

Exploring the Role of Parental Dental Anxiety in Children's Oral Health

Buzzi N, Chiao C, Tuncer H, Sprott S, Discepolo K Boston University Henry M. Goldman School of Dental Medicine



Background

- The American Academy of Pediatric Dentistry's recommendation is that a child 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 fear¹⁰, 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, as a result of their own dental fear, have an increased risk for dental decay¹¹.
 - 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 who visited the Franciscan Children's pediatric dental clinic with their children ages 6 and under between the dates of April 2022 and March 2023 were invited to participate in a voluntary and anonymous cross-sectional survey.

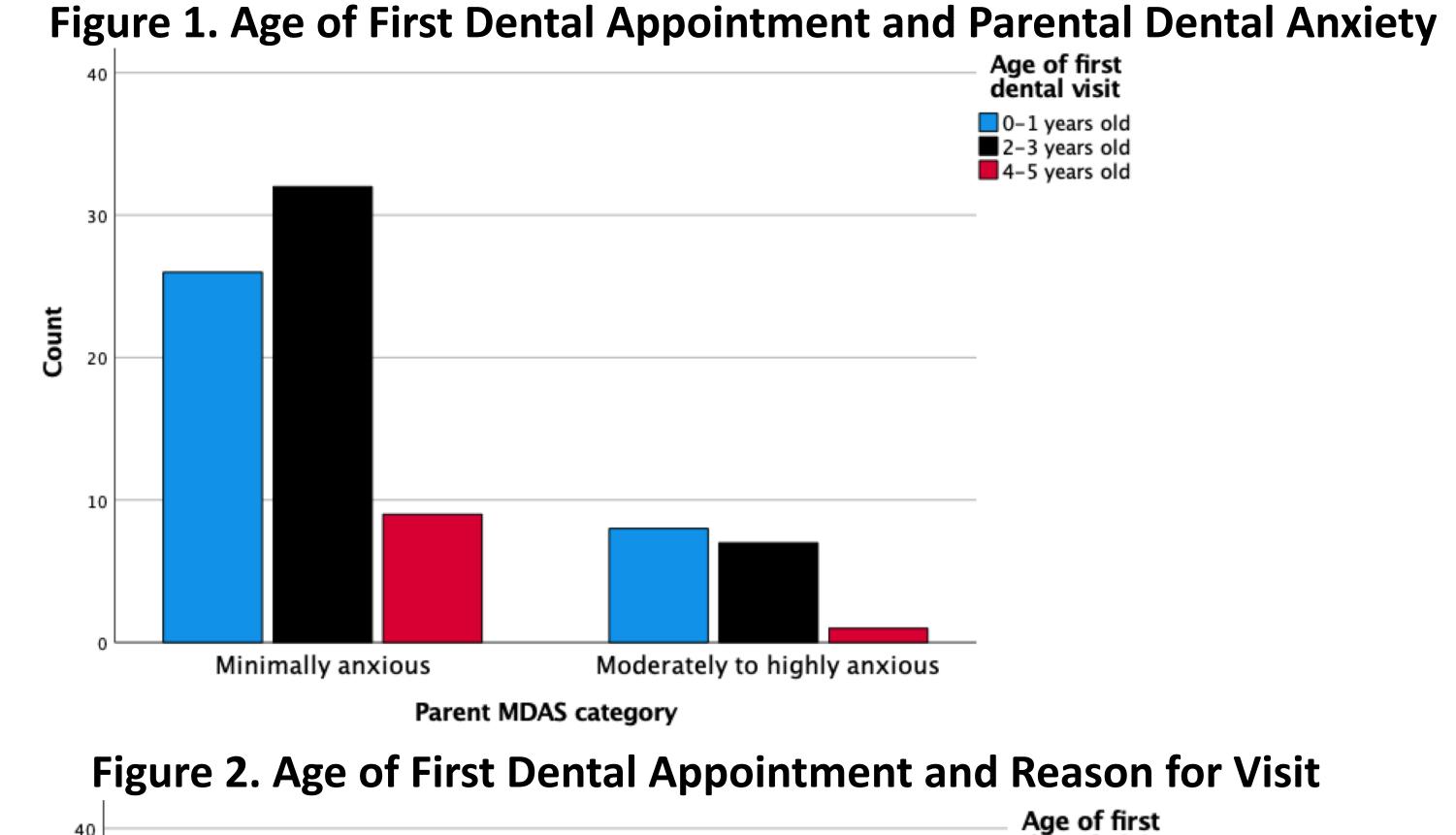
Data collection and analysis:

- The survey was 22 questions and available in both English and Spanish.
- A total of 86 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, when their child's first dental
 appointment took place, what the appointment was for, whether their child has special
 health care needs, if they have any other children, and if so what age they visited the
 dentist for the first time.
- Statistical analysis was performed using SPSS. Significance testing was assessed using Chi Square test.

Results

Table 1. Demographic Characteristics of Sample (n=86)

Survey Language	% (N) or mean	Parent Gender	% (N) or mean
English	77.91 (67)	Male	29.07 (25)
Spanish	22.09 (19)	Female	70.93 (61)
Parent Age		Child Age	
19 and under	5.81 (5)	Less than 1 yr old	0 (0)
20-30	15.12 (13)	1-2 yrs old	9.41 (8)
31-40	50 (43)	3-4 yrs old	36.47 (31)
41-50	24.42 (21)	5-6 yrs old	54.12 (46)
older than 50	4.65 (4)	Child Medical Conditions	
Parent Race		Yes	14.12 (12)
American Indian/Alaskan Native	2.6 (2)	No	82.35 (70)
Black or African American	22.08 (17)	Prefer not to answer	3.53 (3)
Asian	11.69 (9)	Insurance Status	
Native Hawaiin/Pacific Islander	0 (0)	Mass Health	73.81 (62)
White	33.77 (26)	Private Insurance	26.19 (22)
Other	29.87 (23)	Parental MDAS Score	
Parent Ethnicity		Minimally Dentally Anxious	79.1 (68)
Hispanic	39.47 (30)	Moderately to Highly Dentally Anxious	20.9 (18)
Non-Hispanic	60.53 (46)		



Age of first dental visit

0-1 years old

2-3 years old

4-5 years old

• Of the 86 parents who participated in the study, the mean Modified Dental Anxiety Scale (MDAS) ⁵ score was 10.7 (minimally dentally anxious) with a standard deviation of 4.58.

• 9% of participants admitted the delay of their child's first dental visit was due to their own dental fear.

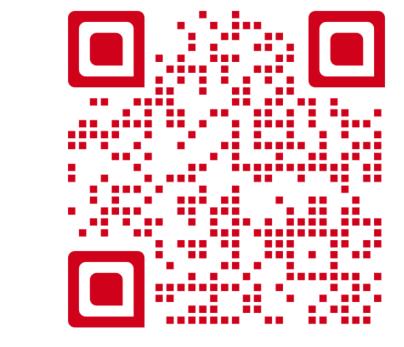
• Parental dental anxiety was not correlated with the age of their child's first dental visit; neither was it correlated with the reason for the child's first visit.

- Insurance type was not associated with age of first dental visit.
- The relationship between age of first visit and reason for first visit was found to be significant (p<.001). If the first dental visit was completed younger, it was more likely to be routine. Conversely, if the first visit was completed older it was more likely to be non-routine.

Discussion

- There are other factors that may be more strongly correlated with the age of a child's first dental appointment besides parental dental anxiety including socioeconomic status, medical history and access to care. Increased research is needed to understand the multifactorial causes of delayed first dental visits.
- Dentists should educate parents on the benefits of early dental visits in order to prevent emergency dental conditions





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