pharmacological efficacy and safety in actual clinical practice, where optimal conditions of use are rarely replicated.

The results of the reviewed studies demonstrate that semaglutide and tirzepatide promote clinically significant weight reductions in populations with obesity and type 2 diabetes, with average losses ranging from 10% to 20% of initial body weight, depending on the dose used and the profile of the patients. Silva and Silva (2024) discuss the use of semaglutide in the treatment of patients with obesity, highlighting that the mechanisms of action involve not only glycemic regulation, but also the modulation of appetite and satiety through central and peripheral pathways. These findings corroborate the understanding that RA LPGs act at multiple levels of the energy regulation system, which explains their superior efficacy compared to diet and exercise interventions alone. However, the magnitude of these effects cannot be dissociated from the conditions in which they were observed, including nutritional follow-up, psychological support, and rigorous clinical monitoring.

The literature also shows that the efficacy of RA GLP-1 is enhanced when associated with lifestyle changes, particularly structured dietary interventions. Oliveira *et al.* (2024) investigate weight loss measures, analyzing the association of dietary and drug measures, and conclude that the combination of calorie restriction, modification of the macronutrient composition of the diet, and use of medications results in outcomes superior to those obtained



with any of these strategies alone. Silva, Alves, and Pinto (2022) examine the effect of a low-carbohydrate, low-calorie diet on weight loss in overweight or obese patients, demonstrating that well-structured nutritional interventions can generate significant weight reductions even in the absence of pharmacotherapy. These findings reinforce the need for a multidisciplinary approach to the management of obesity, in which medications are understood as adjuvant tools, and not as isolated or definitive solutions.

In parallel with the evidence of efficacy, the literature documents a number of adverse effects associated with the use of GLP-1 RA, which vary in severity and frequency. Silva *et al.* (2024) analyze the pharmacological effect of tirzepatide on weight loss and its adverse effects, identifying that the most common adverse events include nausea, vomiting, diarrhea, constipation, and abdominal discomfort, which occur in significant proportions of users and can lead to treatment discontinuation. In addition to gastrointestinal effects, emerging concerns relate to risks of pancreatitis, cholelithiasis, hypoglycemia (especially when there is concomitant use of other hypoglycemic agents), and possible effects on renal function. The severity of these adverse events tends to be higher in contexts of inappropriate use, including excessive doses, lack of clinical monitoring, and use by individuals without formal therapeutic indication.

A particularly worrisome dimension identified in the literature refers to the potential effects of RA GLP-1 on male fertility. Plessis, Omolaoye, and Maya (2024) warn about the potential impact of GLP-1 receptor agonists on male fertility, suggesting that these drugs may affect sperm parameters and reproductive function, although the exact mechanisms and magnitude of these effects are not yet completely elucidated. This finding reveals a critical gap in knowledge about the long-term effects of these drugs, particularly in young populations who use them for aesthetic purposes without medical indication. The absence of robust longitudinal studies on the reproductive, metabolic, and psychological consequences of long-term use of RA GLP-1 constitutes an important limitation that should be considered in the evaluation of the risk-benefit profile of these drugs.

Analysis of the results also reveals that the efficacy of RA GLP-1 in weight loss is often temporary, with significant weight regain after discontinuation of treatment. Tan, Dampil, and Marquez (2022) evaluate the efficacy and safety of semaglutide for weight loss in obesity without diabetes, demonstrating that while the drug is effective during the period of use, maintaining long-term results depends on sustainable lifestyle changes. This finding challenges the simplistic narrative that RA GLP-1 represents a definitive solution to obesity and reinforces the importance of integrated strategies that promote lasting behavioral changes. The exclusive dependence on pharmacological interventions, in addition to being



unsustainable from an economic point of view, perpetuates a reductionist view of health that disregards the complexity of the determinants of obesity.

The discussion of the results in the light of the theoretical framework allows us to understand that the trivialization of the use of Mounjaro and Ozempic is not an isolated phenomenon, but part of a broader process of medicalization of daily life and commodification of health. The transformation of bodily characteristics into treatable medical conditions reflects a cultural logic that values pharmacological intervention as a quick solution to complex issues involving eating habits, physical activity, mental health, and social determinants of obesity. In this context, GLP-1 RA become symbols of a promise of body control that, although technically feasible, ignores the ethical, psychological, and social dimensions of health care. The aesthetic pressure, amplified by social media and celebrity endorsements, creates an artificial demand that outstrips the ability of health systems to provide adequate guidance and safe monitoring.

The implications of these findings for clinical practice and public policy are significant. First, it becomes imperative to develop clear, evidence-based clinical guidelines that specify the appropriate indications for GLP-1 RA use, patient eligibility criteria, monitoring protocols, and discontinuation criteria. Second, it is necessary to strengthen the mechanisms for regulating and supervising the prescription of these drugs, curbing inappropriate practices and protecting vulnerable patients. Third, health education campaigns should be implemented to inform the public about the risks of inappropriate use, demystify unrealistic promises, and promote a more comprehensive understanding of obesity as a multifactorial condition that requires integrated approaches. Finally, investments in research are needed to fill gaps in knowledge about long-term effects, particularly in specific populations such as young people, pregnant women, and individuals with comorbidities.

## **5 FINAL CONSIDERATIONS**

This study aimed to critically analyze the process of trivialization of the use of Mounjaro and Ozempic as rapid weight loss drugs, identifying the factors that contribute to this practice and its implications for public health. The investigation revealed that, although GLP-1 receptor agonists demonstrate proven efficacy in weight reduction in specific populations with obesity and type 2 diabetes, their social appropriation for aesthetic purposes, unrelated to formal therapeutic indications and adequate medical follow-up, configures a complex phenomenon that articulates pharmacological, ethical, social and regulatory dimensions. The synthesis of the main results shows that the popularization of these drugs does not result exclusively from their pharmacological properties, but reflects cultural structures that value thinness as



synonymous with success and social acceptance, amplified by media campaigns, celebrity endorsements, and the promise of quick solutions to issues that require multidisciplinary and sustainable approaches. The tension between proven clinical efficacy and safety in real practice constitutes the core of the problem, revealing that the transformation of medicines into aesthetic consumer products compromises both the integrity of health care and equity in access to treatments for those who really need it.

The findings of this study demonstrate that the risks associated with the inappropriate use of RA GLP-1 are significant and multifaceted, including gastrointestinal, metabolic, perioperative adverse effects, and potential impacts on male fertility, as well as psychological consequences related to pharmacological dependence and weight regain after treatment discontinuation. The critical analysis of the literature allowed us to understand that the efficacy of these medications, when dissociated from structured protocols that integrate nutritional, behavioral, and psychological interventions, results in temporary and unsustainable benefits, perpetuating a reductionist view of obesity that ignores its social, economic, and cultural determinants. The interpretation of the findings reveals that the trivialization of the use of Mounjaro and Ozempic is not a natural or inevitable phenomenon, but the result of deliberate choices by multiple actors, including the pharmaceutical industry, health professionals, the media, and consumers, who operate in a context of increasing medicalization of daily life and the commodification of health. The central question that emerges is not whether these drugs work, but for whom, under what conditions, with what long-term consequences, and at what cost to society.

The contributions of this study to the area are manifested in multiple dimensions. From a theoretical point of view, the research offers an integrated analysis that articulates pharmacological, clinical, social and regulatory evidence, overcoming fragmented approaches that tend to privilege only one of these aspects. From a practical point of view, the results provide subsidies for the formulation of public policies, clinical guidelines and health education strategies aimed at the rational use of GLP-1 RA, including the specification of eligibility criteria, monitoring protocols and prescription inspection mechanisms. From an ethical point of view, the study contributes to a critical reflection on the limits of medicalization, the risks of the commodification of health, and the need to protect vulnerable populations against inappropriate practices. However, important limitations are recognized, particularly the absence of primary data collected specifically for this investigation, which restricts the ability to explore contextual nuances of the Brazilian reality, and the possibility of publication bias, which can generate a distorted view of the efficacy and safety of these drugs. In addition,



the rapid evolution of knowledge in this area makes any literature review potentially outdated in the short term, requiring periodic updates to maintain the relevance of the findings.

It is suggested that future studies investigate the long-term effects of GLP-1 RA use in specific populations, particularly young people without formal therapeutic indication, pregnant women, and individuals with comorbidities, filling critical gaps in knowledge about reproductive, metabolic, and psychological consequences. Qualitative research that explores the motivations, perceptions, and experiences of users of these drugs can offer valuable insights into the factors that underpin trivialization and effective health communication strategies. Implementation studies that evaluate the effectiveness of clinical guidelines, prescription protocols, and educational campaigns in real practice contexts can contribute to the translation of scientific knowledge into concrete actions that promote the rational and safe use of these drugs. Finally, cost-effectiveness analyses that consider not only the direct costs of medicines, but also the indirect costs associated with adverse events, shortages, and impacts on equity in access, are essential to support public policy decisions. The final reflection that emerges from this study is that science, ethics, and collective well-being must prevail over commercial interests and aesthetic pressures, ensuring that therapeutic advances benefit those who really need them, without generating new risks or deepening existing inequalities in access to health.

#### REFERENCES

- ABUTAIMA, R., et al. (2024). Knowledge, attitudes, and practices towards the use of GLP-1 receptor agonists for weight loss among the general population in Jordan: A cross-sectional study. PLOS ONE, 19(12), e0314407. https://doi.org/10.1371/journal.pone.0314407
- BERNING, P., et al. (2025). Longitudinal analysis of obesity drug use and public awareness. JAMA Network Open, 8(1), e2457232. https://doi.org/10.1001/jamanetworkopen.2024.57232
- BEZERRA, T., et al. (2024). Perigos e consequências do uso indiscriminado de Ozempic no emagrecimento. Revista Foco, 17(6), e5289. https://doi.org/10.54751/revistafoco.v17n6-004
- BRENNAN, M., et al. (2025). Perioperative practice patterns of anaesthesiologists surrounding glucagon-like peptide-1 (GLP-1) agonist medications. Turkish Journal of Anaesthesiology and Reanimation, 53(2), 42–52. https://doi.org/10.4274/tjar.2025.241653
- JASTREBOFF, A. M., et al. (2023). Tirzepatide once weekly for the treatment of obesity in people with type 2 diabetes (SURMOUNT-2): A double-blind, randomised, multicentre, placebo-controlled, phase 3 trial. The Lancet, 402(10402), 613–626. https://doi.org/10.1016/S0140-6736(23)01200-X



- KAPAN, A., et al. (2025). Real-world insights into incretin-based therapy: Associations between changes in taste perception and appetite regulation in individuals with obesity and overweight: A cross-sectional study. Diabetes, Obesity and Metabolism, 27(9), 5008–5018. https://doi.org/10.1111/dom.16548
- KAWAI, T., et al. (2020). Structural basis for GLP-1 receptor activation by LY3502970, an orally active nonpeptide agonist. Proceedings of the National Academy of Sciences, 117(47), 29959–29967. https://doi.org/10.1073/pnas.2014879117
- LEITE, A., et al. (2023). Perda de peso associada ao uso de semaglutida: Eficácia e mecanismo de ação. Brazilian Journal of Implantology and Health Sciences, 5(5), 3095–3103. https://doi.org/10.36557/2674-8169.2023v5n5p3095-3103
- LIU, X., et al. (2025). Coverage and prior authorization policies for semaglutide and tirzepatide in Medicare Part D plans. JAMA Network Open, 8(8), e2529842. https://doi.org/10.1001/jamanetworkopen.2025.29842
- MIRANDA, A., et al. (2025). Análise do uso do Ozempic para perda de peso e tratamento da obesidade na atualidade: Uma revisão integrativa. Brazilian Journal of Implantology and Health Sciences, 7(1), 1768–1781. https://doi.org/10.36557/2674-8169.2025v7n1p1768-1781
- OLIVEIRA, L., et al. (2024). Medidas para o emagrecimento: Um estudo sobre a associação de medidas dietéticas e medicamentosas. Brazilian Journal of Implantology and Health Sciences, 6(11), 1708–1719. https://doi.org/10.36557/2674-8169.2024v6n11p1708-1719
- PLESSIS, S., OMOLAOYE, T., & MAYA, W. (2024). Potential impact of GLP-1 receptor agonists on male fertility: A fable of caution. Frontiers in Physiology, 15, Article 1496416. https://doi.org/10.3389/fphys.2024.1496416
- SILVA, F., ALVES, A., & PINTO, E. (2022). Effect of a low-carb and low-calorie diet on weight loss in overweight or obese patients. Clinical Medicine and Health Research Journal, 2(6), 295–301. https://doi.org/10.18535/cmhrj.v2i6.134
- SILVA, M., & SILVA, P. (2024). O uso da semaglutida no tratamento em pacientes com obesidade. Brazilian Journal of Biological Sciences, 11(25), e65. https://doi.org/10.21472/bjbs.v11n25-018
- SILVA, P., et al. (2024). Efeito farmacológico da tirzepatida sobre o emagrecimento e seus efeitos adversos: Uma revisão sistemática. E-Acadêmica, 5(3), e0753564. https://doi.org/10.52076/eacad-v5i3.564
- TAN, H., DAMPIL, O., & MARQUEZ, M. (2022). Efficacy and safety of semaglutide for weight loss in obesity without diabetes: A systematic review and meta-analysis. Journal of the ASEAN Federation of Endocrine Societies, 37(2), 65–72. https://doi.org/10.15605/jafes.037.02.14