

Early childhood caries in Moshi, Tanzania.

Abstract:

To determine the prevalence, severity and pattern of early childhood caries (ECC) in Moshi Municipality, Tanzania. DESIGN: Cross-sectional study. SETTING: Moshi Municipality, Kilimanjaro region, Tanzania. SUBJECTS: Three hundred and seventy two randomly selected children aged three to five years (157 males and 215 females) in 2008. RESULTS: Overall caries prevalence was 30.1% with no significant gender difference ($p>0.05$). The severe form of ECC that attacks primary maxillary incisors occurred in 21.2% of the children. The mean dmft score was 0.95 (SD +/- 1.81). The decay component was 0.87 (SD +/- 1.71), whereas the missing component was 0.08 (SD +/- 0.41). There was no significant gender difference in the mean dmft scores ($p>0.05$). Among the posterior teeth, mandibular last molars had the highest caries prevalence (12.4%) and for the anterior teeth, the maxillary central incisors had the highest caries prevalence (21%). Majority of the affected children had three or less teeth affected. The sample mean plaque score was 0.57 (SD +/- 0.46) with no statistical gender difference ($p>0.05$). A total of 174 (46.8%) parents/guardians responded to the questionnaire. Caries risk and experience was significantly higher in children with guardians and in children with history of falling asleep with the breast in the mouth respectively ($p<0.05$). CONCLUSION: Most of the affected children had ECC in the anterior and posterior segments. In the anterior segments, the maxillary teeth were affected more frequently than the mandibular teeth, while in the posterior segments the mandibular teeth were more frequently involved than the maxillary teeth. Significantly higher caries prevalence was found in children under the care of the guardians, children who had slept with breast in the mouth and those with higher sugar moments as the result of snacking.