

Caregiver Behaviors/Beliefs Associated with Dental Anxiety in Pediatric Patients

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Purpose

The purpose of the current study is to explore possible associations between caregiver attitudes/behaviors surrounding dental healthcare and reported anxiety within BronxCare Health System's pediatric dental population.

Introduction

- Dental anxiety in pediatric patients is associated with poor oral health outcomes.² Behavior management techniques employed by the pediatric dentist can be applied to alleviate fear and establish trust and communication with the patient.³
- Parents may play a role in addressing pediatric anxiety prior to presentation to the dental clinic: parental involvement in the anticipation and preemptive management of uncooperative behavior in pediatric patients has been further suggested as a means to address dental anxiety prior to the dental visit through allaying fear and increasing compliance.^{8,9}
- Caregiver interaction with their children prior to dental visits represents an avenue of possible research that may elucidate means of alleviating or addressing pediatric dental anxiety prior to presenting to the dental clinic for care.
- By identifying factors associated with improved parent communication with children prior to dental visits and/or factors associated with reduced patient-reported anxiety, this research project hopes to inform future interventions that may improve dental experiences and outcomes for the BronxCare pediatric dental community.

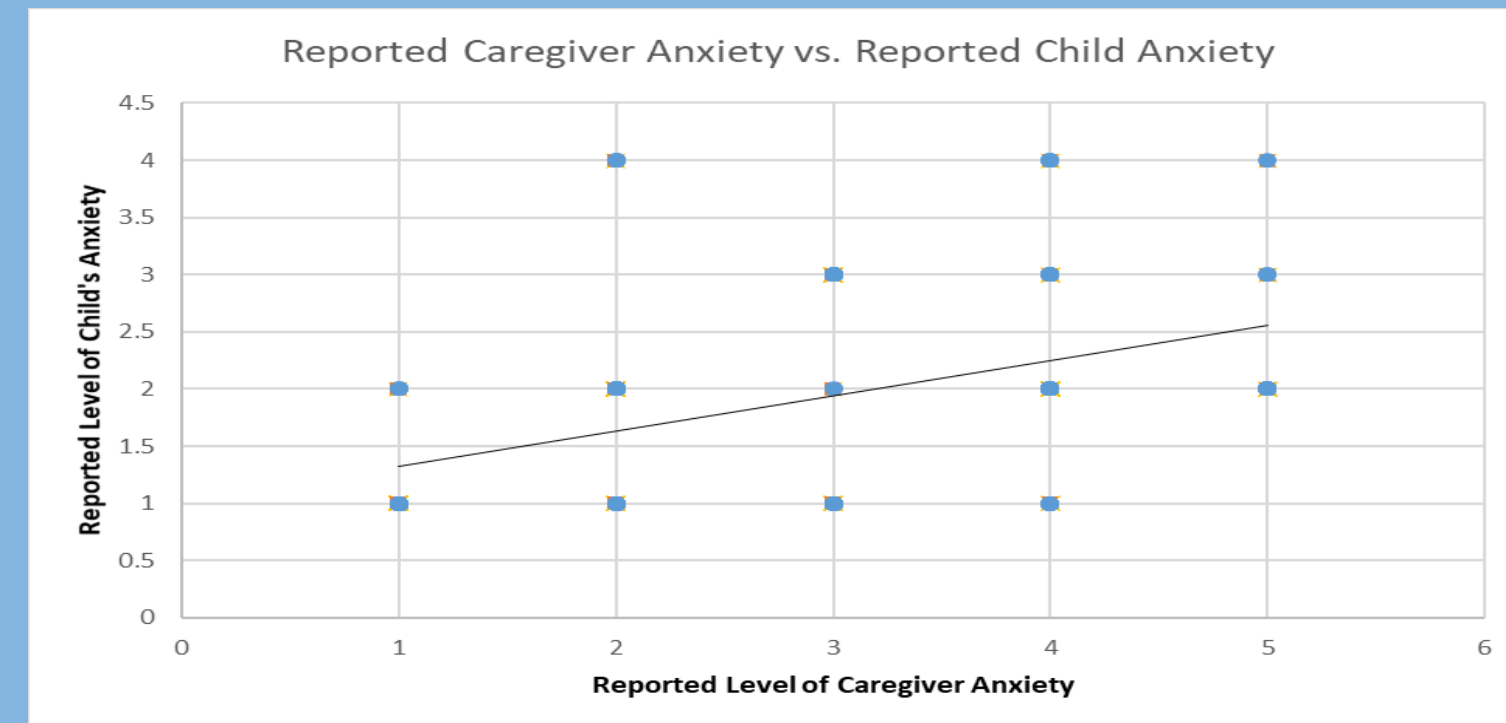
Methods

An anonymous survey was completed by 222 parents or legal guardians of pediatric patients between the ages of 6 to 14 years old who presented to the clinical for dental care. The survey comprised of 20 questions, including:

- Caregiver demographics
- Caregiver dental anxiety
- Caregiver overall dental experience
- Child's perceived anxiety level as reported by caregiver
- Child's reason for dental visit
- Child's pre-visit preparation from caregiver, if applicable

Results

Figure 3: Reported Caregiver Anxiety vs. Reported Child Anxiety



- Pearson Correlation Coefficient = 0.5098** ($P < 0.05$)
- The results suggest a **statistically significant** and **moderate correlation** between reported caregiver anxiety and reported child dental anxiety

Table 1

	Yes, I believe that my child will be anxious	No, I do not believe that my child will be anxious	Totals
Yes, I have a dentist	33	86	118
No, I do not have a dentist	56	47	103
Totals	89	133	222

- A statistically significant positive association was found between the caretaker having a regular dentist and the same caretaker reporting the belief their child would not be anxious during their dental visit.
- Caregivers with regular dentists were 3.1 times less likely to report the belief that their children would be anxious for the dental visit compared with caregivers who did not have a regular dentist ($p < 0.05$)

Table 2

	Yes, I do believe that my child will be anxious	No, I do not believe my child will be anxious	Totals
Yes, I have had a bad dental experience	56	40	96
No, I have not had a bad dental experience	32	94	126
Totals	88	134	222

- A statistically significant statistical association was found between the caregiver's personal dental history and the same caregiver's beliefs regarding their child's level of dental anxiety.
- Specifically, Caregivers who report not having a bad dental experience were 4.1 times less likely to report their children as anxious for the dental visit compared with caregivers reporting to have had a bad dental experience ($p < 0.05$)

Table 3

	Yes, I do believe that my child will be anxious	No, I do not believe my child will be anxious	Totals
Yes, I have experienced depression and/or sadness	20	12	32
No, I have not experienced depression and/or sadness	71	119	190
Totals	91	131	222

- A statistically significant positive association was found between a caregiver's positive report of history of significant depression or sadness, the same caregiver reporting a belief that their child would be anxious for the dental appointment.
- Caregivers who reported having experienced significant depression or sadness were 2.79 times more likely to report the belief that their children would be anxious for the dental appointment compared to those who did not report significant history of depression or sadness. ($p < 0.05$)

Results

Table 4

	Yes, I prepared my child for this visit	No, I did not prepare my child for this visit	Totals
Yes, I believe that my child will be anxious	39	52	91
No, I do not believe that my child will be anxious	60	71	131
Totals	99	123	222

- The relationship between perceived child anxiety and preparation for the visit was found to be **statistically insignificant** at a p value of $p < 0.05$

Table 5

	Yes, I prepared my child for this visit	No, I did not prepare my child for this visit	Totals
Yes, I have a dentist	69	51	120
No, I do not have a dentist	30	72	102
Totals	99	123	222

- A statistically significant association between caregiver's dental care-seeking habits and preparing children for dental visits.
- Caregivers with a dentist were 3.2 times more likely to have prepared their child in some way for the dental visit. ($p < 0.05$)

Discussion

The findings suggest that there is a moderate correlation between the caregiver's own level of anxiety regarding their child's dental visit, and the same caregiver's perception of their child's dental anxiety. Moreover, caregiver dental care practices, negative dental experiences, socioeconomic background, and mental health may be principal factors that influence a caregiver's perception of their child's dental anxiety.

Interestingly, our study findings suggest that a belief in the child's probable dental anxiety alone is not significantly related to a tendency in the same caregiver to prepare their child for the visit. The only domain of the caregiver dental experience that was associated with a statistically significant increased likelihood of preparing a child for a visit to the dentist was history of current dental usage (ie. Whether the caregiver has a dentist). This suggests that caregivers with dentists are more likely to prepare their children and highlights the potential importance of improvement in oral healthcare seeking habits and oral health literacy in caregivers.

Conclusion

The current study suggest the that caregiver's perceptions of their children's dental anxiety may be associated with their own anxiety regarding the dental visit. Caregivers' preparation for their children's dental visits were found not to be significantly associated with their perceptions of their children's anxiety; instead, the caregiver's oral healthcare seeking habits were found to be associated with the caregivers' preparation for their children's dental visits.

As such, our study suggests that familiarity with oral healthcare may be associated with a tendency for caregivers to prepare their children for dental visits.

Dental professionals can play a role by³:

- Encouraging caregivers to maintain their own dental health.
- Providing guidance on how to communicate positively about dentistry with children.
- Offering support to caregivers struggling with mental health challenges that might impact their child's dental anxiety.

By addressing these factors, dental professionals may contribute to creating positive dental experiences for both caregivers and children.

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