## Familial and socio-environmental predictors of overweight and obesity among primary school children in Selangor and Kuala Lumpur.

## Abstract

Introduction: A cross-sectional study was conducted to determine the familial and socioenvironmental predictors of overweight and obesity among 1430, 9-12 year-old primary school children and their parents in Selangor and Kuala Lumpur. Methodology: Body weight and height were measured and body mass index was calculated. Modified Child Feeding (CFQ) and Determinants of Adolescent Social Well-being and Health (DASH) questionnaires were used to measure familial and socio-environmental factors. Results: A total of 17.9% of the children were overweight while 16.0% were obese. Positive relationships were found between child's BMI and parent's BMI (r = 0.129, p < 0.01), concern about child's weight (r = 0.125, p < 0.01) and restriction (r = 0.057, p < 0.05) to unhealthy foods. However, negative relationships were found between child's BMI with pressure to eat (r = -0.135, p < 0.01) and neighbourhood safety perception (r = -0.053, p < 0.05). The logistic regression analysis showed that being male  $(\text{Exp}(\beta) = 0.538; 95\% \text{ CI} = 0.421-0.687)$ , higher parent's BMI (Exp  $(\beta) = 1.055; 95\% \text{ CI} = 1.028 \cdot 1.082$ , higher concern about child's weight (Exp ( $\beta$ ) = 1.082; 95% CI = 1.030-1.127), low pressure to eat (Exp ( $\beta$ ) = 0.857; 95% CI = 0.801-0.916) and low perception of neighbourhood safety (Exp ( $\beta$ ) = 0.951; 95% CI = 0.913-0.990) were significantly associated with increased risk of overweight. Conclusion: Parents should be the main target for education to modify children's weight status. Further research should be carried out to understand the mechanism of influence of parents and the socio-environment on child's health.

Keyword: Child feeding practices; Childhood obesity; Neighbourhood safety; Restrictions.