

Early childhood caries: Sociodemographic factors

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Introduction: Early Childhood Caries (ECC) is a form of decay of the primary dentition that is distinguished by the specificity of tooth surfaces involved and the rapid progression of carious lesions. Objective: The objective of this investigation is to compare several sociodemographic variables between families of children with S-ECC and their caries free counterparts.

Methods: Two groups of children ages 2-6 yrs were enrolled in a longitudinal study of the effects of ECC on growth in young children. Information was obtained on several sociodemographic variables including income, education, insurance status as well as race/ethnicity. Comparisons were made using the chi square analysis as well as multivariate regression to determine the independent effects of each variable on S-ECC risk.

Results: A large proportion of children with S-ECC (47.6%) were from families with annual incomes <\$15,000 compared to 36% of caries free children ($p < 0.001$). Parent's education was also found to be significantly related to S-ECC risk with S-ECC children more likely to come from families where one or both parents had less than a high school education ($p = 0.002$). The majority of children from both groups had Medicaid as their primary insurance with nearly twice as many children from the caries free group (18.2%) having private insurance as compared to S-ECC children (9.6%) ($p = 0.03$).

Conclusion: Sociodemographic factors are likely to be determinants of S-ECC and thus education interventions should be targeted toward families from these population subgroups. Supported by NIDCR/NIH Grant U54 DE014264.

Learning Objectives:

- Assess the contribution of several sociodemographic factors to ECC risk.
- Identify the most significant sociodemographic predictors of ECC.
- Prioritize the sociodemographic risk factors for ECC.

Keywords: Early Childhood Caries, Health Disparities

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