Abstract

**Objective:** To determine the prevalence of obesity in Taiwanese adolescents and important related variables.

**Methods:** This analysis was based on the Nutrition and Health Survey in Taiwan (NAHSIT) data during 2010 and 2011. The original study was a cross-sectional and national representative survey. A total of 1842 subjects (920 males and 922 females) aged 11–20 years participated. Research tools consisted of questionnaires and anthropometry parameters, and Taiwanese criteria were used to classify adolescents’ weights. The acquired data were analyzed using descriptive and inferential statistics.

**Results:** The prevalence of obesity in Taiwanese adolescents was 16.7%. Logistic regression analysis showed that obesity in adolescents was significantly associated with male gender, parental obesity, mother’s overweight, eating habits, and perceived dietary benefits.

**Conclusion:** Obesity among adolescents in Taiwan is a health concern that requires attention. The prevalence may be reduced by adjusting lifestyles. Prevention strategies should focus on adolescents, particularly adolescents of obese parents. Furthermore, employing integrative, education-based methods can reduce the health risks caused by obesity.

**Key words:** adolescent, cross-sectional studies, obesity, prevalence

Introduction

If preventive weight control can be implemented at adolescence, it could drastically enhance the effects of treatment, and reduce the amount of effort required. Thus, screening high-risk adolescents at an early stage is crucial for preventing obesity.

Prior studies have indicated that factors are related to adolescent obesity; however, these studies have been primarily conducted in Western countries and relevant surveys conducted in Taiwan have primarily analyzed a single school or area. The results might differ among populations because of school policies or urban-rural gaps.

We analyzed the NAHSIT data for adolescents aged 11—20 years by using a multistage, stratified clustering sampling scheme.

Investigated measurements: the data collection comprised anthropometric measurements and questionnaire interviews.

The data were analyzed using SPSS.

Materials and methods

The prevalence of obesity in Taiwanese adolescents was 16.7%.

Furthermore, using the definitions of the IOTF, WHO, and CDC to examine the prevalence of obesity in Taiwan; comparing the results of the Taiwanese and international definitions indicated that the results of the international definitions were low.

Regarding demographics, a difference existed between adolescent obesity and sex, parental education level, father’s BMI, and mother’s BMI. No obvious differences were observed between obesity and age or the father’s education level.

Subsequently, the backward stepwise method was used to analyze the dependent variables, namely, adolescent obesity, and a logistic regression was conducted. Table 3 shows that sex, father’s BMI, mother’s BMI, dietary habits, and perceived dietary benefit factors were significantly related to and influenced adolescent obesity.

Conclusions

The problem of adolescent obesity cannot be neglected and its treatment and prevention primarily rely on the recognition and prevention of risk factors.

Future intervention measures and health policies should stress adjusting adolescent lifestyles.