Background

- Rates of decayed missing and filled teeth in children have decreased over the past two decades, however the declining rate has plateaued over the past ten years.
- Severe tooth decay can negatively affect a child's growth, body weight, cognitive development and overall quality of life; yet prevalence remains high, particularly among socially vulnerable children
- Caries management in young children falls heavily on parents/guardians and their oral health related knowledge and practices.
- Parents impact children's oral health through their influence on dietary practices, frequency and technique of toothbrushing, as well as regular dental check-ups.

Objectives

The purpose of this cross-sectional survey research was to assess the relationship between parent's oral health knowledge and the rates of decayed, missing, and filled surfaces (dmfs) in children's dentition.

Materials & Methods

Parent/child dyads (n=100) recruited. Eligibility limited to well children between the ages of 2-13.

Consent obtained. Parents completed 18 based multiple choice questionnaire. 6 questions on oral health knowledge, 5 questions on children's oral health knowledge, 2 on parent's dental habits and 5 assess demographic information

Data on children's dmfs rates were abstracted from electronic health records

Data was descriptively analyzed and t-tests used to explore associations between parent's oral health knowledge and decayed, missing, filled surfaces (dmfs) in children

Parent Oral Health Knowledge and Caries Experience in Children

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Results

- A total of 100 surveys were completed
- Most parents were between 25-34 years old, mainly spoke English at home (n=72, 72%), were employed (n=54, 54%) and completed high school education (n=77, 77%)
- The average number of dmfs in children studied was 7.67 (range 0 25)
- No statistically significant associations were found between percent correct responses by parents and their child's dmfs rate
- Parents averaged 85% correct responses. The most frequently incorrectly answered question was the duration of time for tooth brushing.

Figure 1: Analysis of Survey Response



Figure 2: Distribution of dmfs Ranges







- dentition was not evaluated

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Results (continued)

Figure 3: Number of Children in Household and Average Age Range of Child

Discussion

• Although there was no statistical significance associations found, parents were shown to be knowledgeable regarding oral health, despite children presenting with high average dmfs rates • Knowledge assessment may have been affected by completion of surveys immediately following dental visits, during which routine oral health information is provided.

• The study was also limited to primary teeth dmfs and the prevalence of caries in permanent

Conclusion

• Findings suggest that although parents posses oral health knowledge regarding caries risks, they may not be adequately implanting healthful oral health-related behaviors at home, as caries rates remained very high among children in the study

• Future studies should assess the home-based oral health behaviors and the challenges parents may face in implementing behaviors to prevent caries.

References

• "Trends in Dental Caries in Children and Adolescents According to Poverty Status in the United States from 1999 through 2004 and 2011 through 2014." British Dental Journal, vol. 223, no. 7, 2017, pp.499-499. • Dye, Bruce A, et al. Prevalence and Measurement of Dental Caries in Young Children, vol. 37, no. 3, May

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