

Childhood Obesity

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Introduction

Paediatricians have been facing a very common complaints: “Look doctor, my child is thin & has been becoming thinner day by day and not eating enough.” Although their kids achieved almost all the parameters of normal growth & development. Traditionally, a fat child is considered as an “attractive” child and is often referred to as an “healthy” child. However, the adverse effects and serious consequences of childhood obesity are now proven beyond doubt. At least 30% of obesity begins at childhood. Conversely 50 to 80% of obese children, become obese adults.¹ Many longitudinal studies have demonstrated convincingly, the higher risks of child onset obesity.^{2,3} In the Harvard study, morbidity from cardiovascular disease, diabetes, obesity related cancers and arthritis was 50 to 100% higher in obese individuals who were also obese as children and the cardiovascular mortality in such individuals was doubled.⁴

Obesity has become a pandemic and it has been estimated that about 13% of the world's population (11% of men and 15% of women) are obese.⁵ The increased economic development and nutrition transition has led to a dramatic increase in the prevalence of obesity in children, especially in developing countries. Over 340 million children and adolescents aged 5-19 years are reported to overweight and obese. The prevalence of overweight and obesity among 5-19 years has risen dramatically from just 4% in 1975 to just over 18% in 2016. The rise has occurred similarly both boys and girls.⁵

According to the Centre for Disease Control and Prevention (CDC), overweight is defined as a body mass index (BMI) at or above 85th percentile and below 95th percentile for children and teens of the same age and sex. Obesity is defined as a BMI at or above 95th percentile for children and teens for the same age and sex. Due to the increasing trend of higher BMIs in children around the world, it is not possible to have any ideal population on whom ideal weight/BMI charts can be constructed. Country specific growth charts have been designed to assess the development of children between 5 and 18 years of age.⁶

Some documented risk drivers of childhood obesity related to food, eating behavior, intake, and feeding practices are as follows: shorter duration of breastfeeding or no breastfeeding; ready availability of calorie-dense food;

preference to and increased consumption of sweet and fatty/fried food snacks; skipping the breakfast; and the child food environment at home. (7,8,9,10). Food related risk drivers are also very closely related to social structures; urbanization (urban residence; rural-to-urban migration; and psychological stress in urban settings); increasing affluence; and child targeted market.^{7,11,12} For children, prime movers in the domain of social structures are family related attributes. The correlates emerging through a study conducted in urban school children in central India are father and/or mother involved in service/business; and English medium schools (which again may be a proxy of higher economic strata).¹³ Risk drivers associated with physical activity are motorized transport; increased mechanization of day-to-day activities; and child playing outdoor games for <30 min.^{11,13} Decreased duration of sleep (<8.5h/day) and increased television viewing (>3h/day) have also been documented as significant risk drivers.¹⁴

Almost all households in Bangladesh are entertaining televisions; the facilities dramatically increased in last two decades. The children along with their parents/family members engaged in television viewing for a long period which creates a significant barrier for health promotion. Even when they are dealing with health-related issues, they frequently end up promoting a product goaded by some quasi-scientific misinformations. With their near universal reach and traction, the market forces are exerting an overreaching influence to sustain this seemingly unidirectional mass movement toward their construct of “modernity”.¹⁴

According to WHO, childhood obesity is one of the most serious public health challenges of the 21st century. Prevention of obesity in children is vital because the treatment is extremely difficult. The following strategies should be taken to address the complex problem-

- Balanced nutrition to pregnant mothers
- Encourage exclusive breastfeeding
- High importance on physical activity
- Making healthier choice available and banning unhealthy food in cafeteria, (sweetened beverages and energy-dense junk food)
- Screen-time (TV, Computer, Smartphones) to be restricted to maximum 2h/day
- Mandatory 60 min of physical activity daily supervised by parents
- Restriction on eating out at weekends and restricting availability of junk foods at home

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- Restriction on advertisement of commercial foods on television at prime time and during children's programs and ban on unfair nutrition claims for commercial products
- Prohibition of promotional gifts with junk foods.¹⁵

Effectively addressing the complex problem of childhood obesity calls for a sustained, multi-sectoral response involving the public, private, health professional and non-governmental sectors. The role primary and secondary prevention is the mainstay plan for controlling the epidemic. These strategies can be initiated at home and in preschool institutions, schools and after-school care services. However further research needs to be done to examine the most effective strategies of intervention, prevention and treatment of obesity in children.¹⁵

The impact of overweight and obesity in children on lives and economies offers a serious signal and cautionary tale as these health problems rapidly expand into low-and-middle income countries like Bangladesh. So, we should start early actions to prevent obesity in our future generation.

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