

ABSTRACT

Introduction: Overweight in childhood is an emerging health problem in developing countries. The increasing trend in overweight is associated with three most important factors; dietary habits, physical activity and socio-economical changes.

Objectives: To determine the prevalence and risk factors for overweight among grade five school children in schools of Gampaha MOH area.

Methodology: The study consisted of two phases. Phase 1 was a descriptive cross sectional study, carried out among the grade five school children in government and private schools in Gampaha MOH area during September and October 2007. Nine schools were selected by stratified cluster sampling technique. Overweight and obese were detected using age and sex specific body mass index cut off points recommended by International Obesity Task Force.

Phase 2 was a case control study to determine the risk factors for overweight. Those who were detected as overweight and obese were taken as cases. Controls were selected from the same class. A pre-tested self administered questionnaire was administered to parents or guardian of cases and controls. Data were analyzed by SPSS. Univariate and multivariate logistic regression were applied. Results were shown as prevalence with 95% C.I. and odds ratios with 95% C.I.

Results: The total number included in descriptive study was 1110. The prevalence of overweight was 11.34 % (n=126). The prevalence of obesity was 2.16% (n= 24). Sex specific combine overweight and obesity prevalences were 13.4% and 13.6% for

female and male respectively. Prevalence of overweight in private schools was higher than in government schools ($Z= 4.2$; $p > 0.01$).

In univariate analysis, mother's employment (OR 1.68; 95% C.I: 1.05-2.68; P 0.03), less physical activity done at free times in home (OR 1.86; 95% C.I: 1.01-3.42; P < 0.05), less physical activity done at weekends (OR 2.06; 95% C.I: 1.18-3.61; P = 0.01), less physical activity assessed with overall activities (OR 1.77; 95% C.I: 1.08-2.90; P = 0.02), sleeping more than 8 hours per day (OR 0.46; 95% C.I: 0.29-0.74; P = 0.01) showed statistically significant associations with overweight. After adjusting for confounding effects, less physical activity done in weekends was detected as a risk factor (OR 2.17, 95% C.I: 1.22-3.86) for overweight. Sleeping more than 8 hours per day was a protective factor (OR 0.46, 95% C.I: 0.29-0.74) for overweight.

Conclusion: Prevalence of overweight and obesity in grade five students, studying in schools of Gampaha MOH area were 11.34% and 2.16%. Prevalence was higher in private schools. Less physical activity done at weekends was a risk factor for overweight.