

The Role of Parental Dental Anxiety on Children's Oral Health

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Background

- The American Academy of Pediatric Dentistry's recommendation is that a child should visit the dentist at the time of eruption of their first tooth and no later than 12 months of age¹. • This first dental visit establishes a dental home and provides a foundation upon which a lifetime of dental education, prevention and oral health care can be built¹.
- The global estimated prevalence of dental anxiety among adults is about 15%⁹.
- While there is previous evidence that supports the relationship between parental dental anxiety and children's dental fear³, there is a lack of existing research on whether parental dental anxiety affects when their child's first dental visit takes place.
- Children whose parents avoid bringing them to their scheduled dental appointments, because of their own dental fear, have an increased risk for dental decay⁷.

> The purpose of this study was to explore whether parental dental fear and anxiety resulted in a delay of their child's first dental appointment.

Methods

Study population:

• Parents and guardians who visited the Boston University Pediatric Dental Clinic and Franciscan Children's Pediatric Dental Clinic with their children ages 6 and under between the dates of June 2023 and March 2024 were invited to participate in a voluntary and anonymous cross-sectional survey.

Data collection and analysis:

- The survey was 23 questions and available in English only
- A total of 46 surveys were completed and included in the study.
- The survey utilized 5 questions from the Modified Dental Anxiety Scale (MDAS) ⁵. Each question is scored from 1 to 5, for a total score range of 5 to 25. Scores of 14 and under indicate minimally dentally anxious and scores 15 and above indicate moderately to highly dentally anxious.
- Additional questions recorded parent's demographics, how the old child was, when their child's first dental appointment took place, what the appointment was for, if they encountered any difficulties for their first dental appointment, and if the child was anxious for their first dental appointment.
- Statistical analysis was performed using SPSS. Significance testing was assessed using Chi Square test.

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Results

Table 1: Demographic C Parent Age 19 and under 20-30 31-40 41-50 older than 50 Parent Race American Indian/Alaska Black or African America Asian Native Hawaiin/Pacific White Other Parent Ethnicity Hispanic Non-Hispanic Did Not Respond Parent Gender Male Female

- study

Discussion

- first dental visits
- conditions

| Characteristics of Sample (n=46) | | | |
|----------------------------------|---------------|--------------------------------------|------------|
| | % (N) or mean | Child Age | |
| | 10.9 (5) | 0-1 year old | 6.5 (3) |
| | 34.8 (16) | 2-3 year old | 32.6 (15) |
| | 34.8 (16) | 4-5 year old | 26.1 (12) |
| | 17.4 (8) | 6 year old | 34.7 (16) |
| | 0 | Age of first visit | |
| | | 0-1 year old | 41. 3 (19) |
| an Native | 0 | 2-3 year old | 32.6 (15) |
| can | 54.3 (25) | 4-5 year old | 23.9 (11) |
| | 10.9 (5) | 6 year old | 2.2 (1) |
| Islander | 0 | Insurance Status | |
| | 21.7 (10) | Mass Health | 82.6 (38) |
| | 13 (6) | Private insurance | 6.5 (3) |
| | | Other | 10.9 (5) |
| | 28.3 (13) | Parent MDAS Score | |
| | 60.9 (28) | Minimally Dentally anxious | 91.3 (42) |
| | 10.9 (5) | Moderately to Highly dentally anxiou | 8.7 (4) |
| | | | |
| | 32.6 (15) | | |
| | 67.4 (31) | | |
| | | | |

• Of the 46 parents who participated in the study, the mean Modified Dental Anxiety Scale (MDAS) ⁵ score was 8.8 (minimally dentally anxious) with a standard deviation of 3.68

• 6.5% of participants admitted the delay of their child's first dental visit was due to their own dental fear • 4.3% of participants admitted the delay of their child's first dental visit was due to their child's own dental fear • 19.6% of parents admitted to having dental fear

• Insurance type was not associated with age of first dental visit

• 47.8% of parents was told by a pediatrician to bring their child for their first dental visit • Parents might be unaware that they may experience dental fear and phobia, more research and support is needed in this area of

• There are many factors that may be more strongly correlated with the age of a child's first dental appointment besides parental dental anxiety. These include socioeconomic status, medical history and access to care. Increased research is needed to understand the multifactorial causes of delayed

• Dentists should educate parents on the benefits of early dental visits to prevent emergency dental



Bar Chart A doctor told me I should bring my child My child had a cavity My child was in pair Dental cleaning FirstVisit

Figure 1: Age of first Visit and Reason for Visit



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