The prevalence of Metabolic Syndrome (MS) among Kuwaiti male adolescents

Abdulwahab N Al-Isa
Kuwait University, Kuwait

Background: The prevalence of overweight and obesity are high in Kuwait. Metabolic Syndrome (MS) is associated with both. It is expected to find the syndrome to be higher in Kuwait than in other countries.

Objective: To assess the prevalence of MS using two different diagnostic criteria, the International Diabetes Federation (IDF) and the National Cholesterol Education Program-Third Adult Treatment Panel Modified for age (NCEP- ATP III).

Methods: The analysis of data for this study was based on a sample of 303 male Kuwaiti adolescents, 10–19 years of age selected from intermediate and high schools. Anthropometric measurements and biochemical tests on blood samples were carried out. The IDF criterion requires waist circumference (WC) plus two of the following criteria: triglycerides (TG), high density lipoprotein (HDL), fasting blood sugar (FBS) and blood pressure (PB). The ATP III criterion requires three of the above parameters. The parameters mentioned must show increase in their values except for HDL which must show decrease in either criterion used.

Results: Each of the two criterion revealed that the prevalence of MS was 14.8 and 19.5%, using the IDF and the ATP III criteria, respectively. HDL decreased in each of the two diagnostic criteria and the other four parameters increased, satisfying the diagnostic requirements of either criterion.

Conclusions: Significant implications may be drawn from these results, especially, when it comes to being at risk of type 2 diabetes (T2D) and cardiovascular disease (CVD).

Jordanian adolescents’ health behaviors and school climate

Abeer Shaheen, Omayyah Nassar, Samiha Jarrah, Mary Norton, Inaam Khalaf and Khaldoun Hamdan
The University of Jordan, Jordan

This study was conducted to assess the occurrence of physical activity, nutritional habits, tooth brushing, and seat belt use behaviors among adolescent school students in Jordan, and to examine the effect of psychosocial aspects of school on these behaviors. A cross-sectional descriptive correlational design was used to draw a sample of in-school adolescents aged between 11 to 15 years. The final sample included 1166 adolescents from five public and two private schools. Study participants filled a translated version of Health Behavior in School Aged Children questionnaire. Descriptive statistics, correlational (point biserial), and bivariate analyses (Chi-square tests) were used to analyze the data. The study results revealed that negative perception of school climate and lower perception of peer support were associated with lower frequency of tooth brushing behavior. Lower perception of teacher support at school was associated with lower frequency of physical activity and tooth brushing behavior. Among study sample, 34.5% of the adolescents practiced exercise outside school hours once a week or less frequent and only 53.1% of them brushed their teeth more than once a day. Regarding seat belt, 44.7% of the adolescents used it rarely or never. Concerning soft drinks carbonated sugary drinks and sweets consumption, about 64% and 83.3% of the adolescents respectively consumed them once a day or more often. The percentages of adolescents who never drank low fat or whole fat milk were 43.1% and 38.2% respectively. The study concluded that school adolescents do engage in unhealthy behaviors. Psychosocial aspect of schools affects students’ physical activity, nutritional habits, tooth brushing, and seat belt use behaviors.