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Original Article

Dental caries and associated factors in 12-year-old schoolchildren in Thiruvananthapuram, Kerala, India

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Summary

Objectives. The aims of the present study were to describe the dental health status of 12-year-old schoolchildren in Thiruvananthapuram, Kerala, India, and to identify sociodemographic factors, oral health behaviours, attitudes and knowledge related to dental caries experience.

Methods. The study took the form of a cross-sectional survey of 838 children in upper primary schools. A two-stage cluster sampling technique was used. Dental caries was measured using World Health Organization criteria. Sociodemographic factors, oral health behaviours, attitudes and knowledge were assessed by a self-administered questionnaire.

Results. The prevalence of dental caries in the permanent dentition was 27%. The mean number of decayed, missing and filled teeth was 0.5 (SD = 0.9). The decayed component (D) constituted 91% of the total number of decayed, missing and filled teeth (DMFT). Multiple logistic regression analysis showed that children had a higher risk of having dental caries if

they lived in urban area [OR = 1.5, 95% confidence interval (CI) = 1.1–2.1], had visited a dentist (OR = 1.6, 95% CI = 1.2–2.2), did not use a toothbrush (OR = 1.9, 95% CI = 1.2–2.9), consumed sweets (OR = 1.4, 95% CI = 1.0–1.9) or performed poorly in school (OR = 1.7, 95% CI = 1.0–2.3).

Conclusions. The prevalence of caries in this sample of 12-year-old schoolchildren was low compared to that in other developing countries. The present study indicated that urban living conditions were associated with more dental caries. Since urbanization is rapid in India, oral health promotion at the present time would be valuable to prevent increased caries prevalence.