

## Prevention Strategies and Guidelines to Manage Obesity in Children and Young People

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### Dear Editor-in-Chief,

Obesity in children and young people is a significant public health issue. It can be associated with adverse health, economic and social implications. It is argued that preventing obesity needs adaptation to a healthy lifestyle, which includes behavioral modification, reduction in sedentary behavior, changes in nutrition, managing stress and increased physical activity. Families, healthcare professionals, school nurses, policy makers, researchers, and the community share responsibilities to prevent and manage obesity in children and young people.

**Key Words:** Children, Obesity, Recommendations, Young People.

\*Please cite this article as: Al-Awamreh Kh, Alkhalwaldeh A, Aloush S, Alrimawi I, Al Qadir M, Suliman M, et al. Prevention Strategies and Guidelines to Manage Obesity in Children and Young People. Int J Pediatr 2019; 7(9): 10043-47. DOI: **10.22038/ijp.2019.40813.3447**

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Received date: Mar.17, 2019; Accepted date: Aug.12, 2019

Obesity has become a universal issue within the last decade, affecting all age groups worldwide. It can be a challenging health condition for individuals, families and societies, with potentially serious implications for physical, social and psychological status (1, 2). According to the World Health Organization (WHO) Media Center, obesity rate worldwide increased for both boys and girls from around 1% in 1975 to nearly 6% and 8% in girls and boys, respectively, in 2016 (3). It has been suggested that obesity is a risk factor associated with many co-morbidities including, diabetes, hypertension, coronary heart disorders, and it can decrease life expectancy (1, 4). In addition, morbid obesity can be associated with sleep disorders, psychological and mental problems and certain types of cancer. In some cases, those with obesity face various types of psycho-social stigma (1, 5, 6). One of the approaches to reduce the incidence of obesity is the pursuit of a healthy lifestyle, although this may not be a single individual's choice (1, 7, 8).

It is a multifaceted problem, where there is a need for significant input and commitment from families, policy makers, community leaders, healthcare professionals, and school nurses. Through working together, they can create and support a healthy social and physical environment that encourages individuals to adopt a healthy lifestyle (1, 6, 9). In terms of health insurance, the insurance companies may recommend regular obesity screening and prevention services for children and young people. Despite the possibility of the high cost, regular health and biometric screening could improve the health status, and, decrease the risk of having chronic disorders for children and young people in future (1, 7, 8, 10). Globally, the prevalence of overweight and obesity between children and young people has increased regardless of cultural, socio-economic and environmental

variations (11). On one hand, literature (3, 7, 8, 12) found that the highest rate of obesity is reported in high-income countries. For instance, Ng et al. stated in 2013 the incidence of obesity has been increased between children and young people from 8.1 to 12.9% for boys and from 8.4 to 13.4% in girls in developing countries (13). On the other hand, according to Lobstein et al., and Frederick et al. the incidence of obesity is significantly high in low and middle-income countries (14, 15). For instance, in Jordan, the percentages of overweight and obese reached 24.1% and 8%, respectively, for boys 25.4% and girls 8% aged between 2 and 19 years in 2013 (13). Probably, this could be related to consuming food poor in nutritional quality, educational level of parents, socioeconomic status of the family, place of living, and variations in physical activity.

It is argued that preventing obesity needs comprehensive adaptation to a health-related lifestyle. This can be achieved through shared responsibility for the young people, their families, school staff, and healthcare professionals. Which includes young people's behavioural modification, reduction in sedentary behaviour, changes toward a healthy diet and increased physical activity (6, 16). Regular physical activity such as an aerobic exercise in combination with healthy eating habits will help reach optimal weight reduction (17, 18). Families play a major role in diet choices, types, and snacks which can contribute to controlling weight gain and prevent obesity. According to literature (19, 20, 21) mothers have a direct and positive influential role on the quality and eating practices in children and young people more than fathers do. Moreover, Ali et al. in 2017 found that mothers' perceptions influenced children and young people perceived the value of the significance of breakfast as a regular meal which can decrease the rate of overweight

and obesity (22). School nurses and staff can introduce innovative health education about healthy diet and the importance of being physically active. They play the main part in the choice of food and snacks at school, assisting students in food selections and raising awareness in the school of the health risks of obesity.

Nurses play various roles in preventing and managing obesity as a health educator, counselor, and referral (23). Nurses caring for children and young adult have the chance to deal with growth and development issues and biometric measures, encourage maintaining average Body Mass Index (BMI), and the provision of eating habits. This will put nurses in the position to provide advice to the family and young children related to preventing obesity and encouraging healthy nutritional habits.

Through a health assessment, nurses can assess, evaluate and educate, and then refer children if needed to more advanced interventions regarding healthy eating habits to prevent overweight and obesity. On top of health education and promotion about healthy lifestyle, the community nurse can focus on the type and the quality of daily activities for children and young people which can play a major role in maintaining a healthy weight and decrease the risk for obesity. In addition, nurses can work on behavioral modifications and increase family awareness about eating healthy habits.

#### **Recommendations for policy decision makers to prevent and manage obesity:**

1. Develop a policy to follow up students in schools over time to measure environmental changes for obesity prevention.
2. Develop a policy of providing professional education for healthcare professionals in assessment and referral of overweight and obese patients to licensed nutritionists.

3. Establish legislation requiring nutrition labels on fast-food packaging and reduce the numbers of food advertisements and marketing directed at children.
4. Develop strategies to support healthy food and beverage choices in schools.
5. Develop partnerships with various types of organizations to support healthy school environments by providing healthy food and promoting physical activities.
6. Encourage more physical activities, by limiting the time in which children watch television or play computer and video games to less than two hours a day.
7. Assess the various societal factors affecting children's eating and activity habits.
8. Promote children's healthy foods by increasing the consumption of high fiber, low fat, and sugar-free foods.
9. Educate children about healthy food and the importance of physical activities.
10. Advocate community centres and schools to be available for physical activities at various times including after school and holidays and participate in community coalitions or partnerships to address obesity.
11. Discourage consumption of sugar-sweetened beverages through community committees and social activities.
12. Reduce screen time in public service venues and encourage outdoor activities for young people's access to outdoor recreational facilities.
13. Develop legislations to limit advertising of unhealthy foods on TV.
14. Children need to be actively involved in addressing and promoting their healthy food and life style.

#### **The recommendations for health care providers and researchers to prevent and manage obesity:**

1. Educate school staff including teachers and school heads about healthy diet and about the importance of physical activity, for at least 30-60 minutes three times a week.

2. Educate the school community about evidence-based healthy lifestyle changes, daily physical activity requirements, and preventable health risks associated with overweight and/or obesity.
3. Improve the quality of school meals and control the type of food available from vending machines.
4. Evaluate students' health status by conducting biometric screenings, BMI, waist circumference, and waist/height ratio.
5. Refer students with overweight and obesity problems to healthcare providers for further assessment and intervention.
6. Encourage the consumption of healthy foods and increase physical activities in, during and after school time, and promote the idea of a walk to school.
7. Develop plans for obesity prevention, screening, diagnosis and treatment.
8. Provide health education for obese children and their families.
9. Participate in multi-sector obesity prevention and treatment initiatives to achieve the required policy and meet the goals.
10. Conduct a national epidemiological study that builds on the evidence base for the relationship between obesity and physical inactivity.
11. Conduct longitudinal, cohort research at the national level to study BMI, waist circumference, waist/height ratio, and haemoglobin.
12. Identify the characteristics of individuals who have successfully maintained their healthy weight over the long term.

## CONCLUSION

A holistic approach is required in order to address teenage pregnancy. This means not focusing on changing the behaviour of girls but addressing the underlying reasons of adolescent pregnancy such as poverty, gender inequality, social pressures and coercion. This approach should include "providing age-appropriate comprehensive sexuality education for all young people,

investing in girls' education, preventing child marriage, sexual violence and coercion, building gender-equitable societies by empowering girls and engaging men and boys and ensuring adolescents' access to sexual and reproductive health information as well as services that welcome them and facilitate their choices" (24-26).

**CONFLICT OF INTEREST:** None.

## DECLARE OF FUNDING

No funding supported this document.

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