

Predictors of overweight and obesity among secondary school students in

Puchong Selangor, Malaysia

ABSTRACT

Background: childhood obesity is gaining a dramatic increase in developing as well as in developed countries. Childhood overweight and obesity in which adolescents are included have been known to have negative impact on both physical and psychological health. Overweight and obese children are likely to stay obese into their adulthood and are more likely to develop non-communicable diseases. The objective of this study is to determine the occurrence and factors associated with overweight and obesity among secondary school students in Puchong Selangor Malaysia. Materials and method: a cross-sectional study design was employed. A self-constructed pretested questionnaire was used for the data collection. The questionnaire consists of six sections, which include: socio-demography characteristics, physical activity questionnaire, self-esteem scale, body parts satisfaction scale, body size perception scale and smoking status questionnaire. Weight and height were measured and converted to body mass index (BMI). The study analysis was done using SPSS version 22. Basic descriptive analyses were carried out for the mean, median, frequency and percentage. Chi square test was used to test association between the variables. Multiple logistic regressions were used to determine the predictors of overweight and obesity among the respondents. Result: the response rate was 100%. The respondents' age was 13-17 years and occurrence of overweight and obesity was 10% and 3.9% respectively. Out of the 281 students that participated in the study 164 were female (58.4%). Overweight and obesity was significantly associated with father's education ($\chi^2 = 9.697$, $df = 2$, $p = 0.006$), mothers education ($\chi^2 = 7.448$, $df = 2$, $p = 0.023$), body part satisfaction ($\chi^2 = 14.837$, $df = 1$, $p = 0.001$) and body image ($\chi^2 = 6.745$, $df = 1$, $p = 0.009$). Multiple logistic regression analysis showed that the predictors of obesity were age (AOR=2.049, 95% CL: 0.186, 0.835, $p < 0.007$), body parts satisfaction (AOR=3.656, 95% CL: 1.729, 7.730, $p < 0.001$) and body size perception (AOR=3.130, 95%:1.269, 7.718, $p < 0.014$). Conclusion: the significant predictors of overweight and obesity among study population were age, body parts satisfaction and body size perception.

Keyword: Overweight; Obesity; Association; Predictors; Secondary school; Students