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MINI REVIEW ARTICLE

Counselling and Behaviour Modification Techniques for the Management of Obesity in Postpartum and Midlife Women: A Practical Guide for Clinicians

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Abstract
Behaviour change is the basic foundation in the management of obesity. Such behaviour change is difficult to achieve due to several psychosocial and behavioural barriers that often remain unidentified and unaddressed in a weight management programme. This is even more challenging in postpartum and midlife women because of several biopsychosocial factors. The non-availability of psychologists or trained healthcare counsellors further complicates the attainment of behavioural changes. Therefore, clinicians, who are often the first point of contact for treating these population groups, are hamstrung by the lack of a multidisciplinary approach for weight reduction. Some of the common psychological, social and behavioural barriers have been identified in this article, and evidence-based techniques such as goal setting, stimulus control and cognitive restructuring are presented in a step-wise approach, to help clinicians cater to these population groups in a holistic manner.

Keywords Behaviour modification · Obesity · Postpartum · Midlife · Psychological intervention

Introduction

The rising prevalence of obesity among women has been emerged as a significant public health challenge in our country. According to the recent National Family Health Status (NHFS-5) data, more females are overweight or obese than males [1]. This can be partly attributed to the changes experienced by a woman during the process of childbirth. The weight gain during the postpartum period primarily gets distributed centrally, contributing to several metabolic complications as women progress to midlife [2].

The first line of obesity management is behavioural lifestyle modification, which is challenging due to various psychological, cognitive and situational barriers that often go unidentified and unaddressed in weight management programmes. Studies indicate that 80% of the patients who successfully lose weight regain it after a certain period of time because they are unable to comply with the necessary behavioural change in the long run [3, 4]. This behavioural change is even more challenging in postpartum and midlife women. Women undergo several biopsychosocial changes during the postpartum and midlife stage. These factors impact the overall motivation of the woman to lose weight, making the treatment of obesity more challenging.

In everyday clinical practice, behaviour management techniques are not executed adequately due to the lack of assistance from allied healthcare workers such as psychologists. Clinicians (Gynaecologists, Obstetricians and Physicians), who are generally the first point of contact for treating these population groups, are often hamstrung by the lack of a multidisciplinary approach towards weight loss treatment. The management of obesity can be improved by

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empowering clinicians with cognisance of counselling and behaviour modification techniques.

This article intends to address the common psychosocial barriers affecting the management of obesity in postpartum and midlife women and suggests a practical, patient-centred and evidence-based stepwise approach for counselling such patients.

Evidence-Based Effective Behavioural Intervention Techniques

Studies suggest that certain behavioural and cognitive strategies could be useful in the management of obesity (see Table 1).

1. *Goal setting:* Motivating strategies such as goal setting are used to direct the attention and action of an individual to choose appropriate strategies in achieving the pre-defined goals. Setting SMART (specific, meaningful, action-based, realistic and timely) goals have proved to be effective in changing eating behaviour and achieving weight loss in previously conducted studies. Studies have reported a significant weight reduction of up to 15% within 12 months with no tendency to regain for up to 6–12 months [5].
2. *Self-monitoring:* A technique to monitor behaviour, track progress and identify problematic areas. Individuals willing to lose weight monitor their calorie intake and physical activity and look for triggers that lead to unhealthy behaviour such as stress and social gatherings. Consistent self-monitoring is associated with significant weight loss [6]. Several studies have reported that self-monitoring leads to weight loss in up to 74% of the cases [6].
3. *Stimulus control:* This helps in modifying the environmental factors leading to unhealthy behaviour. The obese individuals are sensitive to consuming high-calorie food in contrast to normal-weight individuals. RCT's have reported a significant reduction in waist circumference in a 2-month follow-up as compared to the control group at (− 1.6 cm) [7]. Therefore, changing the environment can be used in promoting healthy behaviour.
4. *Problem-solving:* This approach can be taught to obese individuals to help them overcome problematic situations systematically. These help individuals in overcoming barriers and improving adherence, resulting in significant weight loss [8].
5. *Cognitive restructuring:* Negative thoughts that an individual may hold regarding their weight may impact an individual's behaviour. This can be identified and replaced with more adaptive ones using this technique. Cognitive restructuring is used in CBT and has proven to be useful in treating obese patients for weight loss. Studies have reported a significant weight loss ranging from 5 to 15% among the participants who completed the intervention [9, 10].
6. *Reinforcement:* Rewarding oneself on attaining a goal can be used to constantly motivate positive behaviour. Reinforcement learning has proven to be useful in attaining significant weight loss. Studies have exhibited slightly more weight loss among the intervention group in comparison to the control group (up to 7%) [10].
7. *Relapse prevention:* Relapse prevention techniques, which helps an individual to cope with situations that place the person at risk of returning to previous unhealthy behaviour, is an important component in any weight loss programme [11].

Incorporating Psychological Intervention Modalities in Weight Management Prescription: A Stepwise Approach

A stepwise approach to motivate, psycho-educate, identify the underlying psychological, social and behavioural issues and develop a therapeutic alliance is described below that can be incorporated in the different phases of the management of obesity:

Phase-1: Initiation of Weight Management Advice

The physiological changes during the various reproductive stages often lead to emotional instability resulting in unhealthy eating practices. Additionally, during this period women are more involved in household chores and childcare, having little or no time to devote to weight loss activities. Due to this excessive weight gain, these women are often discriminated against or stigmatised by family members, friends and society, resulting in various psychological issues. Body image issues and low self-esteem lead to a lack of motivation, impacting the adherence to their treatment plan [12].

Therefore, to challenge these negative beliefs and self-perception, women should be encouraged to communicate freely and should be assured of empathy by the treating clinician, which can be achieved by the following techniques (see Box 1 and 2):

1. *Avoid discrimination and stigmatisation:* Obese women are often stigmatised as having a lack of willpower and poor self-discipline. This leads to blaming rather than understanding the biological, social and psychologi-

Table 1 Techniques and strategies for behavioural change for weight management

Technique	Purpose	Application
Goal setting		
A technique to set pre-defined goals in order to motivate action	Setting small goal helps the patient in achieving the goals and gives a sense of accomplishment when goals are achieved	Setting a goal of 0.5 kg weight loss in a week Aligning weight loss goals with lifestyle-related goals For example: Limiting eating out to once a week Participating in physical activity daily
Self-monitoring		
The technique helps in keeping a record of the behaviour	The patient is encouraged to keep a track of their eating and physical activity routine, in order to become aware of their lifestyle	Maintain a journal to keep a record of the food intake and activity routine Identify the emotions which led to overeating Identify emotions after completing the physical activity routine
Problem-solving		
A technique to help the patient overcome any problematic situation	This helps an individual to look for adaptive solutions when facing difficulty in attaining behavioural change	Portion control while eating out at any festivities
Stimulus control		
The technique helps in identifying social and environmental cues that trigger unhealthy eating behaviour	Individuals undergoing weight loss intervention are taught to identify the triggers that may resort them to unhealthy eating practices and help them in changing the environment to provide healthy cues	Keep unhealthy food out of reach Keep healthy food in the front, in the refrigerator Delete food ordering applications from mobile
Cognitive restructuring		
The technique helps in identifying the negative emotions associated with weight gain or body image issues and help to replace them with adaptive ones	The shame or stigmatisation due to excessive weight and inability to adhere to the lifestyle changes often result in negative emotions. These emotions can trigger overeating resulting in relapse	Ability to distinguish between healthy and unhealthy choices Focusing on changing the body composition, biochemical parameters, by the combination of physical exercise and diet, rather than obsessing over the weighing scale Realising that fitness and health are beyond the "perfect size" endorsed by media
Reinforcement		
The technique is used to strengthen the desired behaviour and weaken an undesired one	The reinforcement technique helps in achieving the desired response because of the constant feedback or criticism	If the patient is showing progress, the clinician can reinforce them by allowing them to have a cheat day once a week
Relapse prevention		
The technique is used to help in sustaining and reinforcing the changed behaviour	Individuals are encouraged to maintain the lost body weight and follow a healthy lifestyle pattern	Encourage regular follow-ups Personalised feedback should be provided to the patient The patient can be encouraged to monitor the triggers and try to overcome them

Box 1 Techniques to avoid discrimination and stigmatisation

- The clinicians should try to be empathetic and non-judgemental
- Understand that obesity is a complex disease and is not fully under the control of the patient
- Clinicians should not use inappropriate words or should not try to body-shame the patient
- Maintain a healthy and positive relationship with the patient
- Clinicians should be trained in communication skills

Box 2 Techniques for motivational interviewing

- Provide a warm and comfortable environment to the woman
- Ask open-ended questions, this would help the clinician understand the knowledge, attitude and barriers that the woman faces because of the excessive weight
- Even if the woman discusses issues unrelated to the weight, those issues should be acknowledged by the clinician and should be empathetic about it
- Plan an agenda in consensus with the woman
- Guide the woman towards the desired plan and address issues if she is unable to work in the suggested direction

cal causes for obesity. The stigmatisation perpetuates a cycle of shame resulting in body image issues and associated mental health conditions. While treating a woman for obesity, the clinician should not bring their personal biases to the discussion. Instead, they should proactively counter the negative attitude towards excessive weight so that the woman feels at ease while engaging in the discussion.

2. *Motivational Interviewing:* It is observed that women seek medical help for comorbid conditions associated with obesity without recognising excessive weight gain as the root cause of the problem. It is the clinicians' role to make the women aware of obesity being the underlying cause, encourage them to adopt healthy behavioural practices and help them overcome any reluctance in undergoing lifestyle changes. Clinicians can make use of motivational interviewing (MI) technique to encourage women to actively participate, plan a goal as per their convenience and keep themselves focused on the goal. These sessions can be conducted in person or in a group of 4–5 women, one session a week for the initial two weeks. Sessions conducted in groups are proven to be more effective as women get to share their experiences with others in similar situations, which motivates all the group participants [13].

Once the women are open to considering this line of treatment, the next step is to assess psychological and behavioural barriers to the treatment.

Phase 2: Assessment of Psychological and Behavioural Barriers

In addition to regular clinical assessment, screening of psychological, social and behavioural parameters should also be initiated. First, the clinician should address the readiness to change among these women. Assessing the readiness to change helps in understanding how well the woman will be able to follow the corrective behaviour. A motivated woman is more likely to deliver promising results in comparison to the non-motivated ones. Tools such as The Readiness to Change Questionnaire (RCQ), a self-reported questionnaire can be used by the clinicians to assess the willingness for behavioural change. If the woman is willing to make changes in her lifestyle to achieve weight loss, the clinician can start with the treatment. But, in cases where the woman is not ready to undergo a drastic change in her lifestyle, it becomes necessary for the clinician to persuade her until she is motivated enough to take the next step. This step involves assessment of various psychological and behavioural components that usually go unaddressed in any lifestyle intervention programme, which are as follows:

1. *Underlying psychological issues:* Some common psychological issues identified at postpartum and midlife stages in women due to changes in physiological and social functions include insomnia, depression, stress, anxiety and eating disorders which could act as a potential hindrance in obesity treatment. Specific weight-related psychological issues like body image, self-esteem and motivation should be given enough consideration while assessing the women.
2. *Understand previous weight loss attempts:* Clinicians should try to track the weight loss history. The previous attempts shape the attitude and belief of the woman, defining the success of the current treatment plan. One common reason for unsuccessful previous attempts is inadequate knowledge about the concept of dieting. The misconceptions and myths regarding the difficulty of weight loss make the women disinterested in seeking any obesity treatment. Another factor is the lack of social support. Friends and family are constant motivators as they provide feedback and criticism. When a

woman is not able to seek support from her family and friends, it becomes difficult for her to comply with the treatment in the long run. Identifying the past issues and addressing them can help in better compliance with the treatment [14].

3. *Weight loss Goals and Expectations:* Women undergoing weight loss treatment often set unrealistic goals. This unrealistic expectation has a negative impact on the psychological well-being and performance that affects their effort towards weight loss. Inability to set a modest goal in weight loss results in distress and dissatisfaction in the long run. Therefore, clinicians should encourage these women to set realistic goals, which would help in attaining significant weight loss and well-being [15].
4. *Personal attributes/Intrinsic barriers:* Women often encounter intrinsic barriers towards weight loss over which they have limited control. Barriers such as hormonal imbalance, emotional eating, mood disorders and lack of mobility due to heavy menstrual flow or joint and back pain need to be taken into consideration by the clinician. Depending on the magnitude of the symptoms experienced, the woman should be referred to the relevant specialist for further assistance.
5. *Social and environmental cues:* Identifying obesogenic factors in a woman's family structure, work-life and social life such as religious dietary requirement as well as understanding environmental cues such as eating habits and physical activity is essential before the initiation of the treatment. The clinician should extensively analyse the contribution of each of these factors to be able to design a treatment plan accordingly.

After the analysis of these psychological and behavioural components, the next step is to enrol the woman for the treatment. Some of the behavioural therapy components that can be used in the treatment plan have been described in the next step.

Phase 3: Behavioural Techniques

The goal of any obesity treatment should be to achieve clinically significant weight loss (5–10%), treat comorbidities and promote overall well-being in an individual. Therefore, a comprehensive technique is the best approach to deal with the patient with obesity. The basic components are:

1. *Psychoeducation and goal setting:* Educating the woman as well as the family members about the problem of obesity and ways to manage it is an integral part of the obesity management programme. Providing sufficient knowledge and helping them set realistic goals will help in boosting the confidence of the woman and will help her follow the treatment in the long run.
2. *Healthy eating behaviour:* Techniques to promote healthy eating behaviour should be promoted. *Mindful eating* should be taught to these women. This technique involves the use of all the senses while eating, which will help in attaining satiety. Some of the behavioural techniques that can be promoted are *Portion control techniques* such as eating on a small plate, not using a phone or TV while eating, taking small bites, chewing thoroughly and scheduling the meals. These techniques can be incorporated into one's routine. But, if an individual deviates from their normal routine by eating out at a restaurant or going to a party, then *problem-solving techniques* can be taught. These include eating at home beforehand to avoid overeating while eating out or ordering mindfully.
3. *Encourage physical activity:* The physical activity routine should be accommodated in the lifestyle of the women willing to undergo weight loss. About 300 min of moderate-intensity workout per week or 150 min of intense workout is suggested in the literature. For a woman who is not able to follow this due to responsibilities at home or due to health conditions, clinicians can make use of behavioural techniques such as *setting small goals* in the beginning and suggesting *problem-solving techniques* when an individual is unable to follow the target.
4. *Addressing personal barriers*: Emotional eating is one of the most common reasons for overeating among women of this population group. They tend to eat high-calorie food when they are stressed or anxious. Eating is identified as one of the unhealthy coping strategies used by these women. Some of the cognitive and behavioural techniques that can be taught to these women are, adopting *healthy coping strategies* to manage the negative emotions, such as by talking to others, taking a break, or indulging in some activity of their choice when anxious or under stress. Women may also experience negative emotions due to body image issues and anxiety due to discrimination. These emotions need to be replaced with constructive thoughts as part of the *cognitive restructuring technique.*
5. *Addressing environmental barriers:* Issues such as lack of social support, living in an obesogenic environment and sedentary lifestyle are the common environmental barriers that promote weight gain. In such situations, it is necessary to educate close friends and family members about the disease and encourage them to motivate the patient. The patient should learn to identify environmental cues which lead to unhealthy eating behaviour. The clinician should encourage *stimulus control techniques* such as not keeping fried or high-calorie food at home, carrying a lunch box to work and promoting physical activity in daily routine to encourage weight loss.

These components can be used along with regular treatment to promote behavioural change in the long run. Once the clinician feels that the goal has been achieved, the programme can be terminated after mutually discussing with the patient. On termination of the treatment plan, the patient is encouraged to visit regularly for the follow-up sessions.

Phase 4: Maintenance and Follow-Up

The problem of relapse should be addressed during the termination of the programme. Women should be made aware of how relapse can put them into the same phase again. This will enable them to be more careful in identifying the triggers and will encourage them to make use of the techniques taught during the treatment phase.

Self-monitoring techniques can be taught to these women to help them keep a check on their progress and *positive or negative reinforcement* can be used according to whether they can adhere to the plan or not. The clinicians should try to maintain contact with their patients and encourage follow-ups. If the clinicians observe that the woman is not able to adhere to the diet or exercise routine, they should start working on the problem at that very moment. Personalised feedback should be provided in each follow-up session, as this would keep the patient motivated throughout.

Clinicians, the cornerstone for the management of obesity, often lack the availability of a multidisciplinary approach in all the primary care settings. Clinicians should be provided with the basic knowledge of psychosocial and behavioural barriers that play a significant role in the compliance of obesity treatment. This article provides information that can be used by the clinicians to identify the barriers and address the weight management issue using a scientific approach while dealing with postpartum and midlife obese women, holistically. The key recommendations are summarised below [16, 17]:

1. The patient should be evaluated for the presence of any psychiatric disorder especially depression, anxiety or eating disorder. Eg: Patient Health Questionnaire-2 can be used to screen for depression.
2. Referral to a psychiatrists or clinical psychologists should be considered if the clinical evaluation reveals any psychiatric comorbidity. Lack of motivation, interpersonal difficulties acting as a hinderance in the weight management plan should be identified and addressed during the treatment.
3. Techniques such as goal setting, self-monitoring, motivational interviewing, stimulus control, improving problem-solving skills, cognitive restructuring, reinforcement and regular feedback should be used during the process of weight management.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

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