



Is there a Role of the Obstetrician and Gynaecologist in Recognising, Preventing, and Managing Obesity in Indian Context?

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Editorial

The National Health Portal of India on its website defines obesity as a condition where a person has accumulated abnormal or excessive body fat that causes negative effects on health. For an individual, obesity is usually the result of an imbalance between calories consumed and calories expended. An increased consumption of high-calorie foods, without an equal increase in physical activity, leads to an increase in weight. Decreased levels of physical activity will also result in an energy imbalance and lead to weight gain. Once considered a concern of high-income countries, the problem of being overweight and obesity is increasing in low-income and middle-income countries, especially in urban areas. It is damaging the health prospects for rich and poor countries alike, says the World Obesity Federation. For India, obesity and diabetes associated with it is a real health problem, a disease, an ailment and a report by the World Obesity Federation says that no country has a better than 50 percent chance of meeting their target for tackling childhood obesity.

Here are some shocking facts about India which should serve as a wake-up call. Existence of any policy on marketing foods to children and adults alike is absent in India, says the report. However, the country has worked in the direction of existing policies to reduce physical inactivity and efforts are underway to reduce the norm of unhealthy diet that leads to rise in non-communicable diseases. In 2010, India had 69.6 percent physically inactive adolescent boys 71.6 percent inactive adolescent girls. India's childhood obesity risk score stands at 4/11 and the chances of meeting the WHO standards for 2025 are almost nil.

A recent report published in The Lancet Child & Adolescent Health by the India State-Level Disease Burden Initiative, a collaboration of the Indian Council of Medical Research, the Public Health Foundation of India, and the Institute for Health Metrics and Evaluation, concluded that obesity was on the rise in the country. Its prevalence among children increased during 1990–2017, the period of the study, with an annual rise of 4.98 percent. The projected prevalence is 17.5 percent in 2030.

Weight Measurement at Every Visit as Screening for Obesity

Measuring weight at every visit and calculating BMI and maintaining a record of the same will help the patient as well as the next doctor to have an idea of the rate of weight gain. This will act as a sensitisation for obesity as well. For women who are overweight or obese, dietary changes and exercise are important recommendations.

The American Heart Association recommends the following lifestyle interventions:

- Eat a high-quality diet that includes vegetables, fruit, whole grains, beans, legumes, nuts, plant-based protein, lean animal protein, and fish.
- Limit intake of sugary drinks and foods, fatty or processed meats, full-fat dairy products, eggs, highly processed foods, and tropical oils.
- Exercise at least 150 min weekly at a moderate activity level, including muscle-strengthening activity.
- Reduce prolonged intervals of sitting.
- Consider using an activity tracker to monitor activity level.

Clinicians should consider referring overweight and obese patients to a team which has a physician, a nutritionist, and physiotherapist. A nutritionist will help plan how to

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consume a high-quality, low-calorie diet. A nutritionist can spend time with patients explaining options for implementing a calorie-restricted diet. In addition to recommending diet and exercise, we may consider prescribing metformin for our obese patients.

Metformin

Metformin is approved for the treatment of type 2 diabetes mellitus. Unlike insulin therapy, which is associated with weight gain, metformin is associated with modest weight loss. The mechanisms by which metformin causes weight loss are not clear. Metformin stimulates phosphorylation of adenosine monophosphate (AMP)-activated protein kinase, which regulates mitochondrial function, hepatic and muscle fatty acid oxidation, glucose transport, insulin secretion, and lipogenesis. Many gynaecologists have experience in using metformin for the treatment of polycystic ovary syndrome or gestational diabetes. Hence, the dosing and adverse effects of metformin are familiar to many obstetricians-gynaecologists. Metformin is contraindicated in individuals with creatinine clearance less than 30 mL/min. Rarely, metformin can cause lactic acidosis. According to Lexicomp, the most common adverse effects of metformin extended release (metformin ER) are diarrhea (17%), nausea and vomiting (7%), and decreased vitamin B12 concentration (7%) due to malabsorption in the terminal ileum. Some experts recommend annual vitamin B12 measurement in individuals taking metformin.

Intermittant Fasting—Miracle or Fad?

Sustainable weight loss is very difficult to achieve through dieting alone, especially in obese patients. Many dietary interventions have been viewed as “revolutionary approaches” to the challenging problem of sustainable weight loss and weight stabilisation including the Paleo diet, the Vegan diet, the low-carb diet, the Dukan diet, the ultra-low-fat diet, the Atkins diet, the HCG diet, the Zone diet, the South Beach diet, the plant-based diet, the Mediterranean diet, the Asian diet, and intermittent fasting. Recently, intermittent fasting has been presented as the latest and greatest approach to dieting, with the dual goals of achieving weight loss and improved health. A major goal of intermittent

fasting is to promote “metabolic switching” with increased reliance on ketones to fuel cellular energy needs. There are no long-term studies of the health outcomes associated with intermittent fasting. Intermittent fasting and daily calorie restriction could both be offered as effective approaches to weight loss. India in its tradition has long followed fasting on auspicious occasions and some communities for about a month. Intermittent fasting is not a miracle dietary intervention, but it is another important option in the armamentarium of weight loss interventions.

Team work

Obstetricians and gynaecologists with physicians, counselors, nutritionist, physiotherapists and bariatric surgeon as a team will go a long way in prevention and management of obesity in our country.

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