

Association of early childhood caries experience with oral hygiene status and oral health practices of preschool children in Tandale, Tanzania

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Abstract

Background: Early Childhood Caries (ECC) has short and long-term effects on children and parents. The short-term effects include higher risk of new lesions, emergency room visits and hospitalization, increased treatment costs and days with restricted activity. The long-term effects are diminished learning ability and delayed physical growth and development.

Objectives: To determine the association of ECC with oral hygiene status and oral health practices among children attending informal preschools in Dar es Salaam, Tanzania.

Materials and methods: A descriptive cross-sectional study among 297 preschool children and their caregivers. Schools were selected using a stratified random sampling technique while children were conveniently selected. A questionnaire to interview parents inquired on socio-demographic characteristics, oral hygiene practices and dietary habits. Clinical examination for children's plaque and dental caries scores was conducted. Data was analyzed using SPSS Version 20. Chi square and logistic regression statistical tests were done to determine the association between variables. The level of significance was set at $p \leq 0.05$

Results: Small proportion of the children brushed their teeth twice per day (24.6%), consumed sugar containing snacks (23.9%) or sugary drinks (20.9%) more than twice per day. Seventy percent had caries with a decayed missing and filled teeth index (dmft) of 4.19(± 4.52 SD). Children brushing less than twice a day ($p=0.021$) and having high plaque scores ($p=0.000$) were more likely to develop dental caries than their counterparts.

Conclusion: Caries experience among preschool children was positively associated with poor oral hygiene status and brushing teeth less than twice per day.