THE ASSOCIATION OF MAHARASHTRA OBSTETRIC & GYNAECOLOGICAL SOCIETIES
AMOGS

मिशन मी मिशन स्त्री

DELPHI CONSENSUS

ON OBESITY IN WOMEN: WEIGHT LOSS

COORDINATORS

Dr. Nandita Palshetkar
Dr. Ameya Purandare
Dr. Hrishikesh Pai
Dr. Rohan Palshetkar

Science Integra®

Weigh the transformation with,

ONCE-WEEKLY

poviztra®

semaglutide injection 2.4 mg

An innovator semaglutide for patients with obesity or who are overweight

Transformative weight loss

≥20%

weight loss achieved by 1 in 3 patients*[1]

Proven to reduce CV events

20%

risk reduction in CV death heart attack, and stroke†[2]

*40.6% of patients achieved 20% weight loss. Mean Baseline bodyweight 102.5 ± 25.3 in STEP 8 for Poviztra® patients.
†MACE hazard ratio, 0.80; 95% CI, 0.72 to 0.90, CV: cardiovascular.

References: 1. Rubino D, et al. JAMA. 2022;327:138–150. **2.** Lincoff M, et al. N Engl J Med. 2023;389(24):2221-2232.

Generic Name:
Semaglutide Injection (0.25 mg/0.5 mg/1 mg/1.7 mg/2.4 mg), solution for injection (r-DNA Origin) in pre-filled pen
Brand Name: Poviztra® FlexTouch®
Presentation: Poviztra® FlexTouch® is available in 0.25 mg, 0.5 mg, 1.0 mg, 1.7 mg and 2.4 mg. **Indication: Weight Management:** Semaglutide Injection (Poviztra®) is indicated as an adjunct to a reduced calorie diet and increased physical activity for chronic weight management in adults with an initial body mass index (BMI) of 30 kg/m^2 or greater (obesity) or 27 kg/m^2 or greater (overweight) in the presence of at least one weight-related comorbid condition (e.g., hypertension, type 2 diabetes mellitus, or dyslipidemia). Limitations of Use: Poviztra® should not be co-administered with other semaglutide containing products or with any other GLP- 1 receptor agonist. The safety and effectiveness of semaglutide in combination with other products intended for weight loss, including prescription drugs, over-the-counter drugs, and herbal preparations, have not been established. Poviztra® has not been studied in patients with a history of pancreatitis. **Established cardiovascular disease:** Semaglutide Injection (Poviztra®) is indicated to reduce the risk of major adverse cardiovascular events (cardiovascular death, non-fatal myocardial infarction, or non-fatal stroke) in adults with established cardiovascular disease and either obesity or overweight. **Description:** Poviztra® is a clear and colourless solution for injection in pre-filled disposable pen. **Dosing and administration:** The maintenance dose of semaglutide 2.4 mg once-weekly is reached by starting with a dose of 0.25 mg. To reduce the likelihood of gastrointestinal symptoms, the dose should be escalated over a 16-week period to a maintenance dose of 2.4 mg once weekly. In case of significant gastrointestinal symptoms, consider delaying dose escalation until symptoms have improved. **Method of administration:** Subcutaneous use. Poviztra® is administered once weekly at any time of the day, with or without meals. It is to be injected subcutaneously in the abdomen, in the thigh or in the upper arm. The injection site can be changed. It should not be administered intravenously or intramuscularly. The day of weekly administration can be changed, if necessary, as long as the time between two doses is at least 3 days (>72 hours). After selecting a new dosing day, once-weekly dosing should be continued. Patients should be advised to read the instruction for use included in the package leaflet carefully before administering Poviztra®. **Special Population:** No dose adjustment is required based on age. Therapeutic experience in patients ≥85 years of age is limited. No dose adjustment is required for patients with mild or moderate renal impairment. Experience with the use of semaglutide in patients with severe renal impairment is limited. Semaglutide is not recommended for use in patients with severe renal impairment (eGFR <30 mL/min/1.73m^2) including patients with end-stage renal disease. No dose adjustment is required for patients with mild or moderate hepatic impairment. Experience with the use of semaglutide in patients with severe hepatic impairment is limited. Semaglutide is not recommended for use in patients with severe hepatic impairment and should be used cautiously in patients with mild or moderate hepatic impairment. The safety and efficacy of semaglutide in children below 12 years of age have not been established. **Contraindications:** Hypersensitivity to the active substance or to any of the excipients. **Special warnings and precautions:** In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded. Patients should be advised of the potential risk of dehydration in relation to gastrointestinal side effects and take precautions to avoid fluid depletion. Acute pancreatitis has been observed with the use of GLP-1 receptor agonists. Patients should be informed of the characteristic symptoms of acute pancreatitis. If pancreatitis is suspected, semaglutide should be discontinued; if confirmed, semaglutide should not be restarted. Caution should be exercised in patients with a history of pancreatitis. In the absence of other signs and symptoms of acute pancreatitis, elevations in pancreatic enzymes alone are not predictive of acute pancreatitis. Semaglutide should not be used as a substitute for insulin in patients with type 2 diabetes. Semaglutide should not be used in combination with other GLP-1 receptor agonist products. It has not been evaluated and an increased risk of adverse reactions related to overdose is considered likely. Patients treated with semaglutide in combination with a sulfonylurea or insulin may have an increased risk of hypoglycaemia. The risk of hypoglycaemia can be lowered by reducing the dose of sulfonylurea or insulin when initiating treatment with a GLP-1 receptor agonist. The addition of Poviztra® in patients treated with insulin has not been evaluated. In patients with diabetic retinopathy treated with semaglutide, an increased risk of developing diabetic retinopathy complications has been observed. Rapid improvement in glucose control has been associated with a temporary worsening of diabetic retinopathy, but other mechanisms cannot be excluded. Patients with diabetic retinopathy using semaglutide should be monitored closely and treated according to clinical guidelines. There is no experience with Poviztra® in patients with type 2 diabetes with uncontrolled or potentially unstable diabetic retinopathy. In these patients, treatment with Poviztra® is not recommended. **Use in special populations (Fertility, pregnancy and lactation):** Women of childbearing potential are recommended to use contraception when treated with semaglutide. There are limited data from the use of semaglutide in pregnant women. Therefore, semaglutide should not be used during pregnancy. If a patient wishes to become pregnant, or pregnancy occurs, semaglutide should be discontinued. Semaglutide should be discontinued at least 2 months before a planned pregnancy due to the long half-life. Semaglutide should not be used during breast-feeding. The effect of semaglutide on fertility in humans is unknown. **Drug Interaction:** Semaglutide delays gastric emptying and could potentially influence the absorption of concomitantly administered oral medicinal products. No clinically relevant effect on the rate of gastric emptying was observed with semaglutide 2.4 mg, probably due to a tolerance effect. Semaglutide should be used with caution in patients receiving oral medicinal products that require rapid gastrointestinal absorption. Paracetamol: Semaglutide delays the rate of gastric emptying as assessed by paracetamol pharmacokinetics during a standardised meal test. No clinically relevant effect on paracetamol was observed with semaglutide. No dose adjustment of paracetamol is necessary when administered with semaglutide. Oral contraceptives: Semaglutide is not anticipated to decrease the effectiveness of oral contraceptives as semaglutide did not change the overall exposure of ethinylestradiol and levonorgestrel to a clinically relevant degree, when an oral contraceptive combination medicinal product (0.03 mg ethinylestradiol/0.15 mg levonorgestrel) was co-administered with semaglutide. Atorvastatin: Semaglutide did not change the overall exposure of atorvastatin following a single dose administration of atorvastatin (40 mg). Atorvastatin C_{max} was decreased by 38%. This was assessed not to be clinically relevant. Digoxin: Semaglutide did not change the overall exposure or C_{max} of digoxin following a single dose of digoxin (0.5 mg). Metformin: Semaglutide did not change the overall exposure or C_{max} of metformin following dosing of 500 mg twice daily over 3.5 days. Warfarin & other coumarin derivatives: Semaglutide did not change overall exposure or C_{max} of R- and S-warfarin following a single dose of warfarin (25 mg), and the pharmacodynamic effects of warfarin as measured by the international normalised ratio (INR) were not affected in a clinically relevant manner. However, cases of decreased INR have been reported during concomitant use of acenocoumarol and semaglutide. Upon initiation of semaglutide treatment in patients on warfarin or other coumarin derivatives, frequent monitoring of INR is recommended. **Undesirable Effects:** In 4 phase 3a trials, 2,650 patients were exposed to Poviztra®. The duration of the trials were 68 weeks. The most frequently reported adverse reactions were gastrointestinal disorders including nausea, diarrhoea, constipation and vomiting. In general, these reactions were mild or moderate in severity and of short duration. Other undesirable effects being delayed gastric emptying, dysgeusia, dizziness and intestinal obstruction. **Shelf life:** Before use: 36 months; After first use: 6 weeks. Store below 30°C or in a refrigerator (2°C to 8°C). **Storage:** Keep this medicine out of the sight and reach of children. Store in a refrigerator (2°C to 8°C). Do not freeze and do not use Poviztra® if it has been frozen. After first use: Store below 30°C or in a refrigerator (2°C to 8°C). Keep the pen cap on when the pen is not in use in order to protect it from light. Always remove the injection needle after each injection and store the pen without a needle attached. **Disclaimer:** The abbreviated package insert is updated from the CDSCO approved package insert (File no. r-DNA-15011(12)/27/2025-eoffice (e-office no. 29097) dated 30 Oct 2025). Poviztra® FlexTouch®, NovoFine® and Apis bull logo is a registered trademark owned by Novo Nordisk A/S and registered in Denmark. Imported by: Novo Nordisk India Private Limited, Bangalore. Marketed by: EMCURE PHARMACEUTICALS LTD, 255/2, Hinjawadi,Pune – 411 057, India.
*For full prescribing information, please contact +91-8040303200 or write to us at INAgree@novonordisk.com or reach us at Novo Nordisk India Pvt Ltd, NXT Tower-2, Floor 1&2, Embassy Manyata Business Park, Nagavara Village, Kasaba Hobli, Bangalore – 560 045, India.

Note: For detailed information on this product, please refer to full package insert*.
This material is developed by: Novo Nordisk India, Private Limited,
NXT Tower -2, Floor 1 & 2, Embassy Manyata Business Park, Nagavara Village, Kasaba Hobli, Bangalore-560 045, India.

For the use of HCPs or medical practitioners only.
The photographs are only for illustrative purposes.

The photographs are only for illustrative purposes.

Emcure cure and beyond

Emcure Pharmaceuticals Ltd.
Plot No. P-1 & P-2, IT-BT Park, Phase-II, M.I.D.C., Hinjawadi, Pune - 411057
Tel: +91 20 39821000 • Website: www.emcure.com
/emcurepharmaofficial /emcurepharma /emcurepharma

For the use of a Registered Medical Practitioner or a Hospital or a Laboratory only.
For any medical query, please write to us on emquest@emcure.com
To report any adverse event or product complaint, please write to Safety.IN@emcure.com

Message from President

Dear Colleagues,

Obesity is increasingly becoming a significant public health concern and is associated with several metabolic, reproductive, and long-term health complications. As healthcare professionals, it is important not only to address its clinical management but also to strengthen awareness, early identification, and preventive strategies among patients and the wider community.

It gives me great pleasure to share that the initiative of Delphi Consensus on Obesity was successfully conducted under the aegis of AMOGS across three locations—Mumbai, Kolhapur, and Nagpur.

I would like to extend my sincere appreciation to all the experts and participants who contributed their valuable insights and experience to this academic exercise. The discussions and collective deliberations across the three centers have helped shape a meaningful consensus on Obesity.

Such collaborative academic efforts strengthen our commitment to advancing knowledge, encouraging dialogue, and promoting best practices within our professional community.

I thank Science Integra for their dedication and efforts in making these meetings successful with the Scientific Content and Emcure for providing the academic grant. I look forward to continued participation and collaboration in future AMOGS initiatives.

Warm Regards

Dr. Ameya Purandare
President, AMOGS

PARTICIPANTS ACROSS THE 3 LOCATIONS

Coordinators

Dr. Nandita Palshetkar
Dr. Hrishikesh Pai
Dr. Ameya Purandare
Dr. Rohan Palshetkar

Mumbai	Nagpur (Online)	Kolhapur
Gynaecologist	**Gynaecologist**	**Gynaecologist**
Dr. Asha Dalal	Dr. Komal Chavan	Dr. Manishee Nagaonkar
Dr. Sujata Dalvi	Dr. Fessy Louis	Dr. Bharti Maheshwari
Dr. Niranjan Chavan	Dr. Laxmi Shrikhande	Dr. Priti Deshpande
Dr. Basab Mukherjee	Dr. Chaitanya Shembekar	Dr. Nilesh Balkawde
Dr. Rajendra Nagarkatti	Dr. Vaidehi Marathe	Dr. Revati Rane
Dr. Pradnya Changede	Dr. Parul Saoji	Dr. Indraneel Jadhav
Dr. Madhuri Mehendale	Dr. Manisha Ghate	Dr. Vanshika Kapoor
Dr. Jeetika Thakkar	Dr. Pranjal Sharma	
Dr. Ritu Hinduja	Dr. Seema Dande	
	Dr. Shreya Prabhu	
Allied Specialist	**Allied Specialist**	**Allied Specialist**
Dr. Ram Prabhu	Dr. Sushrut Babhulkar	Dr. Sachin Patil
Dr. Rajiv Kovil	Dr. Ashwini Khandekar	Dr. Bharat Kotkar
Dr. Lakshmi Nagendra	Dr. Ketan Pakhale	Dr. Rahul Borude
Dr. Aalika Banerjee		

Delphi Consensus on
Obesity in Women: Weight loss and beyond

Abstract:

Background: Obesity is a chronic, relapsing, multisystem disease with disproportionate consequences for women across the life course, including reproductive dysfunction, infertility, pregnancy complications, cardiometabolic disease (CVD), hypertensive disorders, and osteoarthritis. With the increasing burden of obesity in India and the availability of effective contemporary anti-obesity medications, clear, practice-oriented guidance is needed.

Objective: To develop expert consensus statements to guide comprehensive obesity assessment and management in women, emphasizing weight loss and benefits beyond weight reduction, including the role of pharmacotherapy (notably semaglutide) alongside lifestyle and multidisciplinary care.

Method: A two-round Delphi study was conducted using 20 evidence-based draft statements derived from a systematic literature review and relevant guidelines. A national panel of 45 experts from India (gynecology, orthopedics, bariatric surgery, and nutrition) rated statements on a 9-point Likert scale. Consensus was defined by a supermajority (>67% agreement), with grading based on level of agreement (Grade U–D). Quantitative agreement and mean scores were calculated; qualitative feedback underwent thematic analysis to refine statements between rounds. Statements not meeting criteria were revised and re-rated.

Results: Response rates were 100% in both rounds. Nineteen final consensus statements were endorsed (all >67% agreement), with 70% achieving near-unanimous or unanimous consensus (Grade A/U). Key outcomes included consensus that obesity should be managed as a chronic multisystem disease. Women should be routinely assessed for obesity and its comorbidities and managed within obstetrics and gynecology settings. Effective obesity management requires a multidisciplinary approach to optimize clinical outcomes.

Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) receptor agonists, including semaglutide and tirzepatide, were recognized as effective pharmacotherapeutic options for achieving clinically meaningful weight loss. Semaglutide, supported by extensive clinical trial evidence, including studies in women with conditions such as polycystic ovary syndrome (PCOS) and menopause-related weight gain, was identified as an important therapeutic option when integrated with structured lifestyle intervention for weight management.

Long-term follow-up and weight-maintenance strategies are essential components of effective obesity management. Sustained lifestyle interventions, behavioral support, and appropriate medical therapy are necessary to prevent weight regain and maintain metabolic improvements. Continuous monitoring within clinical care, including gynecological practice, helps optimize long-term health outcomes for women with obesity.

Conclusions: This Delphi consensus provides women-centered recommendations for routine obesity assessment and individualized multimodal management in India, supporting integration of lifestyle, therapy with effective pharmacotherapy including semaglutide.

Background

Obesity is a chronic, relapsing, multisystem disease characterized by excess adiposity that adversely affects metabolic, reproductive, cardiovascular, and musculoskeletal health.[1]. Its global prevalence has increased substantially over recent decades, with women disproportionately affected across age groups.[1,2] In India, obesity represents a growing public health concern and exerts profound effects on women's health across the lifespan through

mechanisms such as chronic inflammation, lipotoxicity, and hormonal dysregulation.[3-5] It contributes to the development and progression of polycystic ovary syndrome (PCOS), one of the most common endocrine disorders in reproductive-aged women.[6-9] Obesity is also independently associated with reduced fecundity and prolonged time to conception, and women with higher BMI are more likely to seek infertility-related services.[10,11]

Beyond reproductive implications, obesity significantly increases the risk of type 2 diabetes, CVD, metabolic dysfunction–associated steatotic liver disease (MASLD), and osteoarthritis. Although lifestyle modification remains foundational to management, long-term weight reduction with behavioral strategies alone is often modest. Emerging pharmacotherapies, particularly semaglutide, have demonstrated substantial and sustained weight loss with associated reproductive and cardiometabolic benefits. In this context, structured, evidence-informed consensus guidance is essential to optimize obesity management in women in India.

Method

Study design

A Delphi methodology was employed, beginning with a structured set of evidence-based statements derived from a systematic literature review and relevant clinical evidence and guidelines.

Expert panel

- **Composition:** Experts with established clinical or research experience in obesity, women's health, or related specialties.

Rounds

Round 1

A total of 19 draft statements circulated to the expert panel for rating on a 9-point Likert Scale (1 = strongly disagree, 9 = strongly agree). Consensus definition: ≥67% of panelists scoring 7–9.

Round 2

If statements failing to reach consensus were revised based on Round 1 feedback and re-circulated. New statements proposed by the panelists in Round 1 were added. Round 2 include 19 statements for consensus.

Data analysis

Quantitative: Agreement proportions and mean scores calculated; Qualitative: Thematic analysis of comments to inform statement revisions.

Grading of statements

After two Delphi rounds, the level of agreement for each statement was evaluated and categorized using a predefined grading scale (Table 1).

Table 1. Grading system

Grade	Level of agreement	Description
Grade U	100%	Unanimous consensus
Grade A	90–99%	Near-unanimous consensus
Grade B	78–89%	Strong agreement with minimal variance
Grade C	67–77%	Moderate agreement
Grade D	<67%	Below consensus threshold

A supermajority rule was applied to determine consensus, defined as agreement by more than 67% of the expert panel on a given statement.

The initial round consisted of 19 questionnaire items, answered by 45 expert panel. Over the course of the Delphi rounds and the subsequent in-person consensus meeting, expert panel. Our iterative changes throughout the process yielded 19 final statements, all with > 67% consensus all discussed below.

Results

Panel participation

- Round 1: 100% response rate
- Round 2: 100% response rate

Nineteen consensus statements were obtained after evaluation through a structured Delphi process. Overall, 13 of 19 statements achieved near-unanimous or unanimous agreement (Grade A/U), indicating strong convergence of expert opinion. No statement fell below the consensus threshold.

Prevalence of obesity: Focus on Indian women

01 CONSENSUS STATEMENT

Experts reported that the prevalence of obesity in clinical practice has increased by approximately 30–40%, particularly among women. Grade U

Discussion

According to the World Health Organization (WHO), overweight and obesity are defined as abnormal or excessive fat accumulation that presents a risk to health. Obesity is a chronic, relapsing disease arising from complex interactions between genetics, neurobiology, eating behaviours, and the broader environment.[1] In the last decades, obesity has increased across the globe, with an estimated 1 billion adults aged 20 years and older. The prevalence of obesity has increased over the past few decades, and women of all age groups are more susceptible to obesity as compared to men. The WHO, has estimated 2.5 billion adults to be overweight and 890 million to be obese globally, representing 43% of adults (43% of men and 44% of women) being classified as overweight.[1]

Furthermore, among children and adolescents (aged 5–19 years), obesity prevalence among girls is projected to increase from approximately 8% to 18% by 2035.[2] In India, obesity is emerging as a significant health concerns across all age groups more than 5% of adolescents are affected by overweight or obesity.[2] The Indian Council of Medical Research (ICMR)-India Diabetes (INDIAB) study has estimated 254 million adults to have generalized obesity and 351 million adults have abdominal obesity.[3] Overall, **40% of women** and 12% of men in the country are affected by abdominal obesity. The prevalence is even higher among **women aged 30-39 years (49.3%) and 40-49 years (56.7%)**. A substantial proportion of women with a normal BMI may still have abdominal obesity.[4]

- In this Delphi study, experts reported a 30–40% increase in obesity prevalence in clinical practice across specialties.

Obesity as a chronic disease and public health concern

02 CONSENSUS STATEMENT

Obesity should be managed as a chronic multisystem disease because it directly contributes to the development and progression of major comorbidities, including type 2 diabetes mellitus, MASLD, cancer, and autoimmune disorders. Grade U

Obesity is now recognized as a complex, chronic disease characterized by dysregulated neuroendocrine signaling, adaptive metabolic responses, and interactions between genetic, environmental, and behavioral factors. The burden of obesity often begins early in life; overweight and obesity in childhood and adolescence are strongly associated with persistence of obesity into adulthood and an increased risk of non-communicable diseases.[1] Beyond metabolic consequences, early-life obesity can affect psychosocial well-being and may influence pubertal timing and menstrual patterns. These early physiological and endocrine alterations may predispose women to long-term reproductive and metabolic complications.[5]

Obesity profoundly affects female reproductive physiology through mechanisms including hormonal dysregulation. Adipose tissue functions as an active endocrine organ, increases secretion of pro-inflammatory cytokines such as TNF-α and IL-6 contributes to insulin resistance and alters hypothalamic–pituitary–adrenal axis function. Additionally, there is hyperestrogenism that may cause menstrual irregularities, anovulation, and increased risk of endometrial pathology. Obesity is also closely linked to PCOS; a substantial proportion of women with PCOS are overweight or obese.[12]

Obesity adversely affects fertility by reducing fecundity and prolonging time to conception, independent of other reproductive factors such as age, parity, or menstrual regularity.[10,11] Consequently, women with obesity represent a significant proportion of individuals seeking infertility evaluation and treatment. Metabolic disturbances such as insulin resistance and hyperinsulinemia further stimulate ovarian androgen production, worsening ovulatory dysfunction and increasing the risk of type 2 diabetes and other metabolic disorders. In addition to reproductive effects, obesity contributes to broader health complications including CVD, MASLD, obesity-related cancers, osteoarthritis, and endocrine disorders such as subclinical hypothyroidism.[12-14]

Given its wide-ranging effects on reproductive, metabolic, and overall health, obesity has significant implications for gynecological care. Gynecologists

often serve as primary healthcare providers for women across multiple stages of life, including adolescence, reproductive years, and menopause. This position provides an important opportunity for early identification and management of obesity and its related comorbidities. Routine screening, counseling on lifestyle modification, and appropriate referral for multidisciplinary care can improve reproductive outcomes and reduce long-term health risks. Therefore, systematic evaluation and management of obesity should be an integral component of gynecological practice.[15]

Frameworks and multidisciplinary management

03 CONSENSUS STATEMENT

The panel strongly agreed that the 5As framework (Ask, Assess, Advise, Agree, Assist) should be used to guide obesity conversation in clinical practice. (Grade B)

Discussion

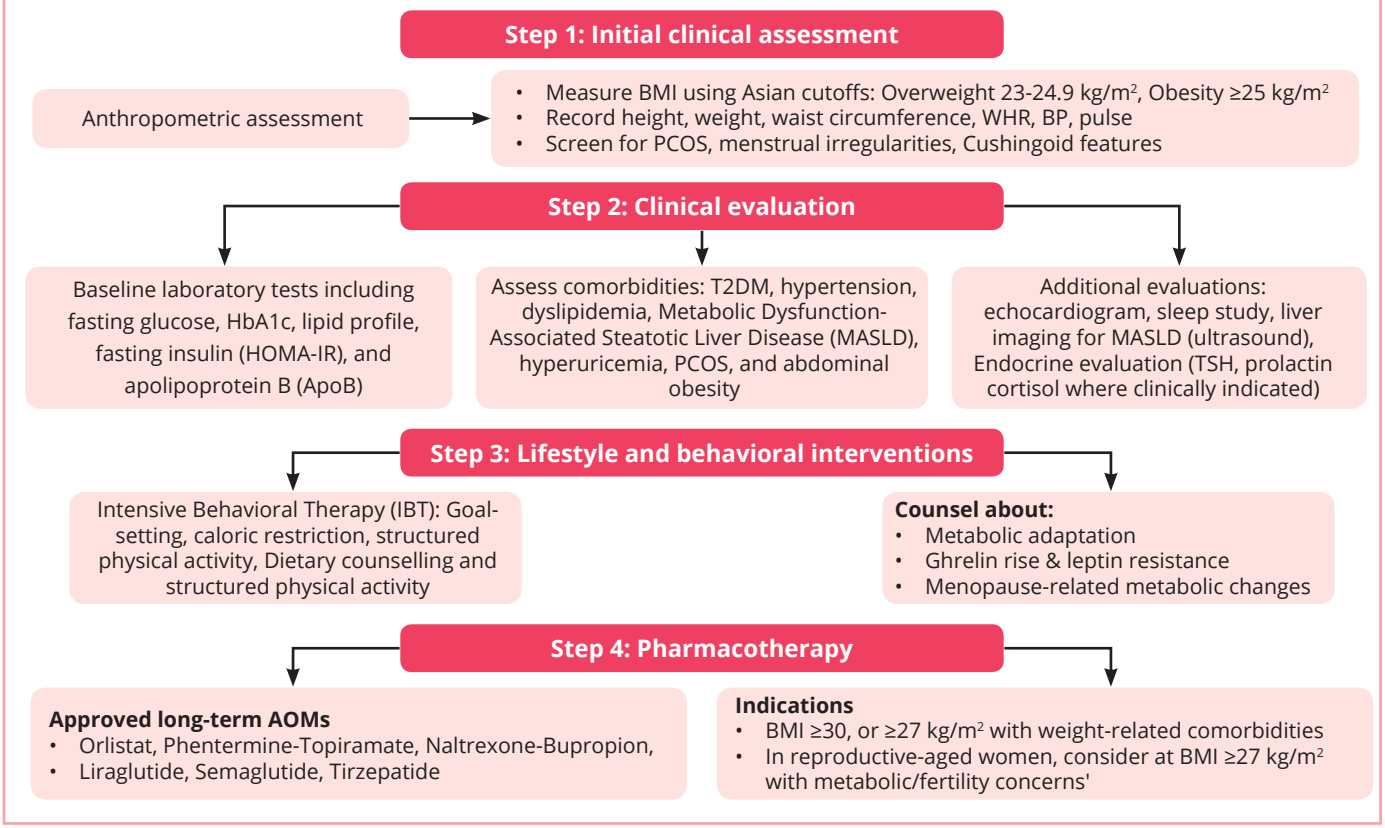
There was unanimous consensus (Grade U) regarding the need for a multidisciplinary approach to obesity management. Additionally, the collaborative role of nutritionists working alongside physicians achieved near-unanimous agreement (Grade A), underscoring the importance of multidisciplinary approach.

Behavioral-based clinical interventions should be regarded as a foundational element of a comprehensive, multimodal treatment strategy, as they enhance and help sustain the therapeutic benefits of pharmacotherapy. Clinicians should also educate patients about underlying biological mechanisms–such as increased ghrelin levels during caloric restriction, leptin resistance, and metabolic adaptation–that may contribute to resistance to weight loss, particularly in women.[16]

- A post-hoc analysis showed that greater weight loss was associated with a lower chance of ovulation dysfunction in women with PCOS.[17]

The pathophysiology of obesity involves dysregulation of energy balance, adaptive thermogenesis,

Algorithm 1. According to FOGSI, the management obese women should include:[16]



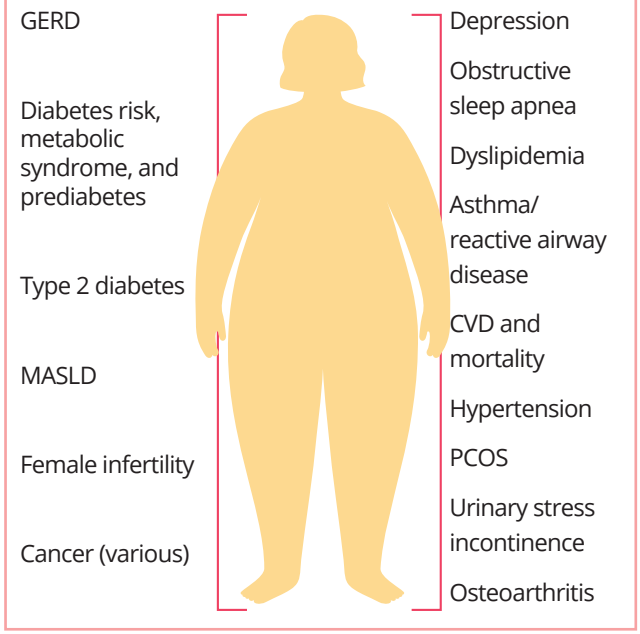
hormonal changes, and biological mechanisms that defend against weight loss. Understanding these processes helps explain weight plateaus, weight regain, and the need for long-term management. Effective care requires evidence-based assessment, targeted treatment strategies, and reduction of weight bias to support sustainable outcomes.[18] This implies that obesity involving multisystem disease, **M**anaging **O**besity **T**hrough **A**ction and **P**atient **A**wareness will have its significance. This synthesis is rooted in the evidence-based practices provided by the experts in this Delphi study. They opine that the 5As model can actively assist patients in realizing their weight loss goals.

Obesity and comorbidities

04 CONSENSUS STATEMENT

The panel agreed that PCOS is among the most commonly encountered obesity-related comorbidities specific to women in clinical practice. Diabetes and hypertension were also consistently identified as highly prevalent comorbid conditions. Infertility, MASLD, GERD, osteoarthritis, and sleep apnea were also reported to be frequently encountered, though with comparatively lower consensus. (Grade B/C)

Figure 1. The wide range of obesity-associated comorbid conditions



Discussion

PCOS is among the most common endocrine disorders affecting women of reproductive age, with an estimated prevalence ranging from 5% to 13%.[19] Epidemiological evidence further indicates that a substantial proportion of women diagnosed with PCOS—approximately 38% to 88%—are either overweight or obese.[20]

Researchers have reported that obesity promotes hepatic steatosis and progression to fibrosis and cirrhosis through insulin resistance, visceral adiposity, inflammation, and gut microbiota dysbiosis, type 2 diabetes mellitus, increased risk of CVD, including hypertension, dyslipidemia, risk of cancer, GERD and obstructive sleep apnea.[21-23] Obesity and metabolic syndrome has also been shown to be involved in the pathogenesis of knee osteoarthritis not simply through increased mechanical loading but the systemic effects of obesity-induced inflammation.[24]

Impact of weight loss on obesity-related comorbidities

05 CONSENSUS STATEMENT

The panel reached strong consensus that weight loss results in meaningful clinical improvements across multiple obesity-related comorbidities. (Grade A/B)

Discussion

Experts identified the most consistent improvements in diabetes, hypertension, and osteoarthritis. Weight reduction was also associated with improvements in MASLD, PCOS, and infertility. Experts acknowledged potential benefits of weight loss on cancer risk, though with comparatively lower agreement.

Clinical evidence shows that even modest weight reduction leads to measurable health benefits. A weight loss of approximately 5–10% is associated with clear metabolic and reproductive improvements, and additional weight loss may yield further benefits. In women with PCOS and infertility, small reductions in body weight, beginning at around 2–5% can improve menstrual regularity and enhance fertility outcomes.[28]

06 CONSENSUS STATEMENT

Obesity management should be based on BMI thresholds, obesity-related comorbidities, and patient preferences, incorporating lifestyle therapy, pharmacotherapy, and bariatric surgery when appropriate. Grade A

Discussion

Lifestyle modification has long served as a foundational component of obesity management. However, lifestyle intervention alone is often insufficient to achieve or sustain clinically meaningful weight loss instead, it should be integrated within a comprehensive, patient-centered treatment strategy.[29,30] Such a framework typically includes structured physical activity, individualized nutritional counseling, behavioral therapy, and pharmacologic management when appropriate.[29, 31,32]

Importantly, the role and intensity of lifestyle interventions may differ depending on the treatment modality employed—whether lifestyle therapy alone, pharmacotherapy, or bariatric/metabolic surgery. With the emergence of more effective contemporary anti-obesity medications (AOM), including semaglutide and tirzepatide, which demonstrate substantially greater efficacy than earlier agents, it is essential to reassess how lifestyle strategies integrate with pharmacologic treatment. In this context, we examine two overarching considerations in which lifestyle factors are hypothesized to play a meaningful and complementary role alongside AOM.[33].

Comprehensive, multifactorial strategies are necessary to achieve meaningful weight loss and reduce long-term complications. Lifestyle interventions remain the foundation of treatment, focusing on sustained calorie restriction and increased physical activity through dietary and behavioral approaches.[34]

Although sustained weight loss in obese women is associated with meaningful health improvements, lifestyle and behavioral changes alone typically result in modest weight loss (3%–5%). Also, this weight loss is often difficult to maintain long term and may be insufficient to improve many adiposity-related complications. In addition to medical nutrition therapy and physical activity, pharmacotherapy, psychological support, and metabolic/bariatric surgery represent key treatment options. These interventions should be individualized to promote effective weight reduction and optimize overall health outcomes.[35]

BMI thresholds

07 CONSENSUS STATEMENT

The minimum BMI threshold ≥27 kg/m^2 is recommended for the initiation of Grade B

Overweight and obesity are defined by WHO as BMI of 25-29.9 kg/m^2 and a BMI ≥ 30 kg/m^2, respectively.[36] As per CDC:[37] Overweight: 25.0 to <30, Kg/m^2; Obesity is subdivided into categories:

- Class 1: BMI of 30 to <35 kg/m^2
- Class 2: BMI of 35 to <40 kg/m^2
- Class 3: BMI of 40 kg/m^2 or higher

Pharmacotherapy is recommended as an adjunctive treatment for adults with obesity (BMI ≥30 kg/m^2) and for individuals who are overweight (BMI ≥27 kg/m^2) in the presence of at least one obesity-related complication, such as type 2 diabetes, dyslipidemia, hypertension, MAFLD, obstructive sleep apnoea, or osteoarthritis.[38]

Pharmacotherapy in the management of obese women

08 CONSENSUS STATEMENT

Experts unanimously agreed that obesity in women should be routinely assessed and managed in obstetrics and gynecology practice due to its significant association with reproductive, infertility, pregnancy-related, and long-term cardiometabolic comorbidities, hypertensive disorders and osteoarthritis. Grade U

Discussion

Obesity is strongly associated with reproductive dysfunction, infertility, adverse pregnancy outcomes,

long-term cardiometabolic disease, hypertensive disorders, and musculoskeletal conditions such as osteoarthritis. Given these wide-ranging consequences, routine evaluation in gynecologic and obstetric settings represents a critical opportunity for early identification and risk reduction. A Grade U recommendation highlights the clinical urgency and practical importance of implementation.

A fundamental clinical assessment should be undertaken for all women with obesity to enable individualized and context-specific management. While comprehensive obesity evaluations may not always be feasible in busy clinical settings—particularly for healthcare professionals who are not obesity specialists—a focused assessment remains both practical and valuable. Such an approach allows for the identification of high-risk individuals, facilitates timely referral to multidisciplinary care when needed, and supports early intervention to mitigate disease progression and associated comorbidities.[39]

09 CONSENSUS STATEMENT

The expert panel unanimously agreed that a multidisciplinary approach to obesity management optimizes clinical outcomes. (Grade U)

Given that overweight and obesity are chronic, relapsing conditions, they necessitate sustained follow-up and long-term monitoring. Close multidisciplinary collaboration is essential to facilitate regular assessment, timely identification of lapses, and prompt intervention to optimize long-term outcomes.[40] A comprehensive strategy combining glucagon-like peptide-1–based pharmacotherapy with structured dietary modification and physical rehabilitation provides an integrated framework for the management of severe obesity and its associated comorbidities, thereby enhancing overall clinical outcomes.[41]

10 CONSENSUS STATEMENT

In patients with obesity and related comorbid conditions, the integration of pharmacotherapy with cognitive behavioral therapy is recommended to enhance treatment effectiveness. (Grade A)

Systematic review and meta-analysis reported that Cognitive Behavioral Therapy (CBT) with lifestyle changes is effective for weight loss and weight maintenance.[42] Adaptive treatment strategy in which early behavioral therapy is intensified with timely pharmacotherapy optimizes weight-loss outcomes.[43] The combination of CBT and AOM can provide a more planned treatment; CTB provides the psychological support needed to treat obesity, with a focus on improving diet and exercise.[44]

11 CONSENSUS STATEMENT

Semaglutide should be considered for obese PCOS, infertility with obesity. Grade A

Discussion

Treatment with subcutaneous semaglutide has been shown to be effective in promoting significant weight reduction and improving reproductive outcomes in women with obesity, prediabetes, and PCOS.[45] Similarly, semaglutide is effective in weight reduction and improving fertility in patients with obesity, prediabetes, and PCOS.[46]

12 CONSENSUS STATEMENT

Pharmacotherapy was recognized as an essential component of care, providing clinically meaningful weight loss. (Grade B)

Discussion

Pharmacotherapy in obesity facilitates clinically meaningful weight loss and important improvements in obesity-related health complications. Clinicians who treat people with obesity with or without obesity-related health complications should appropriately use pharmacotherapy as an integral part of their treatment paradigm.[35]

13 CONSENSUS STATEMENT

The expert consensus agreed that Semaglutide should be used in obesity management, particularly in patients with comorbidities such as PCOS, type 2 diabetes, osteoarthritis, and MASLD. (Grade B)

Discussion

Semaglutide is a glucagon-like peptide-1 receptor agonist (GLP-1 RA) initially developed for the treatment of type 2 diabetes. It has since been evaluated for use in individuals with overweight or obesity, including those without diabetes.[47] Clinical studies have demonstrated that semaglutide produces significant weight loss compared with placebo, even in non-diabetic populations.[48] Its mechanism of action involves mimicking the endogenous hormone GLP-1, which regulates appetite and energy intake. By activating GLP-1 receptors in the brain, semaglutide reduces appetite, enhances satiety, and decreases caloric intake, thereby promoting weight reduction.[49]

- Once-weekly Semaglutide 2.4 mg, used as an adjunct to lifestyle intervention, resulted in substantial and sustained weight reduction in adults with overweight or obesity.[50]
- Semaglutide 2.4 mg was associated with statistically significant improvements in systolic blood pressure, lipid parameters, C-reactive protein, physical functioning, and weight-related quality-of-life scores compared with placebo.[50]
- Carmina and colleagues evaluated the effect of Semaglutide (0.5 mg subcutaneously, once a week for 6 months) on body weight and insulin and glucose blood levels in 27 obese PCOS women who were unresponsive to a lifestyle program. The study authors stated that Semaglutide, was found to be highly effective in reducing excess body weight and improving metabolic health in obese patients with PCOS, who were unresponsive to lifestyle interventions. Semaglutide therapy caused an average weight loss of 7.6–11.5 kg over 3–6 months, with ~80% of patients achieving significant weight reduction, improved menstrual regularity, reduced androgen levels, and improved insulin sensitivity.[45]
- Semaglutide, due to its potent antiglycemic effect and weight loss advantages, could offer benefits for individuals with non-alcoholic fatty liver disease.[51,52]

14 CONSENSUS STATEMENT

In individuals with obesity and symptomatic knee osteoarthritis, once-weekly semaglutide is recommended due to its demonstrated benefits on weight reduction, pain relief, and physical function. (Grade A)

Discussion

According to STEP 9 study group, in patients with obesity and moderate-to-severe knee osteoarthritis pain, once-weekly injectable semaglutide led to significantly greater reductions in body weight and osteoarthritis-related knee pain compared with placebo.[53]

15 CONSENSUS STATEMENT

The panel agreed that semaglutide 2.4 mg is supported by evidence demonstrating significant improvements in body weight, glycemic control (HbA1c), and reduction in 3-point major adverse cardiovascular events (MACE). Grade A

Discussion

Davies et al. conducted a study in adults with overweight or obesity and type 2 diabetes to evaluate once-weekly subcutaneous Semaglutide as an adjunct to lifestyle intervention. A total of 1,595 patients were screened, of whom 1,210 were randomized to receive Semaglutide 2.4 mg (n=404), Semaglutide 1.0 mg (n=403), or placebo (n=403) for 68 weeks; women accounted for 50.9% of patients at baseline.[55] At week 68, mean body weight decreased by −9.6% with Semaglutide 2.4 mg compared with −3.4% with placebo, corresponding to an estimated treatment difference of −6.2 percentage points (95% CI −7.3 to −5.2; p<0.0001).[51]

- Waist circumference decreased by −9.4 cm with Semaglutide 2.4 mg compared with −4.5 cm with placebo, with an estimated treatment difference of −4.9 cm (95% CI −6.0 to −3.8; p<0.0001).

- HbA1c decreased by −1.6 percentage points with Semaglutide 2.4 mg, −1.5 percentage points with Semaglutide 1.0 mg, and −0.4 percentage points with placebo; the estimated treatment difference for Semaglutide 2.4 mg versus placebo was −1.2 percentage points (95% CI −1.4 to −1.0; p<0.0001).

Semaglutide 2.4 mg was associated with statistically significant improvements in physical functioning, and weight-related quality-of-life scores compared with placebo.

The SUSTAIN, 1-7 trials showed that semaglutide provides consistently superior and sustained glycemic control and weight loss. In SUSTAIN 6, semaglutide was also shown to significantly decrease the occurrence of cardiovascular events compared with placebo or standard of care.[54]

16 CONSENSUS STATEMENT

In obesity management, pharmacotherapy with semaglutide, along with structured lifestyle modification, enhances and sustains clinically meaningful weight loss. Grade U

Discussion

In a randomized, double-blind, placebo-controlled phase 3 trial involving 1,961 adults with overweight or obesity without diabetes (74.1% women), participants were assigned in a 2:1 ratio to receive once-weekly subcutaneous semaglutide 2.4 mg (n=1306) or placebo (n=655) for 68 weeks, alongside standardized lifestyle intervention. At week 68, semaglutide produced a mean weight reduction of 14.9% compared with 2.4% with placebo, yielding a significant treatment difference of −12.4 percentage points (p<0.001). A markedly higher proportion of patients receiving semaglutide achieved ≥5%, ≥10%, and ≥15% weight loss compared with placebo (all p<0.001). Significant reductions in waist circumference (−13.54 cm vs. −4.13 cm; p<0.001) were also observed, along with improvements in blood pressure, glycemic parameters, inflammatory markers, and lipid profile. Overall, semaglutide 2.4 mg, as an adjunct to lifestyle modification, resulted in substantial and sustained weight loss in adults with overweight or obesity.[50]

17 CONSENSUS STATEMENT

Nutritionists, in collaboration with physicians, should integrate GLP-1 receptor agonist therapy into structured meal planning and calorie-reduction programs to optimize therapeutic outcomes. Grade A

Discussion

Research emphasis is shifting from weight reduction alone toward a targeted strategy that combines semaglutide with evidence-based nutritional interventions may offer a more effective and sustainable pathway for long-term obesity management.[55]

18 CONSENSUS STATEMENT

Semaglutide consistently improves hunger regulation and satiety control, thereby facilitating significant weight loss and improved eating behavior management in individuals with obesity. Grade A

Discussion

Semaglutide has been demonstrated to significantly influence hunger and satiety in adults with obesity through central nervous system effects. In a double-blind, parallel-group trial of 72 participants, once-weekly subcutaneous semaglutide (titrated to 2.4 mg) administered over 20 weeks led to a 35% reduction in ad libitum energy intake compared with placebo. This was accompanied by reduced hunger and anticipated food consumption, along with increased feelings of fullness and satiety (all $p < 0.02$). Findings from the Control of Eating Questionnaire further showed improved eating control and fewer food cravings among participants receiving semaglutide ($p < 0.05$).[58] In another randomized, placebo-controlled crossover trial involving 30 participants, 12 weeks of semaglutide therapy resulted in a 24% reduction in total daily energy intake and enhanced appetite suppression, without an increase in nausea.[57] Furthermore, the STEP 5 trial in adults with overweight/obesity showed that semaglutide 2.4 mg improved short- and longer-term control of eating associated with substantial weight loss.[58]

Overall, the study showed that semaglutide consistently improves hunger and satiety control, contributing to significant weight loss and better management in individuals with obesity.

19 CONSENSUS STATEMENT

Semaglutide should be considered for weight management in perimenopausal, menopausal, and postmenopausal women with obesity, given its demonstrated benefits on weight reduction and quality of life. Grade U

Discussion

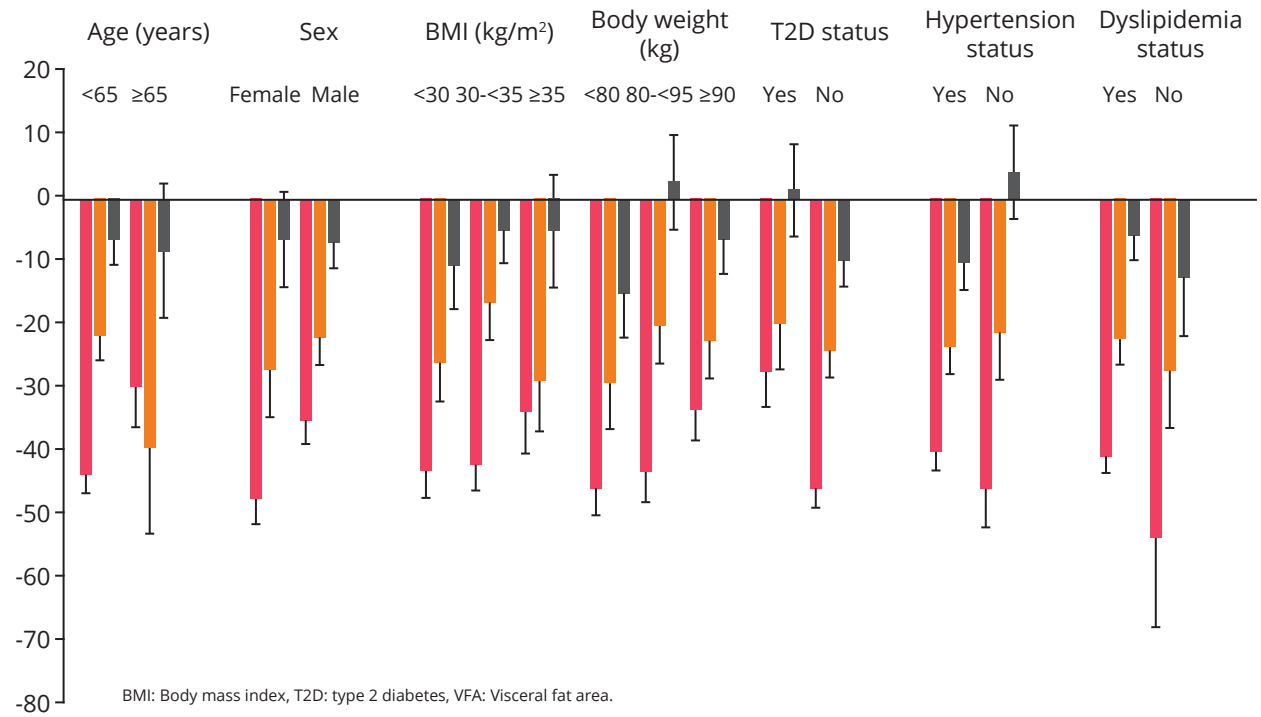
In a retrospective cohort study involving 106 postmenopausal women, semaglutide resulted in sustained weight loss in both hormone therapy (HT) users and non-users. However, women receiving HT experienced significantly greater percentage reductions in total body weight compared with those not on HT: 7±3% vs. 5±4% at 3 months (p=0.01), 13±6% vs. 9±5% at 6 months (p=0.01), 15±6% vs. 10±6% at 9 months (p=0.02), and 16±6% vs. 12±8% at 12 months (p=0.04). Despite these differences, semaglutide was effective overall in promoting weight reduction and improving cardiometabolic health among postmenopausal women.[59]

A post hoc analysis of the STEP 6 trial evaluated the relationship between visceral fat area (VFA) and clinical parameters and assessed the effect of semaglutide on visceral fat reduction in Japanese adults with obesity. Participants (≥20 years) were randomized to once-weekly semaglutide 2.4 mg, semaglutide 1.7 mg, or placebo, alongside lifestyle interventions for 68 weeks.[60]

Baseline VFA showed moderate positive correlations with body weight (r = 0.415), BMI (r = 0.374), and waist circumference (r = 0.458–0.555), indicating an association between visceral adiposity and key anthropometric indicators. Changes in VFA were also correlated with metabolic markers including lipids, liver enzymes, and plasminogen activator inhibitor-1 (PAI-1). Both semaglutide 2.4 mg and 1.7 mg significantly reduced VFA, Figure 2.

The study suggested that semaglutide effectively reduces visceral adiposity and improves metabolic risk parameters, supporting its role in obesity management and associated health outcomes.

Figure 2 Percentage change in abdominal VFA from baseline to week 68 with semaglutide 2.4 mg, semaglutide 1.7 mg, and placebo, by key subgroups



BMI: Body mass index, T2D: type 2 diabetes, VFA: Visceral fat area.

Researchers evaluated the effectiveness of semaglutide 1 mg over 4 months in reducing body weight and altering body composition in postmenopausal compared with premenopausal women.

Following four months of semaglutide therapy, both postmenopausal and premenopausal women experienced clinically meaningful reductions in body weight and fat mass. The mean weight loss was comparable between postmenopausal and premenopausal women (5.9 ± 5.2 kg vs. 4.5 ± 3.5 kg), corresponding to a percentage weight reduction of 5.8% and 5.1%, respectively. Similarly, reductions in fat mass (4.1 ± 4.5 kg vs. 3.1 ± 3.7 kg) and lean mass changes were comparable between postmenopausal and premenopausal women.

These results suggest that semaglutide may represent a promising therapeutic option for weight management across different stages of a woman's life course.

Strengths and limitations

This Delphi consensus featured several strengths. The resulting statements for which consensus was achieved reflect the views of experts with relevant expertise and experience. Although generated through a consensus process, these statements were derived from the medical literature and existing guidelines, and are therefore evidence-based. In addition, the high consensus threshold ensured that the recommendations were unequivocal. A limitation noted is the size of the expert panel may not be representative of all Indian states.

Conclusion

Obesity in women signifies reproductive, metabolic, cardiovascular, and musculoskeletal consequences. Its rising prevalence in India highlights the need for routine assessment and proactive management, particularly within obstetrics and gynecology practice.

This Delphi consensus emphasizes that obesity care should extend beyond weight reduction alone and adopt an individualized, multidisciplinary approach integrating lifestyle intervention, behavioral support, pharmacotherapy, and when appropriate, bariatric surgery. The panel recognized the growing role of effective AOM, particularly semaglutide, in achieving clinically meaningful and sustained weight loss when combined with structured lifestyle strategies. These consensus recommendations provide practical, evidence-informed guidance to support comprehensive, patient-centered obesity management in women.

References: **1.** Obesity and overweight [Internet] [Updated May 07, 2025]. Available at: https://www.who.int/news-room/fact-sheets/ detail/obesity-and-overweight. Accessed on January 27, 2026. **2.** Panda A, Parida J, Jena S, et al. Prevalence and associatedrisk factors of overweight and and obesity among adolescent population of India: a scoping review. BMC Nutr. 2025;11(1):110. **3.** Anjana R, Unnikrishnan R, Deepa M, et al. Metabolic non-communicable disease health report of India: the ICMRINDIAB national cross-sectional study (ICMR-INDIAB-17). Lancet Diabetes Endocrinol. 2023;11(7):474–89. **4.** Chaudhary M, Sharma P. Abdominal obesity in India: analysis of the National Family Health Survey-5 (2019-2021) data. Lancet Reg Health Southeast Asia. 2023;14:100208 **5.** Rubino D, Schon S. The impact of obesity on women's health. Menopause. 2025;32(Suppl 1):S3-S9. **6.** US Department of Health & Human Services Office on Women's Health. Polycystic ovary syndrome. Accessed October 22, 2024. https://www.womenshealth.gov/a-z-topics/polycystic-ovarysyndrome **7.** Hazlehurst JM, Singh P, Bhogal G, et al. How to manage weight loss in women with obesity and PCOS seeking fertility? Clin Endocrinol (Oxf) 2022;97:208–16. **8.** Ollila MM, Piltonen T, Puukka K, et al. Weight gain and dyslipidemia in early adulthood associate with polycystic ovary syndrome: prospective cohort study. J Clin Endocrinol Metab 2016;101:739–47. **9.** Barber TM, Hanson P, Weickert MO, Franks S. Obesity and polycystic ovary syndrome: implications for pathogenesis and novel management strategies. Clin Med Insights Reprod Health 2019;13:1179558119874042. **10.** Gesink Law DC, Maclehose RF, Longnecker MP. Obesity and time to pregnancy. Hum Reprod 2007; 22:414–20. **11.** Wise LA, Rothman KJ, Mikkelsen EM, et al. An internet-based prospective study of body size and time-topregnancy. Hum Reprod. 2010;25:253–64. **12.** Koliaki C, Dalamaga M, Kakounis K, Liatis S. Metabolically healthy obesity and metabolic dysfunction-associated steatotic liver disease (MASLD): Navigating the controversies in disease development and progression. Curr Obes Rep. 2025;14(1):46. **13.** Nedunchezhiyan U, Varughese I, Sun AR, et al. Obesity, inflammation, and immune system in osteoarthritis. Front Immunol. 2022;13:907750. **14.** Yan Y, Xu M, Wu M, et al. Obesity is associated with subclinical hypothyroidism in the presence of thyroid autoantibodies: a cross-sectional study. BMC Endocr Disord. 2022;22:94. **15.** Asma Ul Hosna, Yeasmin Dil Jannat, Munmun Nahar Lipi, Tabassum Tamanna (2024). The Impact of Obesityon Gynecological Health: A Comprehensive Overview. Sch Int J Obstet Gynec, 7(8): 352-357. **16.** Federation of Obstetric and Gynaecological Societies of India (FOGSI). Good Clinical Practice Recommendations (GCPR) on Obesity in Women. FOGSI; 2026. Accessed March 2, 2026. https://www.fogsi.org/wp-content/uploads/2026/02/GCPR-on-Obesity-in-Women.pdf **17.** Dietz de Loos ALP, Jiskoot G, Timman R, et l. Improvements in PCOS characteristics and phenotype severity during a randomized controlled lifestyle intervention. Reprod Biomed Online. 2021;43(2):298–309. **18.** Chamarthi VS, Daley SF. Obesity as a chronic disease: Epidemiology and pathophysiologic insights. [Updated 2025 Aug 27]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK618380/ **19.** Saydam BO, Yildiz BO. Weight management strategies for patients with PCOS: current perspectives. Expert Rev Endocrinol Metab. 2021;16(2):49–62. **20.** Barber TM, Franks S. Obesity and polycystic ovary syndrome. Clinical Endocrinology. 2021; 95(4): 531–41. **21.** Wang L, Wang Q, Xiong Y, Shi W, Qi X. Obesity and its comorbidities: current treatment options, emerging biological mechanisms, future perspectives and challenges. Diabetes Metab Syndr Obes. 2025;18:3427–45. **22.** Thalheimer A, Bueter M. Excess body weight and gastroesophageal reflux disease. Visc Med. 2021;37(4):267–72. **23.** Esmaeili N, Gell L, Imler T, et al. The relationship between obesity and obstructive sleep apnea in four community-based cohorts: An individual participant data meta-analysis of 12,860 adults. EClinical Medicine. 2025;83:103221. **24.** Shumnalieva R, Kotov G, Monov S. Obesity-related knee osteoarthritis-current concepts. Life (Basel). 2023 Jul 28;13(8):1650. **25.** Garvey WT, Mechanick JI, Brett EM, et al; Reviewers of the AACE/ACE Obesity Clinical Practice Guidelines. American Association of Clinical Endocrinologists and American College of Endocrinology comprehensive clinical practice guidelines for medical care of patients with obesity. Endocr Pract. 2016;22(suppl 3):1–203. **26.** Obesity and cancer. Centers for Disease Control and Prevention. Accessed February 4, 2024. https://www.cdc.gov/cancer/ obesity/index.htm **27.** Milner J, Beck M. The impact of obesity on the immune response to infection. Proc Nutr Soc. 2012;71(2):298–306. **28.** Ryan DH, Yockey SR. Weight Loss and Improvement in Comorbidity: Differences at 5%, 10%, 15%, and Over. Curr Obes Rep. 2017;6(2):187–94. **29.** Fitch A, Alexander L, Brown CF, Bays HE. Comprehensive care for patients with obesity: an obesity medicine association position statement. Obesity Pillars. 2023;7:100070. **30.** Jakicic JM, Rogers RJ, Apovian CM. Contemporary treatments for obesity: Physical activity in the context of anti-obesity medications. Transl J Am Coll Sports Med. 2024;9(2):2379. **31.** Jakicic JM, Apovian CM, Barr-Anderson DJ, et al. Physical activity and excess body weight and adiposity for adults. American College of Sports Medicine consensus statement. Med Sci Sports Exerc. 2024;56(10):2076–91. **32.** Martin MY, Rogers RJ. Relevance of behavioral research in the evolving state of anti-obesity medications: is the glass half empty or half full? Ann Behav Med. 2024;58(7):474–76. **33.** Rogers RJ, Hosking M, Burridge K, et al. The critical role of lifestyle with the use of contemporary obesity management medications. American Journal of Health Promotion. 2025;39(5):836–40. **34.** Idris I, Anyiam O. The latest evidence and guidance in lifestyle and surgical interventions to achieve weight loss in people with overweight or obesity. Diabetes Obes Metab. 2025;27 Suppl 2(Suppl 2):20–34. **35.** Pedersen SD, Manjoo P, Dash S, et al. Pharmacotherapy for obesity management in adults: 2025 clinical practice guideline update. CMAJ. 2025;197(27):E797–E809. **36.** Tchang BG, Aras M, Kumar RB, et al. Pharmacologic Treatment of overweight and obesity in adults. [Updated 2024 Aug 20]. In: Feingold KR, Adler RA, Ahmed SF, et al., editors. Endotext [Internet]. South Dartmouth (MA): MDText.com, Inc.; 2000-. **37.** Misra A, Vikram NK, Ghosh A, et al; India Obesity Commission Members. Revised definition of obesity in Asian Indians living in India. Diabetes Metab Syndr. 2025;19(1):102989. **38.** Forner P, Hocking S. Pharmacotherapy for the management of overweight and obesity. Aust J Gen Pract. 2025;54(4):196-? (Reprinted). The Royal Australian College of General Practitioners; 2025. PMID: 40174617. **39.** Sannidhi D, Abeles R, Andrew W, et al. Lifestyle medicine for obesity in the era of highly effective anti-obesity treatment. Nutrients. 2025;17(14):2382 **40.** Cochrane AJ, Dick B, King NA, et al. Developing dimensions for a multicomponent multidisciplinary approach to obesity management: a qualitative study. BMC Public Health. 2017;17:814. **41.** Zaidi M. Multidisciplinary clinical approach to severe obesity. Endocrine Practice. 31(9): S168. **42.** Kurnik Mesari K, Pajek J, Logar Zakrajšek B, et al. Cognitive behavioral therapy for lifestyle changes in patients with obesity and type 2 diabetes: a systematic review and meta-analysis. Sci Rep. 2023;13:12793. **43.** Tronieri JS, Ghanbari E, Chevinsky J. et al. Anti-obesity medication for weight loss in early nonresponders to behavioral treatment: a randomized controlled trial. Nat Med. 2025; 31, 1653–60. **44.** Egoshi M, Saito A, Nordeng L, et al. Retrospective study of cognitive behavioral therapy for obesity modified as FIRE method (CBT-F) in combination with medication for weight loss. Medicine (Baltimore). 2024;103(19). **45.** Carmina E, Longo RA. Semaglutide treatment of excessive body weight in obese PCOS patients unresponsive to lifestyle programs. J Clin Med. 2023;12(18):5921. **46.** Bolek T, Turnová P, Janosova S, et al. Effect of semaglutide with metformin for weight loss and fertility in polycystic ovary syndrome (PCOS) patients with obesity: A pilot prospective study. Clin Nutr ESPEN. 2026;71:102885. **47.** Collins L, Costello RA. Glucagon-Like Peptide-1 Receptor Agonists. 2024 Feb 29. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. PMID: 31855395. **48.** Bergmann NC, Davies MJ, Lingvay I, Knop FK. Semaglutide for the treatment of overweight and obesity: a review. Diabetes Obes Metab. 2023;25:18–35. **49.** Mahapatra MK, Karuppasamy M, Sahoo BM. Semaglutide, a glucagon like peptide-1 receptor agonist with cardiovascular benefits for management of type 2 diabetes. Rev Endocr Metab Disord. 2022;23:521–39. **50.** Wilding J, Batterham L, Calanna S, et al. STEP 1 study group. Once-weekly semaglutide in adults with overweight or obesity. N Engl J Med. 2021;384(11):989–02. **51.** Davies M, Færch L, Jeppesen O, et al. c A randomised, double-blind, double-dummy, placebo-controlled, phase 3 trial. Lancet. 2021;397(10278):971–84. **52.** Alfawaz S, Burzangi A, Esmat A. Mechanisms of non-alcoholic fatty liver disease and beneficial effects of semaglutide: A Review. Cureus. 2024;16(8):e67080. **53.** Bliddal H, Bays H, Czernichow S, et al; STEP 9 Study Group. Once-weekly semaglutide in persons with obesity and knee osteoarthritis. N Engl J Med. 2024;391(17):1573–83. **54.** Aroda VR, Ahmann A, Cariou B, et al. Comparative efficacy, safety, and cardiovascular outcomes with once-weekly subcutaneous semaglutide in the treatment of type 2 diabetes: Insights from the SUSTAIN 1-7 trials. Diabetes Metab. 2019;45(5):409–18. **55.** Barrea L, Annunziata G, Verde L, et al. A multidisciplinary perspective on semaglutide treatment and medical nutrition therapy in obesity management. Curr Obes Rep. 2025;14(1):73. **56.** Friedrichsen M, Breitschaft A, Tadayon S, et al. The effect of semaglutide 2.4 mg once weekly on energy intake, appetite, control of eating, and gastric emptying in adults with obesity. Diabetes Obes Metab. 2021;23(3):754–62. **57.** Blundell J, Finlayson G, Axelsen M, et al. Effects of once-weekly semaglutide on appetite, energy intake, control of eating, food preference and body weight in subjects with obesity. Diabetes Obes Metab. 2017;19(9):1242c51. **58.** Wharton S, Batterham RL, Bhatta M, et al. Two-year effect of semaglutide 2.4 mg on control of eating in adults with overweight/obesity: STEP 5. Obesity (Silver Spring). 2023;31(3):703–15. **59.** Hurtado MD, Tama E, Fansa S, et al. Weight loss response to semaglutide in postmenopausal women with and without hormone therapy use. Menopause.2024;31(4):266–74. **60.** Kadowaki T, Nishida T, Ogawa W, et al. Effect of once-weekly subcutaneous semaglutide on abdominal visceral fat area in Japanese adults with overweight and obesity: A post hoc analysis of the STEP 6 trial. Obes Res Clin Pract. 2025;19(2):146–53. **61.** Nicolau J, Blanco-Anesto J, Bonet A, et al. Effectiveness of low doses of semaglutide on weight loss and body composition among women in their menopause. Metab Syndr Relat Disord. 2025;23(1):70–76.

Science Integra®