



Asian Pacific Journal of Tropical Medicine

journal homepage: www.apjtm.org



doi: 10.4103/1995-7645.268165

Impact factor: 1.77

Prevalence and determinants of childhood obesity in Haikou, China: A cross-sectional study

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Objective: To identify the prevalence and factors of rapidly increasing childhood obesity in Haikou, China.

Methods: A total of 11 497 students from 227 classes in primary and secondary schools of Haikou were surveyed by questionnaires from October 2013 to December 2014 using the Stratified Random Cluster Sampling method. Height and weight of the students were measured. A total of 8 458 children aged 7-15 years old were selected for the prevalence analyzing of overweight/obesity and 7 836 for logistic stepwise regression analysis.

Results: The rate of overweight and obesity were 10.5% and 7.4%, respectively. Out of the 33 investigated factors, 17 were associated with childhood obesity ($P < 0.05$), including 9 risk factors ($OR > 1$) and 8 beneficial factors ($OR < 1$). Birth weight (macrosomia), parent's obesity are the top three risk factors and children's breakfast hobby (soybean milk) and food taste (sweet), favorite diet style of the family (stewing) are beneficial factors.

Conclusions: The overweight/obesity rate is already at a high level and early interventions are needed. The necessary tasks are to strengthen education on parents and children with prevention knowledge, appropriately reduce the learning burden, and control the average time of watching TV to less than 3 h a day.

Keywords: Childhood obesity; Risk factor; Tropical region; Haikou city

Article history:

Received 19 August 2019

Revised 13 September 2019

Accepted 25 September 2019

Available online 7 October 2019

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Foundation project: It was supported by Hainan Applied Technology Research and Development Special Project (No. ZDXM2014063) and Hainan Social Development Science and Technology Project (No. SF201313).

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How to cite this article: Ou-yang FX, Yang LL, Xu HL, Yu RH, Bu PF. Prevalence and influencing factors of childhood obesity in Haikou, China: A cross-sectional study. Asian Pac J Trop Med 2019; 12(Suppl 1): 34.