

UNDERSTANDING THE ADOPTION AND PERCEPTIONS OF TIRZEPATIDE IN CLINICAL PRACTICE: A QUALITATIVE SYSTEMATIC REVIEW

DR. SHRINIDHI B*¹, DR. PREM BALAJI LANKAPOTHU²,
DR. SAI SINDHURI MARUVADA³, DR. S PREMKUMAR⁴,
DR. ARCHANA P⁵, DR. SARAVANAN⁶

¹JUNIOR RESIDENT - YEAR 3 , SAVEETHA MEDICAL COLLEGE, THANDALAM , CHENNAI - 60205

²JUNIOR RESIDENT - YEAR 3, SAVEETHA MEDICAL COLLEGE, THANDALAM , CHENNAI - 60205

³JUNIOR RESIDENT - YEAR 3, SAVEETHA MEDICAL COLLEGE, THANDALAM , CHENNAI - 60205

⁴JUNIOR RESIDENT - YEAR 1, SAVEETHA MEDICAL COLLEGE, THANDALAM , CHENNAI - 60205

⁵ASSISSTANT PROFESSOR , SAVEETHA MEDICAL COLLEGE, THANDALAM , CHENNAI – 60205

⁶ASSOCIATE PREOFESSOR, DEPARTMENT OF BIOCHEMISTRY, SREE BALAJI DENTAL COLLEGE & HOSPITAL, CHENNAI, INDIA

Abstract

Background: A new type of dual GIP/GLP-1 receptor agonist tirzepatide has proven to be very effective in the treatment of type 2 diabetes and obesity conditions and has resulted in tremendous drops in HbA1c levels and body weight. Although it was pharmacologically successful, its actual uptake is affected by other factors other than clinical effectiveness such as patient beliefs, provider attitudes, and other system-related factors. The qualitative systematic review given will focus on the synthesis of the feedback and attitudes of both patients and medical personnel towards the use of Tirzepatide in clinical practice.

Methodology: The systematic literature search was done on March 2025 using PubMed and Google Scholar according to PRISMA. The screening of the studies and the selection of the right ones was based on the established inclusion and exclusion criteria, and the target was the qualitative study on Tirzepatide in the clinical context. Eight studies were found eligible. The extraction of data was conducted in accordance with the CASP Qualitative Checklist, and the process of thematic synthesis was applied with the help of the framework by Thomas and Harden in the determination of analytical themes in the context of participant narratives and interpretations by the authors.

Results: The eight studies that were included were mainly USA, Saudi Arabia and Croatia and although the study participants were diverse, they included patients, dietitians, and general practitioners. Five significant themes came out including (1) emotional and psychological effects of treatment, (2) physical health benefits and perceived effectiveness, (3) motivation and behavior change, (4) support systems and shared decision-making, and (5) the barriers to continuation and concerns. Although patients reported the better confidence, energy, and health outcomes, gastrointestinal side effects, financial barriers, loss of insurance coverage, and reluctance of providers were reported.

Conclusion: The adoption of Tirzepatide in the clinical setting is associated with a multilateral interaction of emotional, physical, social, and systemic factors. Although the drug can be considered as very effective and life-enhancing, its continued use needs to overcome such obstacles as cost, side effects, and familiarity among the providers. Promoting patient-provider communication, providing further training to the providers and equal access to Tirzepatide through policy adjustments are essential to maximize the clinical potential of Tirzepatide. Future research ought to consider the wider demographic representation and the long-term patient participation that would help in informing the collaborative and sustainable implementation planning.

1. INTRODUCTION

Type 2 diabetes and obesity is arising chronic and progressive conditions with overlapping pathophysiologies (Ruze et al., 2023). Although pharmacological and lifestyle interventions to the conditions are widely available, the maintenance of glycemic control and weight loss has remained a challenge. Under such difficult constraints, Incretin based therapies have been a developing possibility in the past years. Tirzepatide is an artificial peptide drug that duplicates glucose-dependent insulinotropic polypeptide (GIP), and glucagon-like peptide-1 (GLP-1) incretin hormones (Liu, 2024). Currently marketed as Mounjaro® (for type 2 diabetes) and Zepbound™ (for chronic weight management) for treatments. It has been clinically efficient incretin based dual agonist reductions in HbA1c levels and body weight compared to conventional therapies (Jastreboff et al., 2023, Tang et al., 2022, Frías et al., 2021)

The mechanisms of action of tirzepatide therapeutic effects are multidimensional. Tirzepatide stimulates glucose-dependent insulin release by GLP-1 and GIP receptors simultaneously, accelerating insulin secretion and satiety together (Forzano et al., 2022, Dutta et al., 2021). This dual effect is believed to achieve better glycemic control along with tackling obesity through lipid metabolism and suppression of appetite. Studies point to the fact that weight loss due to tirzepatide is independent of consumption (Qin et al., 2024), which denotes a direct metabolic effect (Samms et al., 2021). Moreover, the duality of the receptors has been associated with an increased insulin sensitivity that gives added value beyond mere weight loss (Thomas et al., 2020).

Although the evidence base that shows the clinical benefits of Tirzepatide is increasing at a high rate, its application to real-life scenarios is constrained. This is because there is a combination of factors which do not fall entirely within the pharmacodynamics domain. The penetration of tirzepatide in the everyday clinical practice relies on the group attributes of patient compliance, prescriber behavior, perceived effectiveness, cost and availability of the drug. Besides, cultural background, comorbid diseases, emotional response to treatment, and history with anti-diabetic drugs render some of the additional adjustments to the perception and use of Tirzepatide by patients and clinicians. The proposed systematic review will focus on providing evidence and critically analyzing qualitative studies associated with the factors affecting the perceptions and experiences of the stakeholders towards the use and adoption of Tirzepatide in clinical practice. The research will also establish the major obstacles and enable clinical adoption of Tirzepatide in the treatment of type 2 diabetes and obesity. By integrating qualitative findings in thematic form, the review will produce new knowledge about what determines the optimal use of Tirzepatide and what evidence gaps are critical and should be filled in the future.

2. METHODS

The literature search was conducted in March 2025 with publicly available databases such as PubMed and Google scholar. The qualitative systematic review has been reported according to the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA).

Search Terms

(tirzepatide) AND ("healthcare professional" OR clinician OR doctor OR nurse OR pharmacist OR patient) AND (perception OR attitude OR experience OR adoption OR implementation OR "real-world use") AND (qualitative OR "focus group" OR interview OR "thematic analysis" OR "grounded theory")

Study Selection Process

All the articles were imported to EndNote 20, and the duplicates were removed before the screening. The titles and the abstracts of the identified articles were screened by two independent reviewers according to the preconceived inclusion criteria. Detailed evaluation of full-text articles was then done to conclude on the final eligibility. In case of any disagreement between the reviewers, the disagreement was discussed and a third and the fourth reviewer were consulted in case a consensus was to be made. To make the review reproducible and transparent, the results of the selection of the studies were recorded in a PRISMA flowchart.

Inclusion criteria

- Study Design: Qualitative studies (e.g., interviews, focus groups, ethnographic research, grounded theory)
- Participants: Healthcare professionals and/or patients involved with Tirzepatide therapy
- Intervention: Tirzepatide used for type 2 diabetes or obesity
- Outcomes: Reported perceptions, attitudes, experiences, facilitators or barriers to use
- Language: English
- Date Range: 2015–2025
- Setting: Any clinical or healthcare setting globally

Exclusion criteria

- Quantitative or mixed-methods studies without extractable qualitative data
- Studies focusing on other drugs or therapies without mention of Tirzepatide
- Editorials, commentaries, or reviews
- Preclinical or mechanistic studies

Quality Appraisal and Data Extraction

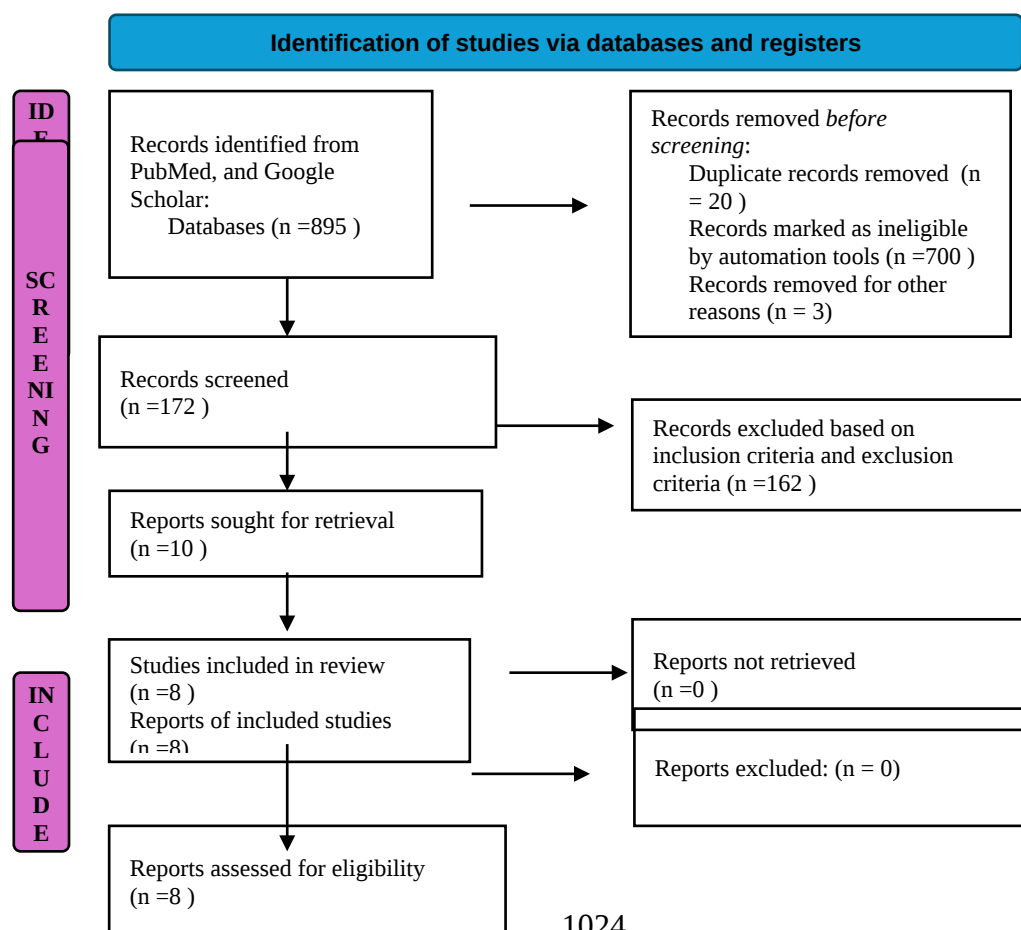
The methodological quality appraisal was performed by two independent reviewers by using CASP Qualitative Checklist to determine the rigor of each included study. A discussion and consensus were reached in case of any difference between reviewers. All the studies were not omitted based on quality scores, rather, the appraisal was used in interpreting the findings. Qualitative data were systematically collected using a standardized data extraction form that included the information on the population in which the study was conducted, the setting, the geographical location, the study design, the methods used to collect and analyze data, the key findings, illustrative quotes and the reported barriers and facilitators of the adoption and perception of Tirzepatide in the clinical practice.

Data Synthesis

The qualitative data included in the qualitative studies were synthesized based on Thomas and Harden (2008) outline of thematic synthesis type of synthesis (Thomas and Harden, 2008). Systematic three-stage process of identification, interpretation and integration of qualitative findings in varied contexts were involved in this method. During the first stage, all the extracted qualitative data, such as quotes by participants and interpretations by the authors, were coded line-by-line to create initial codes with the main concepts and experiences. During the second step, the codes were categorized under descriptive themes that were related to the content and context of the original data to a great extent. The last step was the creation of analytical (higher order) themes that went beyond the main research to provide new interpretation, insights, and conceptual understandings as to adoption and perception of Tirzepatide in clinical practice. The themes were discussed, refined and finalized by the review team to make them consistent, conceptually clear and relevant to the review objectives.

3. RESULTS

Figure 1 PRISMA 2020 flow diagram for the qualitative systematic review



There was a total of 895 articles through the electronic search. The references were uploaded into EndNote 20 and duplicate ones were excluded. The preliminary title screening based on inclusion and exclusion criteria was carried out by two independent reviewers. During this point, titles were not lost when chances were not certain whether they were qualified to have them. After the preliminary screen, 172 articles were chosen to read the abstracts. The abstracts were then graded independently and as either accepted, not accepted or uncertain. Differences or decisions that were not clear were discussed among the reviewers and the third and fourth reviewer was consulted where necessary to make a consensus. A total of eight articles passed the eligibility criteria and were included in the final synthesis after this process. Cross-referencing of included studies did not provide any other relevant articles.

Characteristics of Included Studies

The eight studies involved had different designs, population of the participants, and clinical settings, yet they provided a wide range of opinions about the use of Tirzepatide. Studies were mostly done in the USA with other contributions made by Saudi Arabia and Croatia hence a combination of both western and non-western health care settings. The study designs were mostly qualitative studies based on interview, exit interviews, and mixed-methods, and there was a focus on experiential data of both patients and healthcare providers.

Table 1 Characteristics of the included qualitative studies exploring perceptions and adoption of Tirzepatide.

Study	Country	Design	Setting	Sample Size	Participants	Data Collection	Analysis
(Haggerty et al., 2024)	USA	Qualitative descriptive study	Medical weight management clinic	22	Insured female patients	Semi-structured interviews	Qualitative content analysis
(Despain and Hoffman, 2024)	USA	Qualitative interview study	Registered dietitians in clinical practice	13	Registered dietitians	Zoom interviews	Qualitative content analysis (Graneheim & Lundman)
(Carmichael et al., 2025)	USA	Exit interview study- Qualitative	SURMOUNT-4 clinical trial sites	86	Patients from SURMOUNT-4 trial	Online interviews	Content analysis
(Almaqawi et al., 2024)	Saudi Arabia	Qualitative cross-sectional study	University polyclinic	10	GLP-1 users during Ramadan	Semi-structured interviews + IPAQ	Thematic narrative and framework analysis
(Matza et al., 2022)	USA	Qualitative exit interview study	SURPASS-2 and -3 trial sites	28	T2D patients' post-trial	Telephone interviews	Thematic coding using ATLAS.ti
(Kurevija et al., 2025)	Croatia	Mixed qualitative - methods study	Primary care clinics	168	General practitioners	Survey (incl. open-ended responses)	Content analysis + logistic regression
(Boye et al., 2023a)	USA	Qualitative concept elicitation + cognitive interviews	SURPASS-2 and -3 trials	48	Patients with T2D	Exit cognitive interviews +	Thematic analysis
(Boye et al., 2023b)	USA	Mixed qualitative-study	SURPASS-1 to -5 trials	Not specified (trial-level data)	Trial participants with T2D	Validated questionnaires	Comparative and thematic analysis

The number of participants in the samples was 10-168 subjects and included patients with type 2 diabetes (T2D) and those taking GLP-1 agonists and healthcare professionals (dietitians and general practitioners). Some of the data collection strategies were semi-structured interviews, telephone or zoom interviews, and validated questionnaires, whereas content analysis, thematic analysis, and logistic regression were some of the most frequently used techniques of data analysis. All in all, the research articles used suitable qualitative research techniques to obtain the subtle experiences of the adoption, perception, and implementation challenges of the Tirzepatide in the real-world clinical and cultural settings.

Review Findings

Eight findings were extracted and synthesized into five themes such as emotional and psychological impact of treatment, physical health benefits and perceived efficacy, motivation and behavioral change, support systems and shared decision-making, barriers to continuation and concerns.

Emotional And Psychological Impact Of Treatment

The respondents in multiple studies reported that Tirzepatide was a breakthrough in their emotional state and managing diabetes on their own. The drug encouraged more confidence, hope and a new feeling of control of their health (Carmichael et al., 2025, Matza et al., 2022). Emotional motivation was highly associated with the perceived success of the drug as one of the participants in the exit interview by Carmichael et al. said, *“This medication provided me with the push I needed”*. Patients felt less of failure as compared to the previous treatment as noted by Boye et al. Almaghawi et al. mentioned that the religious/cultural context of fasting had a positive effect on the sense of personal purpose and resilience (Boye et al., 2023b). Some of them were even discouraged in the start when they experienced the side effects like nausea but at one point most of them were emotionally contented and empowered. Such emotional response was both the result and the motivation to adherence, which indicates the relevance of addressing not only the clinical but also the psychological part of the issue.

Physical Health Benefits and Perceived Efficacy

The improvement in physical health was one of the primary factors that led to satisfaction with treatment in the studies reviewed. The participants often claimed to have lost a lot of weight, improved blood glucose control, and experienced more energy during the day, which led to the improved quality of life (Boye et al., 2023b, Carmichael et al., 2025, Matza et al., 2022).

Author, Year, Country	Participant details	Study aims and methodology	Data collection and analysis method	Key themes and illustrative quotes	Barriers/facilitators and adoption experiences
(Haggerty et al., 2024)	22 insured female patients in a weight management clinic	Explore impact of discontinued insurance coverage on obesity medication; qualitative descriptive study	Semi-structured interviews; qualitative content analysis	Hope turned to hopelessness, perceived injustice, stigma in care, generational views on treatment	Insurance discontinuation as barrier; perception of inequity in obesity care
(Despain and Hoffman, 2024)	13 registered dietitians experienced in GLP-1 RA patient care	Explore communication strategies for GLP-1 RA therapy; qualitative semi-structured interviews	Zoom interviews; qualitative content analysis using Graneheim and Lundman framework	Need for structured lifestyle support, communication aids, individualized plans	Facilitators: visuals, structured counselling; Barriers: GI side effects, undernutrition concerns
(Carmichael et al., 2025)	86 SURMOUNT-4 participants (83% female; mean age 49.9)	Understand patient experience using tirzepatide; qualitative exit interview study	Online interviews; content analysis	Improved energy, appetite control, QoL, injection ease	Facilitators: perceived benefits; Barriers: GI side effects
(Almaqawi et al., 2024)	10 adults using semaglutide or tirzepatide during Ramadan	Explore fasting impact on physical activity and weight reduction in GLP-1 users; qualitative study	Semi-structured interviews + IPAQ; thematic narrative and framework analysis	Motivation fluctuations, family influence, energy shifts	Barrier: reduced activity during fast; Facilitator: spiritual/motivational support
(Matza et al., 2022)	28 SURPASS-2 and SURPASS-3 participants (64% female; mean age 57.6)	Capture patient experience with tirzepatide; qualitative exit interviews	Phone interviews; thematic coding using ATLAS.ti	Weight loss, improved glycemic control, increased energy, reduced appetite	Facilitator: strong treatment outcomes; Barrier: nausea
(Kurevija et al., 2025)	168 GPs managing 23036 T2D patients	Explore GP experience and confidence prescribing GLP-1 RAs and SGLT2is; mixed methods	Survey with open-ended responses; logistic regression + qualitative content review	Low confidence tied to unfamiliarity with side effects and new protocols	Barriers: lack of knowledge, side effect fear; Facilitators: protocol clarity
(Boye et al., 2023a)	28 patients in SURPASS-2 and 3: cognitive interviews with 20 others	Develop Emotional Impact of Diabetes Treatment Questionnaire (EIDTQ); qualitative development study	Exit interviews + cognitive testing; concept elicitation analysis	Positive emotions: hope, confidence; few negative impacts	Facilitators: emotional gains; Barriers: limited, minor concerns
(Boye et al., 2023b)	SURPASS 1–5 participants; PRO data across 5 clinical trials	Evaluate patient-reported outcomes on tirzepatide; mixed-method PRO study	EQ-5D-5L, IWQOL-Lite, DTSQ, daily activity performance; comparative and thematic analysis	QoL improvements, satisfaction with treatment, better physical function	Facilitator: enhanced QoL; Barrier: typical GLP-1 GI effects

During the SURMOUNT-4 interviews, one of the participants said, “*I can now take walks with my grandchildren and do not have to take a break*”, which implies the regained functional capacity. Boye et al. also discovered that many participants considered Tirzepatide to be more effective than the past medications, which further motivated them. These physical outcomes reinforced a belief in the treatment's efficacy and encouraged behavioral changes such as improved diet and physical activity. Although certain participants had a difficult time with side effects such as nausea at the beginning of the process, they were usually compensated by the evident health benefits and the feeling of accomplishment. The physical advantages in general were a feedback loop, which reinforced the adherence and increased confidence in dealing with type 2 diabetes.

Motivation and Behavioral Change

In several studies, Tirzepatide was always reported to be a driving force towards making and maintaining healthy lifestyle changes. The participants stated that the apparent outcomes, including weight loss and better glucose levels, motivated them to change their habits towards healthier ones (Boye et al., 2023b, Carmichael et al., 2025, Matza et al., 2022). One of the participants of the SURMOUNT-4 interviews said: “I was so motivated to change more, because I saw the results so fast, I joined a gym!” (Carmichael et al., 2025). This was a common theme of feedback between the success of treatment and the change of personal behavior. Matza et al. [16] stated that patients tended to be more dedicated to the planning of meals, controlling the portions, and engaging in regular physical activity when they noticed improvements. According to Boye et al. [6], the feeling of improvement contributed to accountability and individual responsibility. Even those participants who had difficulty in sustaining behavior change before reported Tirzepatide as a reset point. Such results indicate that in addition to pharmacological effectiveness, the drug was also important psychologically to trigger long-term behavioral involvement.

Support Systems and Shared Decision-Making

The presence of healthcare providers and family members was also an important factor in the treatment adherence and satisfaction with Tirzepatide (Boye et al., 2023b, Matza et al., 2022, Kurevija et al., 2025). Patients underlined the importance of shared decision-making process, free communication, and individualized communication. As one of the participants stated, “*they were in control of the decision because their doctor explained everything clearly*” (Matza et al., 2022). The long-term engagement was crucial through trust and continuity with the providers. Boye et al. also emphasized that clear explanations allowed patients to know what to expect during treatment and become less anxious. Conversely, Kurevija et al. noted that not all general practitioners were willing to prescribe GLP-1 therapies because of the systemic barriers, which indicated the necessity to provide education and institutional support (Kurevija et al., 2025). The positive effects of emotional and logistical support of family members were also noted in terms of daily routine and adherence to injections.

Barriers to Continuation and Concerns

Despite the positive experience, a number of barriers to the continuation of Tirzepatide were reported by patients: side effects, cost, and insurance (Boye et al., 2023a, Despain and Hoffman, 2024, Haggerty et al., 2024). The most common physical complications were nausea, stomach complications and injection fear mainly in early use. These effects used to decline over time but in the early stages, it interfered with compliance among some of them. Haggerty et al. were concerned with systemic obstacles, where the changes in policies caused the abrupt end of treatment, and patients felt naked and defenseless (Haggerty et al., 2024). On the same note, Despain and Hoffman also added that the absence of dietary advice by a provider lowered the prospect of the GLP-1 therapy, especially when the patients had not received nutritional modification trainings (Despain and Hoffman, 2024). These findings indicate how important it is to take action to manage clinical and external barriers such as policy advocacy, education and individualized care to enhance retention and outcomes of treatment.

4. DISCUSSION

The current systematic review summarized qualitative evidence to understand the perceptions and experiences of patients, as well as healthcare providers about using Tirzepatide in clinical practice. It also described major obstacles and enablers which affect its undertaking in the management of type 2 diabetes and obesity.

Perceptions of Tirzepatide in Clinical Practice

When it comes to answering the first question of the review, the results are uniform in the fact that Tirzepatide has received a positive perception among the patients and healthcare providers. The theme of the emotional and psychological impact of the therapy became one of the central ones. In various studies, the participants have stated experiencing a feeling of enhanced hope, restored confidence, and improved control of health after initiation of Tirzepatide (Boye et al., 2023b, Carmichael et al., 2025, Matza et al., 2022). This emotional change was often associated with apparent changes in health outcome including weight loss and

improved glycemic control. Such advancements, in their turn, increased the level of patient's involvement and adherence to the treatment process. Besides emotional advantages, physical health results discussed, including better energy levels, appetite control, and mobility, confirmed the effectiveness of the drug (Boye et al., 2023b, Carmichael et al., 2025). Such results supported the process of changing behavior, such as eating habits, physical activity, and medication compliance (Matza et al., 2022). The treatment was frequently explained as life-altering in the long-run in terms of lifestyle, meaning that it had more to offer than merely the pharmacologic effect.

Barriers and Facilitators to Adoption and Implementation

The review unearthed several facilitators to the adoption of Tirzepatide in clinical practice. Among the main facilitators were the support of the family, the culturally congruent motivation (e.g., fasting during Ramadan), and the good relations between the patient and the provider (Almaqhawi et al., 2024, Kurevija et al., 2025, Matza et al., 2022). Patient trust and increasing adherence were made possible by shared decision-making and effective, compassionate communication by medical workers. On the other hand, several obstacles could be observed as well. The most frequent side effects of early days were nausea and gastrointestinal discomfort, which occasionally interfered with compliance in that period (Boye et al., 2023a, Despain and Hoffman, 2024). But these impacts usually wore off in the long run and they were more than compensated by the perceived advantages. Even more critical structural issues were the high cost of the treatment and the insurance coverage termination, especially, in the U.S. healthcare environment, which exposed patients to the danger of treatment lapse and emotional imbalance (Haggerty et al., 2024). Also, provider reluctance, which was caused by the lack of knowledge of newer dual agonists, was an obstacle in a particular context (Kurevija et al., 2025).

Implications for Practice

In general, this review provides insights into multidimensionality of Tirzepatide adoption. The success of the drug in the real-world environments is determined by its clinical efficacy and clinical performance; however, it can be determined by the emotional wellbeing, education of the patient and the cultural values and the health policy issues that lie within the system. An individualisation of support network and the training of providers as well as a fair access to the support through insurance or policies changes could dramatically improve adoption and sustained adherence.

5. CONCLUSION

The given systematic review has given thorough qualitative understanding of the perceptions and experiences that patients and health practitioners have in the practical management of type 2 diabetes and obesity on the use of Tirzepatide. The results highlight the multiple factors; Tirzepatide has been shown to be not only an effective clinical therapy but also a therapy that empowers and helps with a sense of agency that not only encourages the patient to change but may also improve the engagement of the patient. Good emotional health, physical health gains, and well-built support group have become the major enforcers in adherence and satisfaction. Nevertheless, lack of accessibility to healthcare and system-related barriers as well as limited provider familiarity in terms of side effects, cost, etc. are also still big problems. Cognizance of such elements by engaging the patient-centered communication, provider training, and ameliorative health policy, will be significant to modernizing the clinical use of the Tirzepatide. Future studies ought to be investigated using a wide variety of populations, sustained follow-up, and changes within the health system to foster equal implementation. In general, the psychosocial aspects and systemic factors, in combination with the clinical results, will become the keys to the optimal application of Tirzepatide in everyday practice.

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