

Adolescent Obesity in India: Need for Urgent Policy Action and Multi-sectoral Reform

March 4 is celebrated as World Obesity Day, offering an annual opportunity to reflect on actions needed to reverse obesity's rising trend. Vulnerability to unhealthy body weight can begin early in life; therefore, obesity prevention efforts must focus on childhood and adolescence—a critical window for long-term impact.

Adolescent obesity is a multi-factorial condition with serious health implications. With rising prevalence across all socio-economic strata, India, like many nations, faces a looming health crisis unless urgent measures are implemented. Adolescents form an ideal group for prevention-oriented interventions due to the persistence of behaviour patterns into adulthood.

According to the World Health Organization (WHO), 37 million children under 5 and 390 million aged 5–19 years were overweight or obese in 2022.^[1] A Global Burden of Disease study reported that childhood and adolescent obesity tripled between 1990 and 2021 and continues to rise, especially in Southeast Asia, including India.^[2]

If current trends continue, obesity will outpace overweight status globally by 2030, underscoring two critical points: (1) current strategies have failed and (2) urgent public health efforts are needed, especially in countries transitioning from overweight to obesity-dominant populations such as India.^[3]

Adolescent obesity is driven by a complex interplay of behavioral, genetic, environmental, and psychosocial factors. Poor dietary habits, high intake of processed foods and sugary beverages, and low consumption of fruits and vegetables are significant contributors.^[4,5] Coupled with increasing screen time, physical inactivity, and inadequate sleep, these behaviours create a high-risk environment.^[6]

Psycho-social issues such as stress, depression, and low self-esteem can exacerbate unhealthy eating behaviours. Parental obesity, socio-economic status, and family eating patterns also influence adolescent obesity.^[7]

Obesity in adolescence leads to several immediate and long-term complications, including type 2 diabetes, dyslipidaemia, hypertension, fatty liver disease, and obstructive sleep apnoea.^[8] Mental health issues, bullying, and reduced academic performance are also common.^[9] Long-term, over 80% of obese adolescents become obese adults, increasing the risk of cardiovascular disease, metabolic syndrome, and certain cancers.^[10]

A multi-disciplinary management approach including behavioural therapy, nutritional counselling, physical

activity, and psycho-social support is essential. Motivational interviewing and family-based interventions are effective. In severe cases, pharmacotherapy or bariatric surgery may be considered.^[11]

New pharmacologic agents, particularly GLP-1 receptor agonists like semaglutide, have shown promise and received FDA approval for adolescents aged ≥ 12 years.^[12,13] However, prevention remains the cornerstone of management.

Tackling adolescent obesity requires public health strategies focussed on modifying the obesogenic environment. It is now well established that isolated lifestyle-based individually oriented behaviour change approaches do not produce meaningful or sustainable change without policy initiatives that aim to create healthy, less obesogenic environments. The theme for World Obesity Day 2025 is therefore “Changing Systems, Healthier Lives”. This theme emphasises the need for systemic changes to address the complex factors contributing to obesity, rather than just focussing on individual responsibility. It calls for action on issues like food systems, healthcare policies, and environmental influences to create a healthier future for all.

Effective strategies include implementing taxes on sugary beverages, restricting junk food advertising to children, enhancing urban planning to promote physical activity, providing healthier school meals, and launching school- and community-based nutrition education programs.^[2] Creating safe public spaces, bike paths, and playgrounds in urban and peri-urban areas is critical to promote active lifestyles among youth.

Low-cost interventions, such as food subsidies and local health campaigns, have demonstrated success in low- and middle-income countries.^[2,14] In countries like India with double burden of malnutrition and obesity, integrating obesity prevention with maternal-child health programs (e.g., promoting exclusive breastfeeding, prenatal counselling) can yield dual benefits.^[3] Strengthening of local food systems by promoting agriculture and traditional food preparations; multifaceted interventions with coordination across sectors; and different levels of the government that engage families, teachers, and local stakeholders are likely to be successful. Programs in Australia and China that integrated multisectoral efforts have been particularly effective. These provide evidence-based models that can be adapted for India's diverse setting.^[2]

Childhood and adolescent obesity is a complex and pressing issue with long-lasting health and societal implications. Effective prevention and control require coordinated action involving families, schools, communities, and governments.

Policies targeting systemic contributors to obesogenic environments, backed by strong political will and multisectoral collaboration, are essential to stem the rising tide of obesity.

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