Parental Experiences and Perspectives on a Dental Desensitization Program for Children with Autism Spectrum Disorder (ASD)

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Introduction

Autism Spectrum Disorder (ASD) is characterized by difficulties in social communication and repetitive behaviors (Sanchack et al., 2016), with its U.S. prevalence rising from 1.1% to 2.3% due to improved early detection and diagnosis (Hirota et al., 2023). While early intervention enhances cognitive, linguistic, and adaptive skills, access to timely diagnosis and care remains inequitable due to racial, ethnic, and gender disparities (Wallis et al., 2023). Children with ASD face significant barriers to dental care—including sensory sensitivities, communication challenges, and anxiety—that are often unmet in conventional dental settings, leading to stressful experiences (Tang et al., 2023). In response, specialized dental desensitization programs have been developed to reduce stress and improve oral health outcomes using tailored approaches (Star et al., 2023). Parents, who play a critical role in their child's healthcare, offer valuable perspectives on the effectiveness and limitations of such programs. Although some studies have explored parental views on general desensitization strategies (Cai et al., 2022; Steiner Duker et al., 2019), there is limited research specifically addressing parental experiences within ASD-focused dental programs. This study investigates parent perceptions of a specialized program at the UCSF Pediatric Dentistry Autism Clinic—featuring video visits, individualized communication, sensory adaptations, and ABA therapist support—to assess their child's comfort, cooperation, and attitude toward dental care, with the goal of identifying strengths and guiding improvements in family-centered, accessible care for children with ASD.

Inclusion Criteria	Quantitative Methods: Retrospective Chart Review	Qualitative Methods: Interviews
Parent or legal guardian of a child receiving care at the UCSF Pediatric Dentistry Autism Clinic		
Child is between 2 and under 18 years old	Patient Date of Birth	14 parent/guardian interviews
Child has a formal diagnosis of Autism Spectrum Disorder (ASD)	Number of visits at the Autism Dental Clinic	Semi-structured interview script
Child has attended at least one appointment at the clinic		Transcription
Parent/guardian is able to communicate in English or use an interpreter		Thematic analysis

"We're most likely going to have to do it under sedation because nobody offers what you offer in a medical setting. All we need is to be able to go into the room, get used to it, get used to the situation, get used to trying to lie down, excuse me, and just have somebody that will take their time and go slow. And that just doesn't exist in the medical world, in the dental world. I really just can't say enough how much of a difference it's made just for him to be able to come in."

"So now I'm able to brush her teeth for almost a full minute at a time, just using say 10 in one corner and then 10 in another corner and then maybe take a break 10 in the other and then the other, and then even drink some water after. So we're working up to a minute and then working up to having her pick up the toothbrush herself, put it in her mouth and start the process of brushing her own teeth."

"They always want to lay him down, which I can understand from a dental hygienist perspective, they can't be turning their own body all day long. However, that is an incredibly vulnerable position and especially for somebody who has that anxiety about medical things and things happening to them, and a long history of needing to be pinned down to do stuff that it's just about the most vulnerable thing you can ask somebody to do."

"He's able to explore his surroundings, observe everything to move with him to where he goes, where he's not just restricted to sitting in that chair. It's been a real game changer for this dental clinic. He's able to open his mouth and they're able to look into it. They're able to kind of put the mirror to see inside of his mouth. He's able to floss with the dentist. He's able for somebody else to go in his mouth besides me."

Results

Strengths of the dental desensitization program included reduced anxiety, effective sensory accommodations, improved communication, and a strong patient-centered approach – aided by a licensed ABA therapist working with the providers of the clinc. Key barriers identified were accessibility to providers able to accommodate children with autism, sensory overload in waiting areas, and insurance. Key strengths of the clinic identified by parents included letting patients explore the dental setting as they pleased, not forcing treatment, and sensory accommodations individualized to each patient's needs. A notable unexpected finding was that parents were generally unaware of the involvement of the Applied Behavior Analyst (ABA) therapist and their behind-the-scenes contributions. This suggests that integrating ABA therapy input and consultation into dental care planning may be more effective than having therapists directly present during dental visits.

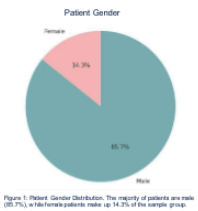

Figure 1: Patient Gender Distribution. The majority of patients are male (85.7%), while female patients make up 14.3% of the sample group.

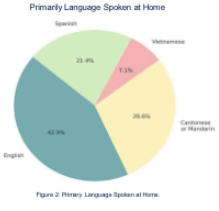

Figure 2: Primary Language Spoken at Home.

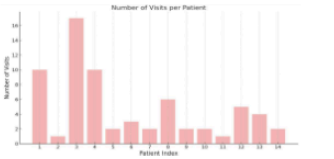

Figure 3: Number of Visits per Patient. This bar chart presents the number of visits per individual patient. The x-axis represents individual patients, while the y-axis indicates the number of visits. Most patients had fewer than 6 visits, with one patient having up to 17.

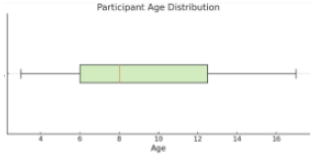

Figure 4: Participant Age Distribution. The ages range from approximately 4 to 16 years, with a median age near 8 years old. The interquartile range (IQR) appears to be between 6 and 11 years, indicating most participants fall within this age group.

Table 1. Key Themes Identified

Theme	Description
Accessibility	Refers to the ease or difficulty of accessing dental care.
Transportation	Highlights challenges or support related to traveling to dental appointments.
Denial at previous clinics	Experiences families had where their child's care was inadequately addressed at other dental facilities.
Insurance	Concerns regarding coverage, affordability, and limitations associated with dental insurance plans.
Wait time	Issues related to the length of time patients must wait for appointments or while at the clinic.
Lack of force	A supportive environment emphasizing gentle and non-restrictive methods during dental appointments. .
Provider demeanor/patience	Importance of the dental provider's attitude, patience, and approach in creating a comfortable atmosphere.
Trust	The confidence and reliability that families feel toward the dental care providers and the services offered.
Expectations	Alignment or misalignment of patient and family expectations with actual experiences during dental visits.
Exploration	Allowing patients the opportunity to become familiar and comfortable with dental tools, environment, and procedures.

Conclusion

Parental perspectives highlight the importance of individualized, family-centered care for children with ASD in dental settings. Key strengths of the UCSF desensitization program include the integration of an Applied Behavior Analyst (ABA) therapist during visits and the scheduling of dedicated appointment times that reduce sensory overload and allow for a slower, more supportive pace of care. These features contributed to improved comfort, cooperation, and overall dental experiences. Insights from this study support expanding similar models to enhance access, reduce anxiety, and promote positive oral health outcomes for children with ASD and their families.

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