Association between socioeconomic status and obesity among 12-year-old Malaysian adolescents

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Abstract

The epidemic of obesity in developed countries is commonly associated with poor dietary habit and sedentary lifestyle. However, other determinants, including education background and family income, may contribute towards the problem especially in developing countries. This study aimed to determine the influence of socioeconomic status (SES) on obesity among 12-year-old school adolescents in Terengganu, Malaysia. Body weight and height were measured and BMI was categorised based on WHO z-score cut-off points. Information was obtained from self-reported questionnaire on parents’ education background, family income and occupation. A total of 3,798 school adolescents aged 12 years (44% boys and 56% girls) were recruited. There was no significant difference in BMI status between boys and girls, or between rural and urban participants. There were significant differences between BMI categories and gender, household income and SES level within rural areas. In the urban areas, significant differences were found between BMI categories and gender, parents’ occupational and educational level, household income and size, and SES level. A logistic regression model found several SES factors to be predictors of obesity in this population, namely, gender, household size, father’s occupation level, household income level and SES level. Each component of SES has been significantly associated with the BMI category of school adolescents, particularly in the urban areas. This suggests the requirement of multifaceted approaches, including the role of family, society and authorities, in the effort to curtail adolescent obesity.

Introduction

During the past three decades, the world prevalence of obesity among children and adolescents has escalated dramatically [1, 2]. In Asia, the epidemic has now become a significant public health concern.