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EDITORIAL

Clinical Practice Guidelines for Weight Management in Postpartum Women: An AIIMS-DST Initiative in Association with FOGSI

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Pregnancy and postpartum period is synonymous with weight gain. It is assumed to be an essential element in determination of foetal weight, and hence, most mothers are pampered with good foods. The notion of healthy eating has changed over the years and when combined with lack of activity can lead to metabolic syndromes [1]. Postpartum obesity has remained a clinical and public health challenge. The greater gestational weight gain is a strong predictor of higher postpartum weight retention [2]. The physiological and biological changes coupled with high-calorie intake and restricted physical activity may further augment the risk of higher postpartum weight retention, weight gain [3] and allied metabolic comorbidities later in life. [4–6].

Postpartum women are saddled with the tasks of infant care. They lack time, energy and motivation to manage or lose their excessive weight retained post-pregnancy. They fail to seek knowledge and counselling from healthcare providers about the diet they should consume and the physical activity they should engage in [4]. Subsequently, they follow the advice of their elders and start practising common socio-cultural myths such as consuming high-calorie foods and restricting physical activity [5]. These challenges and barriers not only impede the shedding of the extra weight retained but also escalate the risk of weight gain and associated health complications [6].

There is a great need for postpartum women to identify the implications of postpartum obesity. There is also need for healthcare professionals to treat postpartum women with greater competency, having a structured postpartum follow up with counselling and motivation for weight loss and investigations like haemoglobin, TSH and blood sugars at follow-up. Special consideration should be given to women belonging to low socioeconomic status who are grappling with obesity like their peers [7]. Bringing various healthcare professionals like obstetrician, counsellor, psychiatrist, medical specialist and women together in managing the postpartum weight.

The Government of India along with Department of Science and Technology, The Federation of Obstetric and Gynaecological Societies of India, Indian Menopause Society, Association of Physicians of India, Academy of Family Physicians of India, Association of Obstetricians & Gynaecologists of Delhi, Indian Dietetic Association and The Indian Society of Clinical Nutrition has attempted to form guidelines for this problem [8].

The summary of the recommendations is as follows:

Initiation of Discussion for Weight Management

a. When is the right time to counsel and engage women regarding postpartum weight management?

   At the time of preconception counselling or during antenatal visits whichever is earlier, sensitisation for weight management should be ideally initiated and reinforced at the time of discharge post-delivery. During the postpartum period, women should be motivated for lifestyle measures for appropriate body weight management [9].

b. What components of knowledge, attitude and practices should be evaluated at the time of initiation of discussion for postpartum weight management?

   Knowledge, attitude and practices related to diet, physical activity, associated socio-cultural myths and other psychological factors should be assessed either at first visit or subsequent visits. Women with pregnancy-related complications such as gestational diabetes mellitus, hypertensive disorders or metabolic complications such as obesity, diabetes, and hypertension and thyroid

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disorders should be informed about the added adverse effects of obesity on pregnancy and their future health [10].

c. Which healthcare providers should counsel women about their postpartum weight management?

The counselling of postpartum women for weight management should be done by a multi-disciplinary team consisting of obstetricians, dietitians and exercise experts/physiotherapists. Clinical psychologists, physicians and endocrinologists should also be involved in special situations. Weight management clinics should be set up at health facilities providing obstetric services and infant immunisation services [11]. During antenatal check-ups, the obstetrician should initiate the discussion regarding myths related to diets such as excessive intake of calorie-dense foods or galactagogues. Paediatricians should also sensitise mothers accompanying infants to the immunisation clinic, check their body mass index and advise healthy lifestyle measures for weight management or refer them to the weight management clinics.

d. What could be the effective ways of delivering pertinent information to women regarding postpartum weight management?

A combination of counselling techniques like face-to-face/group counselling, video conferencing and telephonic counselling should be used to counsel women regarding postpartum weight management. The counselling technique should take into account the socioeconomic and cultural background of postpartum women. Judicious use of social media platforms, educational material like leaflets, booklets, pamphlets, etc. should be done to disseminate information. Women should be empowered with self-monitoring weight management techniques, especially to monitor their diet and physical activity through diary, apps, etc. [12].

Screening and risk assessment of the target population for initiation of weight management advice

a. What BMI cut-off and other anthropometric parameters should be considered to determine the need to initiate postpartum weight management?

Preconception body weight must be considered while fixing the target weight gain during pregnancy. Overweight and obese women have needless gestational weight gain than underweight or normal-weight women. All postpartum women should be assessed at six weeks for their body mass index. Postpartum women with body mass index > 23 kg/m2 at six weeks should be involved in a weigh management program comprising lifestyle management and medical management as per the standard indications. Women belonging to the normal body mass index category (18.5–22.9 kg/m2) can be started with lifestyle management measures if they have:

- Retained more than four to five kilograms weight as compared to their pre-pregnancy body weight.
- Waist circumference more than 80 cm
- Waist-to-hip ratio greater than 0.81.
- Body fat composition greater than 30%.
- Metabolic complications such as lean non-alcoholic fatty liver disease, insulin resistance, gestational diabetes mellitus, etc. [13].

b. What are the important pregnancy-related and other medical health conditions that should be evaluated during postpartum weight management?

Assessment of pregnancy-related complications such as gestational diabetes mellitus, hypertensive disorders of pregnancy, anaemia, placental abruption, preterm birth and polycystic ovary syndrome is recommended for formulating weight management strategies. Assessment of metabolic complications of overweight and obesity such as non-alcoholic fatty liver disease, hypertension, impaired blood glucose and dyslipidaemia is also recommended [14].

c. How dietary practices should be evaluated in postpartum women being engaged in weight management?

The detailed dietary evaluation should include an assessment of the usual meal pattern (including the quantity of food items consumed) and dietary habits (including skipping meals, consumption of HFSS foods, usual frequency of eating out, emotional/ stress eating). Twenty-four-hour dietary recall and food frequency questionnaire for three days (two week days and one weekend) should be used for dietary evaluation, if feasible. Energy, macronutrient and fibre intake should subsequently be calculated. Alternatively, a short-validated questionnaire can be used. Standardised validated infographic material can be prepared and supported with dietary tools to achieve uniformity in capturing data through diet recall and portions consumed besides the standard format of the dietary data capturing methods Factors influencing dietary behaviour should also be evaluated. Dietary intake of micronutrients such as iron, vitamin B12, calcium and vitamin D should be assessed through frequency of intake of foods rich in these micronutrients [15]. Barriers faced by postpartum women to follow a healthy diet in their daily lifestyle should also be assessed.

d. How daily physical activity levels should be evaluated in postpartum women being engaged in weight management?

The detailed physical activity evaluation should include an assessment of dedicated physical exercise, work-related activities, leisure-related activities, trans-

port-related activities and sedentary activities (screen and sitting time).

Madras Diabetes Research Foundation- Physical Activity Questionnaire (MPAQ) should be used for evaluation, if feasible. Alternatively, a short validated questionnaire can be used. The evaluation of the adequacy of physical exercise should be done by assessing: type of exercise (stretching/strengthening/aerobics/balance), intensity (light/moderate/vigorous), duration (number of minutes per day) and frequency (number of days per week). Special attention should be given to assess the number of sedentary hours (especially, screen time and sitting time) spent during the day. Postpartum women should be encouraged to discuss the barriers faced by them in maintaining an active lifestyle. The acceptability and feasibility of performing various types of physical activities (aerobics, strength training, yoga, Pilates, etc.) should also be assessed [16].

e. How psychosocial variables/health/parameters should be evaluated in postpartum women being engaged in weight management?

The routine assessment of the postpartum women engaged in management of overweight and obesity should include inquiry into the presence of a diagnosed psychiatric disorder, especially depressive, anxiety or eating disorder. In case a diagnosed psychiatric disorder is present, then the current condition of the psychiatric disorder and use of psychotropic medications should be asked for by the weight management team. Psychological assessment by a mental health professional can be considered when the woman reports significant anxiety or depression, when there is sudden lack of motivation for weight reduction, or when there are persistent interpersonal difficulties with the weight management team [17].

Management of Weight

a. How should stepwise weight loss goals be set for postpartum women being engaged in weight management?

The healthcare provider should assess the readiness to uptake weight loss attempts by changing current diet and activity using behavioural modification. Realistic and sustainable patient centric weight loss goals should be established after detailed discussion with postpartum women. Overweight and obese postpartum women should be advised to reduce body weight to the body mass index equal to 23 kg/m2.3.1.4. A stepwise weight loss goal should be set with a target weight loss of 0.5 kg per week acquiring 5–10% of clinically significant weight loss over a period of six months. Postpartum women with normal body weight but substantial postpartum weight retention (> 4.5 kg as compared to pre-pregnancy body weight) should be motivated to attain pre-pregnancy body weight over a period of 12 months after delivery [18].

b. In postpartum women, what type of dietary recommendations/interventions should be advised for improving weight management, anthropometric and metabolic health outcomes?

Eating preferences, food habits and health status of the patient should be considered while customising the diet plan. The meal pattern should be spread throughout the day in preferably five-six servings involving three major meals and two–three minor meals or snacks. Individualised calorie goals should be set depending on the mother's body mass index, breastfeeding status and activity levels with a target calorie deficit of 500 kcal/day. Lactating mothers must be given an addition of300–500 kcal based on their status of lactation. The dietary composition must be 50–60% energy from carbohydrates, 10–20% energy from proteins and less than 30% energy from total fats. The daily fibre intake should be more than 12.5 g/1000 cal obtained from whole grains, legumes, nuts, oilseeds, fruits and vegetables. Meal skipping, crash diets and fad diets should always be discouraged. Encourage the consumption of fresh fruits, vegetables and adoption of techniques like fermentation, germination to meet the additional requirement of micronutrients. Supplementation of calcium, iron and vitamin D should be ensured as per the advice of the obstetrician. Limit consumption of high caffeine drinks such as tea, coffee to two to four drinks each day. Restricted consumption of food products high in fat, sugar and salt should be emphasised. The galactagogues should be high in green leafy vegetables and whole grains to make them nutrient dense. For calorie restriction, fat and sugar should be lowered [19].

c. In postpartum women, what type of physical activity recommendations/interventions should be advised for improving weight management, anthropometric and metabolic health outcomes?

Postpartum women with uncomplicated delivery must be encouraged to gradually resume physical activity within four to six weeks post-delivery or as soon as they feel comfortable. Women with caesarean or complicated deliveries should gradually resume physical activity after their first postpartum check-up (i.e. six to eight weeks post-delivery). Postpartum women must be encouraged to engage in low impact exercises such as walking and gradually include core muscle group strengthening exercises (i.e. abdominal, para spinal, pelvic floor and gluteal muscles). Exercise intensity and duration should be gradually increased up to 150 min/week of moderate intensity aerobic activity (up to

30 min per day for five days per week) and one to three sets of muscle-strengthening exercises twice per week. The talk-test should be used for self-monitoring the intensity of aerobic exercises. Sedentary time (sitting, watching television, using mobile phone, etc.) should be limited and replaced with low intensity activities. Women should be encouraged to engage in activities related to household chores or those involving their babies [20].

d. How breastfeeding practices can be useful for postpartum weight management?

Postpartum women should exclusively breast feed their infants for the first six months and along with complementary feeding for up to two years. Exclusive breastfeeding should be coupled with other weight management interventions for postpartum weight loss. In cases of failure of lactation, postpartum women do not need any additional calories, hence should have dietary and physical activity recommendations similar to non-pregnant non-lactating women [21].

e. What are the behaviour modifying techniques that should be advised for postpartum weight management and overall well-being?

Adopt goal setting techniques during the initiation of intervention. Adopt techniques such as self-monitoring and motivational interviewing during the intervention and follow-ups. Inculcate stimulus control and problem-solving skills such as identifying problems, creating solutions and opting for the best possible choice. Teach cognitive restructuring skills such as avoiding negative thinking and cognitive errors, overcoming stress and other barriers usually faced during weight loss process. Feedback on the accomplishments, achievements and scope for better progress should be given regularly [22].

Follow up for sustainable weight loss

a. What should be the duration, frequency and mode of contact during the intervention and follow-up phases of the weight management program in a postpartum woman?

The duration of follow-up for weight maintenance should be 12 months, ranging from six months to18 months based on the target body weight to be achieved. In the initial stages of weight loss, a follow-up frequency of once or twice a month should be maintained. Later, the follow-up can be scheduled every three months. A combination of physical (face-to-face and/or group counselling) and online meeting modalities/telephonic contacts can be used during follow-ups. The schedule for initiation and/continuation of the weight loss program should be decided on the basis of the weight status of the participant. After attainment of weight loss targets, women should be followed lifelong for maintenance and sustenance of lost weight.[23].

b. What advice should be given during the follow-up phase for maintenance of weight in postpartum women?

The follow-up weight maintenance sessions should include/reinforce advice related to healthy eating behaviours, physical activity and sleep practice. During weight maintenance, special attention should be given to behavioural strategies such as motivation, social support, self-efficacy, relapse prevention and addressing individualised barriers. During the follow-up period, the woman should also be counselled regarding the adverse effects of obesity on health, quality of life and subsequent pregnancies. [24] A bi-monthly contact can be maintained using digital technology such as text messages, telephonic calls and mobile applications with the interventionist to mitigate the barriers and challenges faced by women during weight maintenance. [25].

Self-monitoring through technological devices should be incorporated for weight, dietary practices, physical activity and sleep behaviour for management and sustenance of lost weight. Clinical and biochemical parameters such as blood glucose, lipid profile and blood pressure should be measured as per the standard guidelines and/or advice by physicians.

Conclusions

Various myths are related to physical activity during the postpartum period.

Especially in Asian countries like India, the period of confinement for the first forty days post-delivery is usually practiced. Consequently, postpartum women land up being sedentary. It is crucial to burst myths related to physical activity specifically during the postpartum period and raise awareness among these women about the type, intensity and importance of various exercises that should be performed during this period. Depending upon the complications and mode of delivery, postpartum women should be motivated and guided to indulge in physical activity. Women with no complications and normal delivery should be encouraged to resume physical activity within four to six weeks post-delivery or as soon as they feel comfortable, whereas women with complications or caesarean delivery should be screened for their ability to exercise during the first postpartum visit usually held between six to eight weeks postpartum. Postpartum women should be encouraged to set individualised, realistic physical activity goals such as a gradual aim of achieving 10,000 steps per day. They should be encouraged to indulge in moderate-intensity aerobic physical activity like brisk walking for at least 150 min per week (30 min per day for

five days per week), excluding the warm-up and cool-down time and minimum of 10-min bouts per session. Women should be encouraged to participate in household chores and start walking gradually from slow to brisk walking. They can be motivated to practice breathing exercises and gentle yoga. Kegel exercises such as contraction of pelvic floor muscles should be advised. Once they get used to the intensity or duration of a type of exercise, they should be further encouraged to increase the intensity (low to moderate to vigorous) and/or duration (progressively increase five minutes per session per week till the goal is reached). Different physical activities can be planned for postpartum women. Sedentary behaviour of these women should also be targeted. Women should be encouraged to reduce their sitting time along with the screen time. Apart from this, various barriers are usually faced by postpartum women such as lack of time, energy, space, etc. to participate in physical activity. In such cases, where mothers are unable to spare time separately or they do not have provision of walking tracks and fitness centres, they should be motivated to perform activities inside the house involving their infants such as walking while strolling the baby in a pram or performing abdominal exercises while lying next to the baby.

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