

Caries Experience Among Children from Families with Limited English Proficiency (LEP)

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Introduction:

In the United States, people are more likely to have poor oral health if they are low-income, uninsured, and/or members of racial/ethnic minority, immigrant, or rural populations who have suboptimal access to quality oral health care. Dental organizations from different countries have studied local populations and published data investigating the correlation between Decayed, Missing, and Filled Teeth (DMFT) indices and socioeconomic background, parents' education, and income level. However, there is insufficient literature investigating the caries experience among children from families with limited English proficiency living in the United States.

Purpose:

This study aims to measure caries experience among children from families with limited English proficiency, and compare caries experience vs. parental education levels and annual household income.

Methodology:

A retrospective electronic chart review was performed for children ages 1 to 17 years old, who received dental treatment and whose parents have LEP (limited English proficiency). Parental interviews were also conducted following their dental visits. Data collection included: the child's caries experience, the DMFT/dmft + SD score, the parental education and annual household income.

Results:

Characteristics	Age in Years			Total N (%)
	0-5 N (%)	6-11 N (%)	12-17 N (%)	
Total	32 (30%)	45 (42%)	31 (29%)	108 (100%)
Gender				
Female	17 (16%)	19 (18%)	13 (12%)	49 (45%)
Male	15 (14%)	26 (24%)	18 (17%)	59 (55%)
Mean DMFT/dmft ± SD	4.419 ± 5.01	7.31 ± 4.11	8.32 ± 4.89	6.76 ± 4.84
Level of Caries Experience	Moderate	High	High	High

Table 1: Demographic Characteristics, Mean DMFT/dmft Scores, and Caries Experience of Children by Age Group

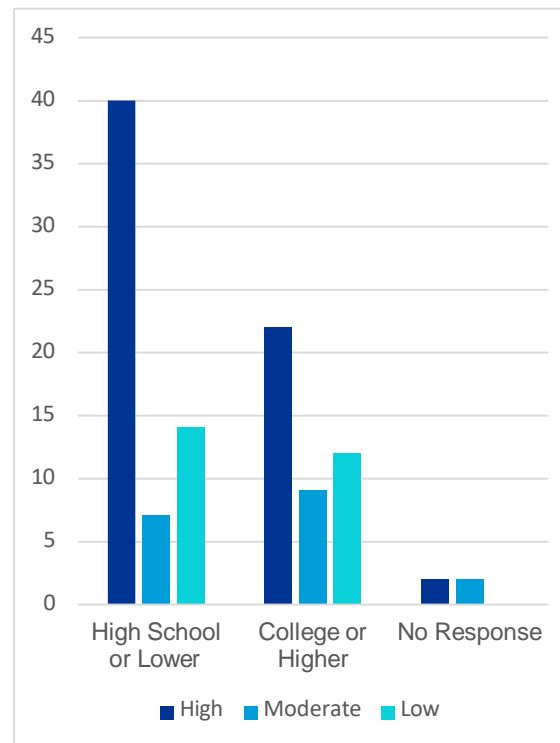


Fig. 1: Caries Experience vs. Parental Education

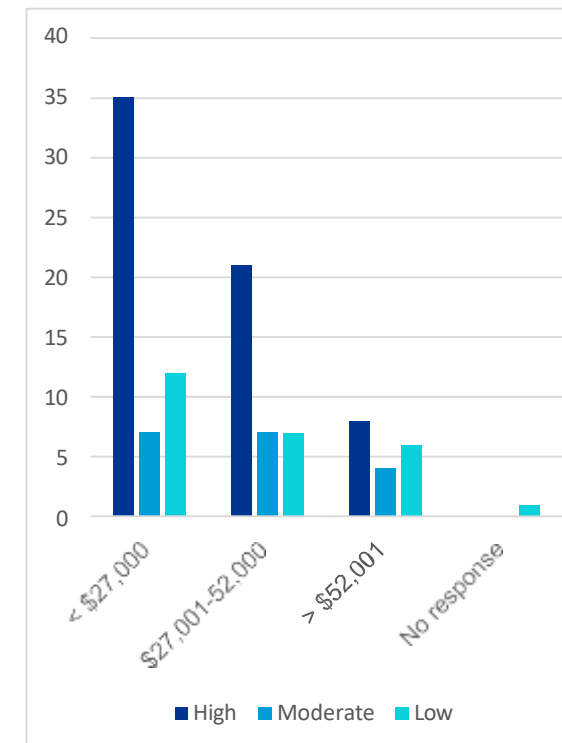


Fig. 2: Caries Experience vs. Annual Household Income

Results:

One hundred eight parent-child dyads participated in the study. Most children (71 percent) had high caries experience with the overall average DMFT/dmft score of **6.76 ± 4.84**; among age groups, 12–17-year-olds exhibited the highest level of caries experience and mean DMFT score. Children of parents with lower parental education (37%) and low annual household income (of less than \$27,000; 32%) exhibited a significantly higher caries experience.

Conclusions:

Children from lower-income, less educated families with LEP exhibit a higher dental caries experience than their higher-income and more educated counterparts.

References:

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