



Childhood obesity in the Middle East and North Africa (MENA) and its trend in Iran

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Abstract

The pediatric and adult populations of the Middle East and North Africa (MENA) are facing a double burden of nutritional disorders in terms of underweight and overweight. The situation has large variations in different countries of this region, however childhood obesity is becoming an important health problem in most of these countries.

A systematic review and metaanalysis conducted on the trend of overweight and obesity in Iranian pediatric population that assessed international (MEDLINE, PubMed, ISI Web of Science, and Scopus) and Iranian scientific databases (Scientific Information Database and IranMedex) revealed that the pooled prevalence of obesity has remained constant during 2000-2004 and 2005-2010 and was estimated to be 5.1% (95% CI: 4.4- 5.8). The meta-regression analysis showed that the prevalence of overweight and obesity had no significant variation according to the year of data collection and gender and age of the study participants. Comparing to those who were 2-6 years, those who aged 7-11 and 12-18 year had lower prevalence of obesity (for 7-11 years, difference= -1.5; 95% CI: -3.9- 1.1; P=0.248 and for 12-18 years, difference= -1.9; 95% CI: -4.4- 0.5; P= 0.115) and higher prevalence of overweight (for 7-11 year, difference= 0.2; 95% CI: -2.5- 2.9; P=0.882 and for 12-18 years, difference= 2.3; 95% CI: -0.3- 4.9; P=0.088). Studies conducted during 1995-1999 revealed a lower prevalence of obesity (difference=3.8; 95% CI: -0.4- 8.1; P=0.078) and overweight (difference= 1.2; 95% CI: -3.9- 6.4; P=0.63) and those during 2000-2005 showed a higher prevalence of obesity (difference= -0.4; 95% CI: -1.9- 1.1; P=0.588) and overweight (difference= -0.1; 95% CI: -1.7- 1.6; P=0.911), compared to studies conducted during 2005-2010. The escalating trend of excess weight among young children is alarming, and should be considered for health policies.

Prevention and early control of childhood obesity should be integrated in health services of low- and middle-income countries of the MENA region. Of special concern in this regard is the situation of the Middle Eastern countries with epidemiologic transition, lifestyle change and considerably high prevalence of obesity that face the population of this region at greatest burden of diabetes in the near future. Prevention and control



of childhood obesity would have a pivotal role in primordial prevention of non-communicable disease in MENA region.