

Child Obesity 2018: Trends of underweight and obesity defined by anthropometric measurements among male students at University of Tamar and Al saeeda-Yemen- Abdelmalek M Amran- Tamar University, Yemen

Abdelmalek M Amran

Tamar University, Yemen

The general characteristics of the study sample, the total number of study participants amounted to 300 males; with mean age of $M=21.3$, $SD=3.01$ years. The majority of students were unmarried (86.3%), while the married students were 13.7%. Around 15.7% of students reported eating less than three meals per day. However, 12.7% of participants skipped their breakfast. Those, whose appetite was poor, felt sad most of the time and Qat chewing percentage was around 78% respectively. A larger proportion of the parents (fathers) education of participants (33%) was more than high school education, while larger proportion of the parents (mothers) education of participants (61.5%) was no education. Anthropometric measurements were done for the participants, together with questionnaire administration. Results indicated that the median BMI was 20.2. Overall, 17%, 70.7%, 9.7% and 2.7% were underweight, normal, overweight and obese respectively. 96% were normal and 4% at risk related to waist circumference while abnormally, extremely, healthy, overweight and obese were 4%, 45.7%, 44.7%, 4% and 1.7% related to WHtR. Poor diet and high prevalence of unhealthy eating habits was recorded among the participants; and unhealthy lifestyle as Qat chewing had been identified as risk factors of underweight disease.

To quantify the prevalence of underweight and overweight or obesity and its related factors (socio-demographic, health behavior, health status) in a national adult population in Indonesia. In a national cross-sectional population-based survey in 2014-15 in Indonesia, 29509 adults (median age 41.0 years, Inter Quartile Range = 22.0, age range of 18-103 years) completed questionnaires and anthropometric measurements. Multinomial logistic regression modelling was used to determine the association between socio-demographic, health behavior and health status factors and underweight and

overweight or obesity. Of total sample ($n = 29509$), 11.2% measured underweight (13.5% among men and 9.1% among women) (<18.5 kg/m²), 39.8% normal weight (48.1% among men and 32.0% among women) and 49.0% had overweight or obesity (≥ 23 kg/m²) (38.3% among men and 58.9% among women); 24.6% of the overall sample had class I obesity (25-29.9 kg/m²), and 8.5% had class II obesity (30 or more kg/m²). Among different age groups, underweight was the highest among 18-29 year-olds (20.0%) and those 70 years and older (29.8%), while overweight or obesity was the highest in the age group 30 to 59 years (more than 53%). In adjusted multinomial logistic regression, having less education, living in rural areas and not having chronic conditions were associated with underweight status. While better education, higher economic status, urban residency, dietary behavior (infrequent meals, frequent meat, fried snacks and fast food consumption), physical inactivity, not using tobacco, having chronic conditions (diabetes, hypertension, hypercholesterol), and better perceived health and happiness status were associated with overweight or obesity. A dual burden of both adult underweight and having overweight or obesity was found in Indonesia. Sociodemographic, health risk behavior and health status risk factors were identified, which can guide public health interventions to address both these conditions.

Analyses of our data reveal gender disparity in the prevalence of obesity among participants. Based on body mass index, 6% of adolescent girls are obese, and 8.5% are overweight, while obesity and overweight among adolescent boys are 2% and 2.5%, respectively. Underweight was 7% and 15% among female and male participants, respectively. However, using waist-to-hip ratio (WHR), central obesity among male and female subjects is as high as 26% (WHR = 0.9) and 30% (WHR = 0.84), respectively.