Biosocial background in the development of child overweight and obesity among preschoolers in Putrajaya: an observational study

ABSTRACT

Introduction: Childhood obesity becomes a global epidemic with the majority are living in developing countries. Obese children are at risk of becoming obese adults with non-communicable diseases, which may further lead to huge economic burden for the affected countries. The study objectives were to determine the biosocial background contributing overweight and obesity among preschoolers in Putrajaya (2017) - sociodemographic, pre-and perinatal factors, feeding and weaning practices. Methods: Cross-sectional study was performed using cluster random sampling among 897 preschoolers, whose anthropometric body weights and heights were measured. The calculated BMI was used to determine their obese status based on WHO Growth Standards 2006 and Reference 2007. Their mothers were distributed with self-administered, validated, and pre-tested questionnaires regarding their children's first two-years-of-life experience. Chi Square test was used for bivariate categorical analysis, Independent T-test and Mann Whitney U test for continuous data analysis. Multivariate binary logistic regression was executed to determine predictors of child obesity. Results: The prevalence of obese children was 7.4%, which can be predicted by the increase in child's age (Adjusted Odd Ratio: 2.619; 95%CI: 1.435 – 4.780), mothers with higher level of education (AOR: 3.896; 95%CI: 1.127 – 13.470), and higher maternal BMI (AOR: 1.132; 95%CI: 1.057 – 1.213). Conclusion: Three predictors of child obesity can be derived from sociodemographic and pre-and perinatal factors. Further application on these predictors in more targeted interventions and policies need to be considered to reduce the prevalence of obesity and related non-communicable diseases in the country.

Keyword: Childhood obesity; Overweight; Preschool children