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Magnitude and Determinants of Overweight and Obesity among High School Adolescents in Addis Ababa, Ethiopia

Authors : Mulugeta Shegaze, Mekitie Wondafrash, Alemayehu A. Alemayehu, Shikur Mohammed, Zewdu Shewangezaw, Mukerem Abdo, Gebresilasea Gendisha

Abstract : Background: The 2004 World Health Assembly called for specific actions to halt the overweight and obesity epidemic that is currently penetrating urban populations in the developing world. Adolescents require particular attention due to their vulnerability to develop obesity and the fact that adolescent weight tracks strongly into adulthood. However, there is scarcity of information on the modifiable risk factors to be targeted for primary intervention among urban adolescents in Ethiopia. This study was aimed at determining the magnitude and risk factors of overweight and obesity among high school adolescents in Addis Ababa. Methods: An institution-based cross-sectional study was conducted in February and March 2014 on 456 randomly selected adolescents from 20 high schools in Addis Ababa city. Demographic data and other risk factors of overweight and obesity were collected using self-administered structured questionnaire, whereas anthropometric measurements of weight and height were taken using calibrated equipment and standardized techniques. The WHO STEPS instrument for chronic disease risk was applied to assess dietary habit and physical activity. Overweight and obesity status was determined based on BMI-for-age percentiles of WHO 2007 reference population. Results: The prevalence rates of overweight, obesity, and overall overweight/ obesity among high school adolescents in Addis Ababa were 9.7% (95%CI = 6.9-12.4%), 4.2% (95%CI = 2.3-6.0%), and 13.9% (95%CI = 10.6-17.1%), respectively. Overweight/obesity prevalence was highest among female adolescents, in private schools, and in the higher wealth category. In multivariable regression model, being female [AOR(95%CI) = 5.4(2.5,12.1)], being from private school [AOR(95%CI) = 3.0(1.4,6.2)], having >3 regular meals [AOR(95%CI) = 4.0(1.3,13.0)], consumption of sweet foods [AOR(95%CI) = 5.0(2.4,10.3)] and spending <u>></u>3 hours/day sitting [AOR(95%CI) = 3.5(1.7,7.2)] were found to increase overweight/ obesity risk, whereas high Total Physical Activity level [AOR(95%CI) = 0.21(0.08,0.57)] and better nutrition knowledge [AOR(95%CI) = 0.160.07,0.37)] were found protective. Conclusions: More than one in ten of the high school adolescents were affected by overweight/obesity with dietary habit and physical activity are important modifiable risk factors. Well-tailored nutrition education program targeting lifestyle change should be initiated with more emphasis to female adolescents and students in private schools.

Keywords : adolescents, NCDs, overweight, obesity
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