

Countering the challenge of childhood obesity

TNIE www.newindianexpress.com/opinion/2022/Mar/15/countering-the-challenge-of-childhood-obesity-2430489.html

Manoj Kumar Jha, Manoj Kumar Jha

March 15, 2022



Illustration: Soumyadip Sinha

The predominant challenge of childhood malnutrition in India has been rightly identified as undernutrition, which continues to be widely prevalent. The latest National Family Health Survey reveals that, of children under five years of age surveyed during 2019–21, 35.5% are stunted, 32.1% are underweight and 19.3% are wasted. While the POSHAN Abhiyaan is trying to address these threats to the survival, physical and cognitive development of kids, another form of childhood malnutrition presents a growing threat to India's health. That is the underestimated and under-recognised threat of obesity in childhood and being overweight at a young age.

Part of the problem lies in the method of measurement and classification. The proportion of children classified as being overweight/obese in the NFHS-5 survey is 3.4%.

This appears low in comparison to the burden of undernutrition but the absolute numbers are large in view of India's population size. The rates are even higher and rising in the 5–19 year age group. The Comprehensive National Nutrition Survey estimates that the numbers of overweight-obese children in that age group will rise from 17 million in 2016–18 to 27 million in 2030.

However, these numbers substantially underestimate the problem because they are based on body mass index (BMI), which relates body weight to height. While BMI is the conventional measure used to identify and classify overweight-obesity, it does not differentiate body fat from lean muscle mass and bone weight. Unfortunately, many Indian children and adults have a higher proportion of body fat and lower levels of lean muscle mass when compared to other population groups in the world.

It is the amount of body fat (adiposity), especially its location around the abdominal organs (visceral obesity), that mostly determines the adverse metabolic and health effects of obesity. Several Indians are called normal or thin when classified by BMI but have high adiposity and visceral obesity. They have an increased risk of cardiovascular disease and

diabetes, even when not recognised as obese persons by BMI. India has a large number of such 'thin diabetics'. Stunted children too have high levels of general and visceral adiposity and carry the risk of early adult onset diabetes, heart disease and stroke.

Maternal nutrition plays a major role in determining body adiposity and metabolic risks across the life course of the offspring. The risk is mediated by epigenetic modification of gene expression and can extend across several generations. Undernourished women give birth to underweight children, who later become stunted as they are metabolically programmed for managing lower calorie availability and cannot handle food increases in later childhood, especially if non-nutritious food delivers empty calories. Overweight women are more likely to give birth to overweight babies. Stunted children as well as overweight babies are more likely to develop diabetes and heart disease in adulthood—a double whammy of childhood malnutrition! NFHS-5 reported that 18.7% of women in the 15–49 year age group were underweight while 24% were overweight or obese.

Overweight-obesity in children has been related to poor feeding practices in infancy and childhood. Exclusive breastfeeding till the age of six months, addition of appropriate complementary foods thereafter, and a balanced, nutritious diet for the growing child are essential for ensuring that the kid does not suffer from any form of undernutrition, obesity or micronutrient deficiencies. From home feeding to diets provided in anganwadi centres and mid-day meals in schools, the principles of nutritiously fulfilling diets must be followed. Physical activity too can increase lean muscle mass, reduce adiposity and guard against cardio-metabolic risk. Balanced diets and physical activity can possibly reset distorted epigenetic mechanisms.

Commercial drivers of faulty feeding can greatly aggravate the risk of childhood obesity. From unethical marketing of breast milk substitutes for infant feeding to aggressive promotion of high calorie-low nutritive value foods and beverages targeting children and adolescents, sections of the food industry have propelled the global pandemic of obesity over the past seven decades. There is a strong association between exposure to advertising and consumption of non-nutritious foods. In addition to billboards and traditional broadcast media (radio and television), new media (internet advertising, text messaging and social media manipulation, video games), partnership with toy manufacturers, animation film and video games industries as well as celebrity endorsements are creating a craving for addictive ultra-processed foods and sugary drinks. Social media technologies are abetting directed marketing based on both demographic and psychological profiling of their young users.

Child psychologists say children under six years of age who watch television cannot distinguish between advertising and programme content. Children under eight cannot understand the persuasive intent of advertising. Regulatory agencies must curb such exploitative advertising of unhealthy foods and beverages. Multi-sectoral policies too must be implemented to make healthy foods easily available and affordable, while promoting physical activity. It has been said that obesity could make the present generation of children have a shorter life expectancy than their parents. That prediction should never come to pass and the present generation of adults should wake up to its responsibility.

(Views are personal)

***Cardiologist, epidemiologist and President, Public Health Foundation of India
(PHFI)***