

A generation at risk: Reviewing the youth obesity epidemic

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Abstract

Youth obesity has emerged as one of the most pressing public health concerns of the 21st century, affecting children and adolescents across developed and developing nations. This review examines the growing prevalence of obesity among young people, its underlying causes, associated health consequences, and possible intervention strategies. The epidemic is driven by a complex interaction of genetic, behavioural, environmental, socioeconomic, and cultural factors. Contributing factors include sedentary lifestyles, unhealthy dietary habits, increased consumption of energy-dense processed foods, and reduced physical activity. The review further highlights the short-term and long-term health implications of youth obesity, including cardiovascular disease, type 2 diabetes, hypertension, psychological distress, low self-esteem, and social stigmatization. In addition, because the condition often persists into adulthood, it increases the burden of chronic disease and healthcare costs globally. The study also explores the role of family structures, school environments, media influence, and public health policies in shaping children's health behaviours. Findings from the review suggest that addressing youth obesity requires a multidimensional and preventive approach involving parents, schools, healthcare systems, communities, and government institutions. Early intervention, nutrition education, promotion of physical activity, and policy reforms aimed at improving food environments are essential to reversing this trend. Ultimately, this review emphasizes the urgent need for coordinated action to safeguard the health and future of the younger generation.

Keywords: Youth obesity; Epidemic; Nutrition; Risk factors; Prevention

1. Introduction

The obesity epidemic among youths has emerged as a significant public health concern in recent decades with alarming rates of overweight and obesity reported globally [1]. The World Health Organization (WHO) defines overweight and obesity as an abnormal or excessive accumulation of fat that presents a risk to health [2]. This increase in prevalence can be attributed to a complex interplay of genetic, environmental, and lifestyle factors [3] including poor dietary choices, reduced physical activity, and socioeconomic influences [3]. In the United States alone, the Centers for Disease Control and Prevention (CDC) reports that the prevalence of obesity among children and adolescents has more than tripled since the 1970s [4].

The consequences of obesity in youth extend far beyond physical appearance, significantly affecting mental health, self-esteem, and quality of life [5]. Moreover, obesity during childhood often leads to serious health complications, including type 2 diabetes, cardiovascular diseases, and musculoskeletal disorders, which were previously considered adult ailments [6]. The implications of this epidemic are not limited to affected individuals; they also pose a substantial burden on healthcare systems and economies. This introduction sets the stage for an in-depth examination of the factors contributing to the rise of adolescent obesity, its consequences, and potential strategies for prevention and intervention.

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2. Key causes of obesity among the youths

2.1. Poor dietary habits

An increase in the consumption of high-calorie, nutrient-poor foods such as fast food, sugary drinks, snacks, and processed foods contributes to excess calorie intake and significantly result to obesity [7]. In many communities, particularly low-income areas, access to fresh fruits, vegetables, and other healthy food options can be limited, making it difficult for youth to make healthy dietary choices [8]. Social media encourages unhealthy eating practices [9]. Furthermore, eating larger portion sizes and the normalization of eating high-calorie foods can lead to overeating and consequently to obesity [10].

2.2. Sedentary Lifestyle

Children and adolescents are spending more time engaged in sedentary activities, such as playing video games, watching television, and using computers, rather than participating in physical activities or sports [11]. Increased time spent on screens (TV, computers, smartphones) contributes to lower physical activity levels which leads to obesity. There is decreased emphasis on physical education in schools [12], a lack of organized sports can limit opportunities for exercise. Many schools have reduced physical education programs and recess time [13], leading to less opportunity for youth to engage in regular physical exercise. The rise in digital entertainment has resulted in more sedentary behaviour among youths [11]. Furthermore, increased parents' concerns about safety in their neighbourhoods has resulted in increased sedentary life.

2.3. Environmental factors

In many communities, children and adolescents are surrounded by fast food restaurants, convenience stores, and vending machines that offer inexpensive, energy-dense, and nutrient-poor foods, making unhealthy choices more convenient than healthier options [14]. The easy availability and aggressive marketing of unhealthy foods strongly influence eating behaviour. The repeated exposure to food advertising on television, social media, and other digital platforms increases young people's preference for sugary drinks, snacks, and fast foods and can shape their food requests and consumption patterns [7]. Together, these environmental influences promote excessive calorie intake, discourage healthy dietary habits, and contribute to a higher risk of obesity among youths [2].

2.4. Education and Awareness

Lower levels of health literacy can limit a person's ability to find, understand, and use health information [15], which in turn can reduce their knowledge about nutrition and healthy lifestyle choices. When individuals struggle to interpret food labels, diet recommendations, portion sizes, or exercise guidance, they may be less able to make informed decisions about what to eat and how to maintain a healthy routine. As a result, they may be more likely to rely on inaccurate information, miss important preventive advice, or develop habits that negatively affect their overall health.

2.5. Marketing and Advertising

Research has consistently found that exposure to food advertising increases children's preferences for high-calorie, low-nutrient foods thus contributing to poorer dietary patterns overall [16]. Aggressive marketing of unhealthy foods and beverages directed at children can significantly shape their dietary preferences and purchasing decisions. Children are especially vulnerable to persuasive advertising because they may not fully understand its persuasive intent, making them more likely to develop positive attitudes toward heavily marketed products and to request them from parents or caregivers.

2.6. Family Habits

Family eating patterns, such as large portion sizes, frequent dining out, and reliance on convenience foods, can contribute to the obesity risk in children and adolescents [17]. Family eating patterns can play a significant role in increasing the risk of obesity in children and adolescents. When families regularly serve large portion sizes, children may learn to eat more than their bodies need, making overeating more likely over time. Frequent dining out can also contribute to weight gain because restaurant meals are often higher in calories, fat, sugar, and sodium than meals prepared at home, and portions are typically much larger. In addition, a reliance on convenience foods such as fast food, frozen meals, packaged snacks, and sugary drinks can increase calorie intake while providing fewer essential nutrients like fiber, vitamins, and protein. These eating habits can become routine within the household and shape children's long-term food preferences and behaviors. As a result, family food choices and eating routines can strongly influence whether children develop healthy eating habits or patterns that contribute to obesity. Family eating habits and lifestyle

choices play a significant role because if parents' model unhealthy eating or sedentary behaviours, children are more likely to adopt these patterns.

2.7. Psychological Factors

Psychological factors significantly influence obesity by affecting eating behaviours, physical activity, and the body's response to stress [18]. For example, stress, anxiety, depression, and low self-esteem can lead some people to overeat, choose high-calorie comfort foods, or become less active. Emotional eating is common when food is used to cope with negative feelings rather than hunger. Chronic stress can have a significant impact on the body by increasing cortisol levels, a hormone released in response to stress. When cortisol remains elevated for long periods, it may encourage the body to store more fat, particularly around the abdomen. At the same time, higher cortisol can stimulate appetite and lead to stronger cravings for high-calorie, sugary, or fatty foods. Over time, this combination of increased fat storage and overeating can make weight management more difficult and may contribute to unwanted weight gain. Managing stress through healthy habits such as regular exercise, sufficient sleep, and relaxation techniques can help reduce cortisol levels and support overall health. Psychological factors can also reduce motivation, making it harder to maintain healthy habits such as regular exercise and balanced nutrition. Over time, these behaviours can contribute to weight gain and obesity.

2.8. Genetic Factors

Genetics can significantly influence an individual's susceptibility to weight gain by affecting how the body stores fat, regulates appetite, and uses energy [19]. Some people inherit gene variants that make them more likely to feel hungry, less likely to feel full after eating, or more efficient at storing calories as fat. Genetics can also influence metabolism, which determines how quickly the body burns energy at rest and during activity. It can also play a role in where fat is stored in the body, such as around the abdomen, hips, or thighs. However, genes do not determine body weight on their own; lifestyle factors such as diet, physical activity, sleep, stress, and environment also have a major impact.

2.9. Sleep Patterns

Insufficient sleep has been linked to weight gain because it can disrupt the body's normal regulation of hunger and appetite. In adolescents, irregular sleep patterns are especially common due to school demands, screen time, social activities, and biological changes during puberty. These inconsistent sleep habits can interfere with hormones such as ghrelin, which increases hunger, and leptin, which signals fullness. When sleep is inadequate, ghrelin levels may rise while leptin levels may drop, leading to increased appetite, stronger cravings, and a greater likelihood of overeating. As a result, inadequate sleep may contribute to unhealthy eating behaviours and, over time, weight gain [20].

2.10. Cultural Influences

Cultural attitudes towards body image, food, and physical activity can impact youth behaviours and perceptions related to obesity [21]. Cultural attitudes toward body image, food, and physical activity play a significant role in shaping young people's behaviours and perceptions related to obesity. In many cultures, ideals of attractiveness and health are influenced by media, family expectations, and community norms, which can affect how youth see their own bodies and whether they feel pressure to lose or gain weight. Similarly, cultural traditions around food may encourage certain eating patterns, portion sizes, or celebrations centered on high-calorie meals, while other cultures may place greater value on moderation and balanced diets. Attitudes toward physical activity also differ, with some communities strongly encouraging sport and exercise, and others viewing exercise as less important or less accessible. These cultural influences can affect whether young people develop healthy habits, feel confident about their bodies, or experience stigma and shame related to weight. As a result, understanding cultural attitudes is essential for addressing obesity in a way that is respectful, effective, and supportive of youth wellbeing.

2.11. Socioeconomic Factors

Families with limited financial resources may opt for cheaper, unhealthy food options [22], because their budgets leave little room for healthier choices that are usually more expensive or less convenient. When money is tight, highly processed foods, fast food, and packaged snacks can seem like the most practical solution since they are affordable, filling, and easy to prepare. However, relying on these foods over time can contribute to poor nutrition and increase the risk of health problems such as obesity, diabetes, and heart disease. This issue is often linked not just to personal choice, but to broader factors such as food deserts, limited access to fresh produce, and the high cost of nutritious meals.

3. Prevalence of adolescence obesity

As of the latest data available up to 2023, adolescent obesity is a growing global health concern. According to the World Health Organization (WHO) [1,3] and various other health organizations, the prevalence of obesity among adolescents (aged 10-19 years) has been rising significantly. Various studies, surveys, and national health approaches contribute to understanding the prevalence of adolescent obesity. Organizations like the WHO and the Centers for Disease Control and Prevention (CDC) provide extensive data on this issue. [1,3]. This increase has been observed in developed and developing countries [1,3]. WHO estimated approximately 14% of adolescents aged 10 to 19 years were obese [23]. The rates vary significantly by country and region. There are higher rates in high-income countries [2]. For example, countries like the United States show significant prevalence [3]. Among low- and middle-income countries, there is also a rapid increase in rates as diets become more Westernized and sedentary lifestyles become more common [24].

4. Health risks associated with adolescent obesity

4.1. Type 2 Diabetes

Obesity increases the risk of insulin resistance [25], a condition in which the body's cells do not respond properly to insulin, making it harder for glucose to enter the cells and be used for energy. As a result, blood sugar levels can remain elevated, putting extra strain on the pancreas to produce more insulin. Over time, this can exhaust the body's ability to regulate blood sugar effectively and may lead to type 2 diabetes. Because of this connection, maintaining a healthy weight through balanced nutrition and regular physical activity is an important way to reduce the risk of developing diabetes and other related health problems.

4.2. Cardiovascular Issues

Adolescents with obesity are at a significantly higher risk of developing high blood pressure, elevated cholesterol levels, and other heart-related conditions that can place extra strain on the cardiovascular system [26]. These health problems often begin early and may progress over time, increasing the likelihood of serious complications such as heart disease and stroke later in life. Hence, obesity during adolescence is not only a concern for immediate health and well-being but also an important predictor of long-term cardiovascular disease risk.

4.3. Musculoskeletal Problems

Excess weight can put significant additional strain on the bones and joints, increasing the risk of discomfort and long-term damage [27]. Carrying extra body weight places added pressure on weight-bearing joints such as the knees, hips, and lower back, which can lead to pain, stiffness, and reduced mobility over time. This added stress may also contribute to the development or worsening of osteoarthritis, a condition in which the cartilage that cushions the joints wears down, causing inflammation and pain. In addition, extra weight can affect posture and spinal alignment, often resulting in back problems and muscle strain. Maintaining a healthy weight can therefore play an important role in protecting joint health and reducing the likelihood of these complications.

4.4. Respiratory problems

Obesity can lead to sleep apnea, asthma, and other respiratory issues, all of which can significantly affect overall lung function [28]. Excess body weight, especially around the chest and abdomen, can put pressure on the lungs and make it harder to breathe properly. In some cases, this can cause breathing to become shallow or irregular, particularly during sleep, which is common in sleep apnea. Obesity may also worsen asthma symptoms by increasing inflammation and making the airways more sensitive. As a result, people with obesity may experience shortness of breath, reduced stamina, and a lower quality of life due to the added strain on their respiratory system.

4.5. Endocrine Disorders

The excess fat can disrupt hormone levels, leading to conditions such as polycystic ovary syndrome (PCOS) in girls [29]. Because hormones control many body processes, these disruptions can have wide-ranging effects on energy, mood, reproduction, and long-term disease risk [30,31]. Obesity can disrupt hormone levels in several important ways because excess body fat is not just stored energy but also active tissue that affects the endocrine system. Fat cells can produce and release hormones and inflammatory substances that interfere with normal hormonal balance, leading to problems such as insulin resistance, higher insulin levels, and an increased risk of type 2 diabetes. Obesity can also alter levels of leptin, the hormone that helps regulate appetite and energy use, which may make it harder for the body to recognize when it is full. In addition, excess weight can affect sex hormones by lowering testosterone in men and causing irregular

estrogen and progesterone levels in women, which may contribute to fertility problems and menstrual irregularities. Obesity is also linked to changes in stress hormones like cortisol and can influence thyroid function, further affecting metabolism and overall health.

4.6. Fatty Liver Disease

Non-alcoholic fatty liver disease (NAFLD) is becoming increasingly common in obese adolescents, potentially leading to liver damage [32]. This is largely due to rising rates of childhood obesity, sedentary lifestyles, and high-calorie diets. In this condition, excess fat builds up in the liver even though the person does not drink alcohol, and over time this fat accumulation can cause inflammation and damage to liver cells. If NAFLD is not identified and managed early, it may progress to more serious problems such as non-alcoholic steatohepatitis (NASH), fibrosis, cirrhosis, and in severe cases, liver failure. Because adolescents may not show obvious symptoms at first, the disease can go unnoticed until liver damage has already begun. For this reason, early screening, healthy eating habits, regular physical activity, and weight management are important in preventing long-term liver complications.

4.7. Cancer

Research has demonstrated a clear link between obesity and an increased risk of several types of cancer [33]. Excess body fat can influence cancer development through multiple biological pathways, including chronic inflammation, altered hormone levels, insulin resistance, and changes in immune function. Studies have shown that obesity is associated with a higher risk of cancers such as breast, colorectal, endometrial, kidney, liver, pancreatic, and oesophageal cancer, among others. In particular, fat tissue can produce hormones and growth factors that may promote the growth and spread of cancer cells. The risk tends to increase with the degree and duration of obesity, making healthy weight management an important strategy for cancer prevention. Public health efforts that encourage balanced nutrition, regular physical activity, and weight control may therefore help reduce the burden of obesity-related cancers.

4.8. Psychological Health Risks

Adolescents with obesity are at a higher risk for developing mental health issues because they may face a combination of biological, psychological, and social challenges during a critical stage of development (34,35). At this age, peer acceptance and body image often play a major role in self-esteem, and teens with obesity may experience teasing, bullying, stigma, or social exclusion, which can lead to feelings of shame, anxiety, and sadness. These negative experiences may contribute to depression, low self-worth, disordered eating, and social withdrawal. In some cases, stress related to weight can also worsen unhealthy coping behaviours, such as emotional eating or avoiding physical activity. Because adolescence is a time when identity and confidence are still forming, the emotional impact of obesity can be especially strong. For this reason, it is important to provide supportive, nonjudgmental care that addresses both physical health and mental well-being.

4.9. Social Pressure

Obese adolescents often face bullying and discrimination from peers, teachers, and even strangers, which can deeply affect their emotional well-being and self-esteem (36). Repeated negative comments, teasing, or exclusion may cause them to feel embarrassed, anxious, or ashamed about their appearance, leading many to withdraw from social activities and avoid interactions with others. Over time, this social isolation can reduce their confidence, weaken friendships, and make school or community life more stressful and less enjoyable. As a result, the social pressure stigma can be just as harmful as the physical health challenges associated with obesity, highlighting the importance of creating supportive, respectful, and inclusive environments for adolescents.

5. Strategies for prevention of adolescent obesity

Addressing adolescent obesity involves a comprehensive approach, including promoting healthy eating, encouraging physical activity, and fostering supportive environments both at home and in schools (37). Early intervention can play a crucial role in mitigating the risks associated with obesity and improving the overall health of adolescents. When unhealthy weight gain is identified early, adolescents have a greater chance of developing healthier habits before obesity leads to more serious physical and emotional complications. Timely support through balanced nutrition, regular physical activity, behavioural counselling, and family involvement can help prevent conditions such as type 2 diabetes, high blood pressure, and low self-esteem. In addition, early intervention can promote positive lifestyle changes that are easier to maintain during the teenage years, a period when lifelong habits are often formed. Addressing these factors requires comprehensive strategies as listed below.

5.1. Promotion of Healthy Eating Habits

The incorporation of nutrition education into school curriculums to teach students about healthy food choices and portion sizes, can reduce obesity [38]. This can be achieved by teaching students how to make healthier food choices and understand appropriate portion sizes. When children learn about the nutritional value of different foods, the importance of balanced meals, and the effects of excessive sugar, fat, and calorie intake, they become better equipped to make informed decisions both at school and at home. Nutrition lessons can also encourage healthy habits early in life, helping students develop a positive relationship with food and increasing their awareness of how diet affects overall health, energy levels, and concentration. In addition, when schools reinforce these lessons through healthy cafeteria options, classroom activities, and parental involvement, students are more likely to apply what they learn in everyday life. Over time, this education can contribute to healthier eating patterns, lower rates of overweight and obesity, and improved long-term well-being.

Interactive workshops and cooking classes are also effective way to engage youths in learning about healthy meal preparation and can play an important role in reducing youth obesity. These hands-on activities make nutrition education more practical, enjoyable, and memorable by allowing young people to actively participate in choosing ingredients, preparing meals, and understanding portion sizes. When youths learn how to cook balanced meals using fresh, affordable ingredients, they are more likely to develop healthy eating habits that continue into adulthood. In addition, interactive classes can build confidence in the kitchen, encourage healthier food choices, and reduce dependence on fast food or highly processed meals. By combining education with active participation, workshops and cooking classes, youths can take greater responsibility for their diet and overall health, ultimately helping to prevent obesity and promote lifelong wellness.

5.2. Using Peer Influence

Encouraging students to form cooking clubs or healthy eating initiatives that promote teamwork and peer support can help reduce youth obesity [39]. This can be achieved through leverage of social media platforms for campaigns that highlight positive eating habits, [39]. Social media platforms can play a powerful role in campaigns that promote positive eating habits by reaching large audiences quickly and engaging people through visual, interactive, and shareable content. Campaigns can use short videos, infographics, recipes, challenges, and testimonials to encourage healthier food choices, portion control, regular meal routines, and increased consumption of fruits, vegetables, and whole foods. Because these platforms allow direct communication with users, health organizations, nutritionists, and community groups can respond to questions, correct misinformation, and tailor messages to different age groups and cultural backgrounds. Social media also helps build supportive communities where people can share progress, exchange healthy meal ideas, and motivate one another to maintain better eating habits. When used effectively, these platforms can make nutrition education more accessible, relatable, and impactful, helping to shape long-term healthy behaviours.

5.3. Incorporation of Technology

Development of apps or online games that educate youth about healthy eating, meal planning, and calorie tracking in a fun and engaging manner can reduce adolescence obesity [40]. Apps and online games can be powerful tools for encouraging young people to develop healthy eating habits because they make learning fun, interactive, and easy to understand. Many apps use colourful visuals, rewards, challenges, and goal-setting features to teach children and teenagers about balanced meals, portion control, reading food labels, and choosing nutritious snacks. Online games can also promote healthy eating habit by letting youths earn points for making smart food choices, completing nutrition quizzes, or helping characters stay healthy through good eating habits. These digital tools are especially effective because they meet young people in a space they already enjoy, making health education feel less like a lesson and more like entertainment. In addition, apps can give reminders to drink water, track fruit and vegetable intake, and involve parents or teachers in supporting progress. When used well, apps and online games can motivate youths to learn about nutrition, build better habits, and make healthier choices in their daily lives. Utilizing food blogs and YouTube channels to showcase healthy recipes and cooking tips specifically geared toward young audiences can also promote healthy eating habits.

5.4. Family Involvement

The families should be encouraged to participate in meal planning and preparation together thereby fostering a culture of healthy eating at home. Hosting family cooking nights or nutrition workshops that involve parents and children working together can promote healthy eating habits [41]. In this program, parents and children can work together to prepare simple, nutritious meals while learning about portion sizes, food labels, and balanced meal planning. A nutrition educator or chef can guide families through hands-on activities such as washing vegetables, measuring ingredients, and making healthy swaps like using whole grains instead of refined grains or adding more fruits and vegetables to meals.

One good example is MasterChef Junior (aired in USA) which often emphasizes cooking at home and building confidence in the kitchen. Episodes highlighting the joy of sharing meals together and making food as a family activity can help families not only learn practical skills but also build positive attitudes toward healthy foods. Educating parents about the importance of role modelling healthy behaviours can help the youths make the right choices. They should be involved in health initiatives at schools or communities. Creation of challenges (e.g., “30 Days of Healthy Eating”) to encourage participation and accountability among youth can also contribute to lowering youth obesity.

In addition, live-action family TV show could be a good model or inspirations for promoting family cooking together. For example, incorporation of a scene in family TV shows can be used to weave in stories about shared meals and cooking. Such family-based TV comedies include Papa Ajasco and Company, Super Story, The Johnsons, Meet the In-Laws, My Siblings and I (aired in Nigeria). These TV shows often reflect home, food, and social bonding.

5.5. Encouraging Physical Activity

Establishing a mandate for daily physical education classes in schools would encourage regular exercise by making physical activity a normal and consistent part of students’ routines [42]. When children and adolescents are required to participate in physical exercise (PE) every day, they are more likely to develop healthy habits, improve their fitness levels, and gain confidence in their physical abilities. Daily exercise can also help reduce stress, increase energy, and support better concentration in academic subjects. In addition, school-based PE can expose students to a variety of activities, helping them discover forms of exercise they enjoy and may continue outside of school. Overall, mandating daily physical education would create an environment that promotes lifelong health and reinforces the importance of staying active. Furthermore, active transportation like walking, or biking to school can help to reduce youth obesity by improving infrastructure and ensuring safe routes

5.6. Community Programs

Organized community-wide health initiatives that promote physical activity, healthy eating, and obesity prevention can help prevent obesity [43]. Creation of community gardens to encourage youth to learn about gardening and the benefits of fresh produce can help youth make right choice in diet. Creating community gardens is an effective way to encourage young people to learn about gardening while also teaching them the value of fresh produce and healthy eating. When youth take part in planting, caring for, and harvesting fruits and vegetables, they gain hands-on knowledge about where food comes from and how it grows. This experience can help them develop a stronger appreciation for nutritious foods and motivate them to make better dietary choices. Community gardens also provide a positive environment where young people can build responsibility, teamwork, and patience as they work together to maintain the garden. In addition, having easy access to fresh fruits and vegetables can make healthy eating more appealing and practical, especially for youth who may not regularly see fresh produce at home. Overall, community gardens can play an important role in shaping healthier habits and helping youth make the right choices in their diet.

5.7. Policy and Environmental Changes

Advocate for zoning laws that support the establishment of parks and recreational spaces in neighbourhoods can improve youths’ physical exercise [44]. This can be done by making active play and movement more accessible, safe, and appealing. When communities are designed with nearby parks, playgrounds, bike paths, and sports fields, young people are more likely to spend time outdoors engaging in activities such as walking, running, cycling, and organized sports rather than remaining sedentary indoors. These spaces also reduce barriers to exercise by providing free or low-cost opportunities for physical activity, which is especially important for families who may not have access to private recreational facilities. In addition, well-planned parks can encourage social interaction and group activities, helping exercise become a regular and enjoyable part of youths’ daily routines. By prioritizing zoning policies that ensure neighbourhoods include green and recreational spaces, local governments can promote healthier lifestyles, support physical development, and foster long-term habits that benefit young people’s overall well-being [44]. Implementation of imposing- taxes on sugary beverages can also discourage consumption of sugary foods [45]

5.8. Mental Health Support

Body Image Education can help reduce youth obesity [46]. Body image education can help reduce youth obesity by encouraging healthier, more positive attitudes toward the body while promoting behaviours that support overall well-being. When young people learn to value their bodies for what they can do rather than how they look, they are less likely to engage in harmful dieting, negative self-talk, or emotional eating driven by shame and low self-esteem or avoidance of exercise due to embarrassment or low self-esteem.

This kind of education can also teach children and teens about balanced nutrition, regular physical activity, and the importance of self-care in a way that feels supportive rather than judgmental. By reducing body dissatisfaction and increasing confidence, body image education can motivate youth to make healthier choices, build a more active lifestyle, and develop habits that support long-term physical and mental health. This kind of education can also reduce the influence of unrealistic media images and peer pressure, which often contribute to negative body image and unhealthy eating habits. Promotion of self-acceptance, confidence, and balanced health behaviours, body image education can support long-term habits such as regular movement, mindful eating, and better emotional well-being. Therefore, it can play an important role in preventing obesity by addressing some of the psychological and social factors that affect youth health. Body image support can be achieved through Counselling Services for youth struggling with body image or related issues

5.9. Fostering Partnership

Obesity prevention programs involving the youths creates awareness about youth obesity epidemic [47]. Involving young people in the planning and implementation of programs is essential because it ensures that their interests, needs, and perspectives are genuinely considered. When young people are given a voice in decision-making, programs are more likely to be relevant, engaging, and effective, since they are designed with the actual users in mind. Their input can help identify challenges adults may overlook and suggest practical, creative solutions that better reflect real-life experiences. In addition, participation builds young people's confidence, leadership skills, and sense of ownership, making them more likely to support and stay committed to the program. Overall, including young people in both planning and implementation leads to stronger, more inclusive programs that are better suited to achieve meaningful results.

6. Conclusion

From this literature review it is clear that obesity epidemic among youths is a complex public health challenge that necessitates a multifaceted approach for effective intervention. By handling the obesity epidemic on multiple fronts as enumerated above and engaging all stakeholders, including children, parents, schools, and communities, we can create a supportive environment that fosters healthy habits among youth and hence reduce youth obesity epidemic in the world.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed

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