



## Childhood Obesity in the Middle East: The Need for Urgent Action

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## Editorial

The prevalence of chronic non-communicable diseases in the Middle East has increased remarkably during the past three decades, representing more than 50% of total annual death [1]. Obesity is one of main risk factors for these diseases and plays an important role in the insulin resistance and metabolic syndrome. A case-control study in 51 countries, showed that Middle East region has the second highest mean body mass index among adults in the world, after United States [2].

The Middle East region is characterized by a large number of children and adolescents. For example about 54% of Arab population is under the age of 25 years [3]. Therefore, with the high prevalence of obesity among this age group, the future projection of obesity comorbidities, might reach epidemic levels with serious health and economic consequences.

Several studies showed a high prevalence of overweight and obesity among children and adolescents in the Middle East. It was reported that 15%-45% of adolescents in this region were overweight and obese [4]. Childhood obesity often tracks to adulthood and it can lead to psycho-social problems and cardiovascular risk factors such as high blood pressure, high cholesterol and abnormal glucose tolerance or diabetes [5].

Obesity co-morbidities were reported among children and adolescents in this region. In Saudi Arabia, for example, it was found that 6.9% of children aged 1-6 years were at borderline and 1.6% were at high risk of high blood cholesterol. Whereas, in Tunisia, the prevalence of hypercholesterolemia was 8.1% among adolescents aged 13-19 years. Many Middle East countries have been reporting that the onset of type-2 diabetes is increased among young age groups. Although, studies in pediatric metabolic syndrome in the Middle East are limited, available data suggested that 9% to 14% of adolescents aged 10-19 years have metabolic syndrome. Hypertension especially among adolescents is not usually diagnosed, however several studies found that hypertension was more prevalent among obese than non-obese school children in this region [6].

The limited number of studies on factors associated with childhood obesity in the Middle East, emphasis the need for more epidemiologic investigations on this aspect. Programs to combat obesity in this region are usually focused on prevention and control of obesity among adults, and little attention is given to children. The emerging risk of type-2 diabetes among children and adolescents is a matter of concern. The American Diabetic Association [7] recommended screening for diabetes in children who are overweight or obese, and have in addition family history of type-2 diabetes and signs of insulin resistance. Any strategy to combat chronic non-communicable diseases in the Middle East, therefore, should include programs to prevent and control of obesity among preschool children, school children and adolescents, with more emphasis on promoting of healthy eating, healthy lifestyle and physical activity.

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