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Relationship Between Dental Caries and Childhood Obesity in Malaysia

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Abstract

Objectives: To assess the relationship between dental caries and childhood obesity and related factors among 5-6 year-old preschool children. Method: A cross-sectional study was conducted on 898, 5-6 year-old children attending 25 kindergartens (government and private) in 2 large districts in Selangor. A multi-staged and cluster random sampling was employed. Children's primary dentition was examined using the dmft index and their weight and height measured. The Body Mass Index (BMI) in kg/m2 was calculated. The WHO 2007 cut off points for BMI-for-age was used in boys and girls. Prior to the study their mothers were given a questionnaire comprising their age, education level and family income. Only mothers who responded and consented to participate together with their children were included in the study. Results: The caries prevalence was 67.9%: the mean dmft and dmft were 3.97 [95% CI (3.67, 4.26)] and 4.18 [95% CI (3.88, 4.49)] respectively. The prevalence of 'overweight', 'obese' and 'normal' children were 8.9%, 15.1% and 54.9% respectively for boys and 8.4%, 9.6% and 53.0% for girls. No significant association was found between 'overweight' or 'obese' with caries experience, mother's education level and family income (p>0.05). Boys had significantly higher prevalence of 'overweight' and 'obese' than girls (p<0.05). Conclusions: This study indicated that there was no relationship between caries and obesity in this paediatric population. Further studies need to be conducted to confirm the finding.

This paper is competing for the following awards:
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