

Impact of Desensitization Appointments on Recall Visit Behavior in
 Autism Spectrum Disorder (ASD)

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Introduction

Autism Spectrum Disorder (ASD) is a neurological disorder involving behavioral and psychological problems in children. It is characterized by difficulty with social communication and repetitive patterns of behavior, interests, or activities. Individuals with ASD may also experience sensory processing differences including hypersensitivity, hyposensitivity, and sensory seeking behaviors. According to the Centers for Disease Control and Prevention (CDC), there has been a steady prevalence of ASD in the United States. In a report published as recently as 2023, one in 36 (2.8%) 8-year old children have been identified with ASD, seeing an increase of 0.5% since 2018.

In recent years, different behavioral management techniques from the educational setting have been implemented in the dental setting. The goal is to help children with ASD establish skills necessary to receive oral care. One technique through which children with ASD can learn to accept dental examinations is via dental desensitization.Dental desensitization refers to the gradual exposure to new stimuli or experiences of increasing intensity. Strategies can include but are not limited to use of sensory tools, visual aids, and mock visits.

In a case review of 168 children who participated in a dental desensitization program, 87.5% of those children successfully received a minimum threshold examination (MTE), which is defined as an examination with an intraoral mirror while seated in a dental chair.Given that children with ASD seem to do better when dental desensitization techniques are implemented, more research on these techniques and how providers make time to implement them into their practice could be beneficial in the progression of effective care in an increasing population.

Objective

The primary aim of this study was to evaluate if dental desensitization appointments result in improvement of behavior in patients with Autism Spectrum Disorder (ASD) between recall visits.

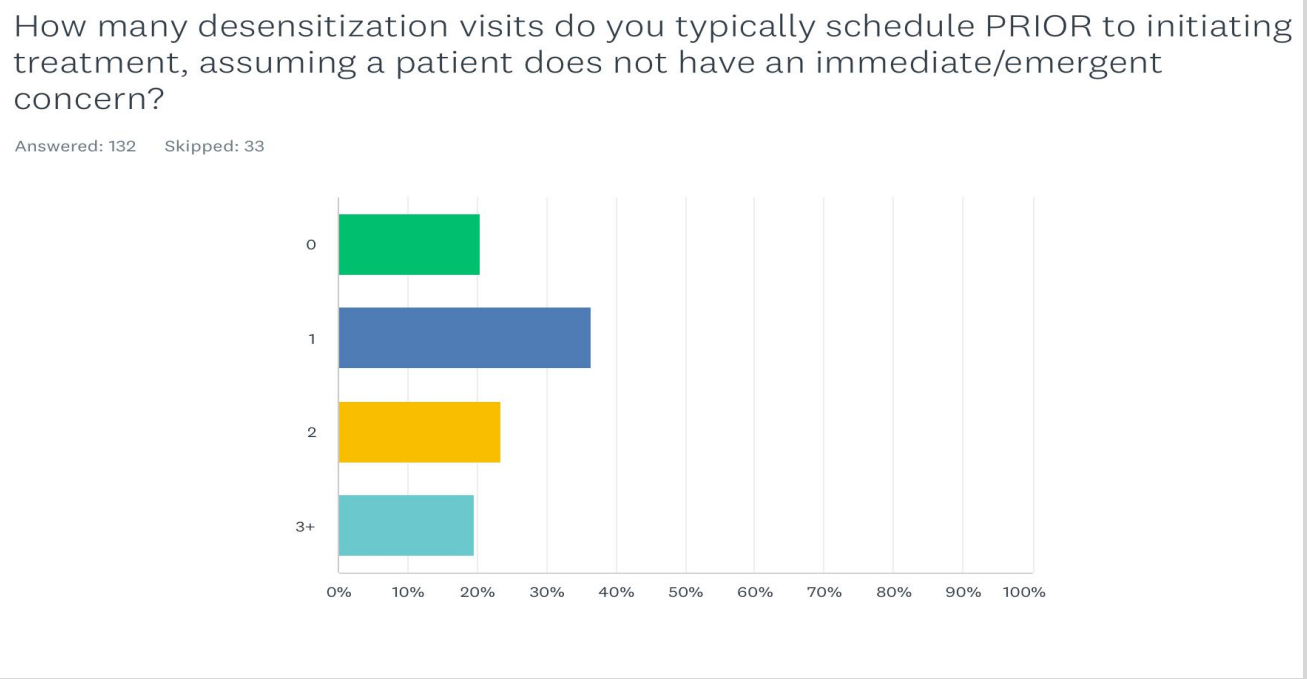
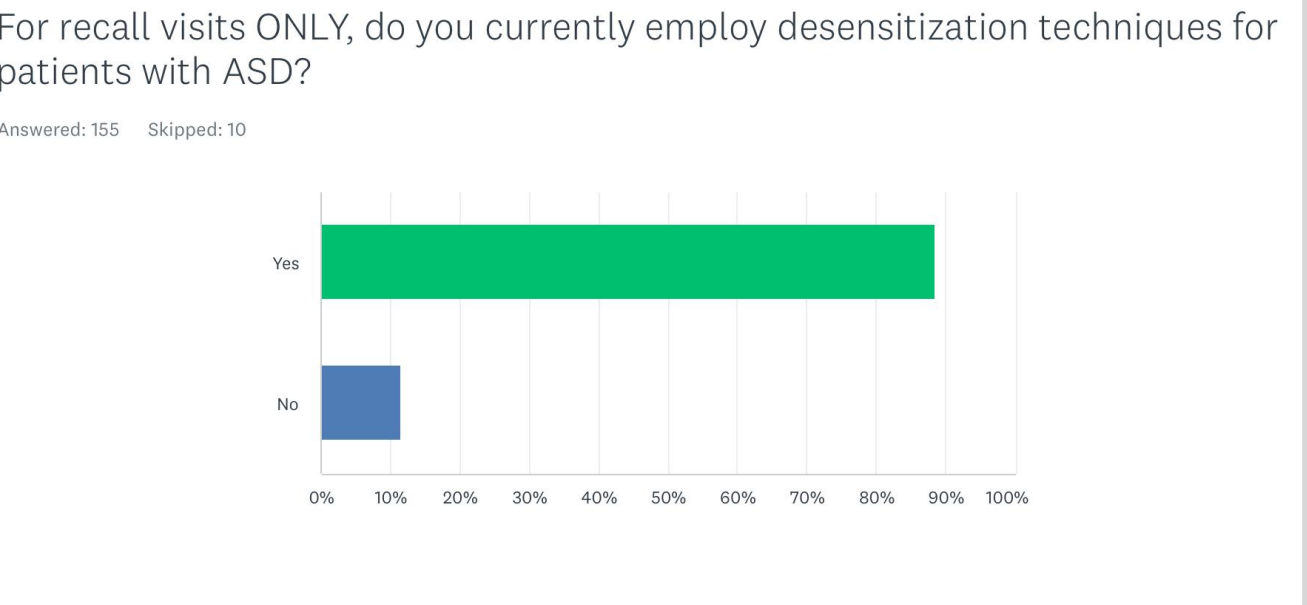
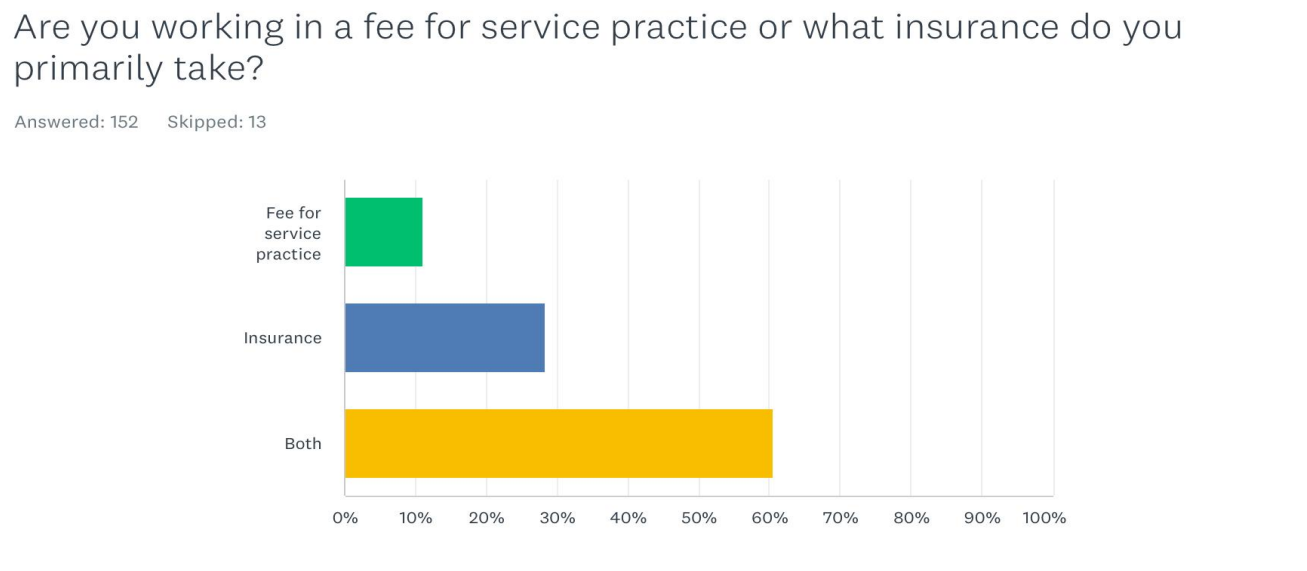
Subjects

The target population for this study included current clinical practicing pediatric dentists and pediatric dental residents throughout the country. Recruitment into the study included an electronic description of the study via email. Recipients of this email had the option to either opt in or out of the study. There were no exclusions based on age, gender, medical history, race, or ethnicity. Retired dentists, pre-doctoral students, and international AAPD members were excluded.

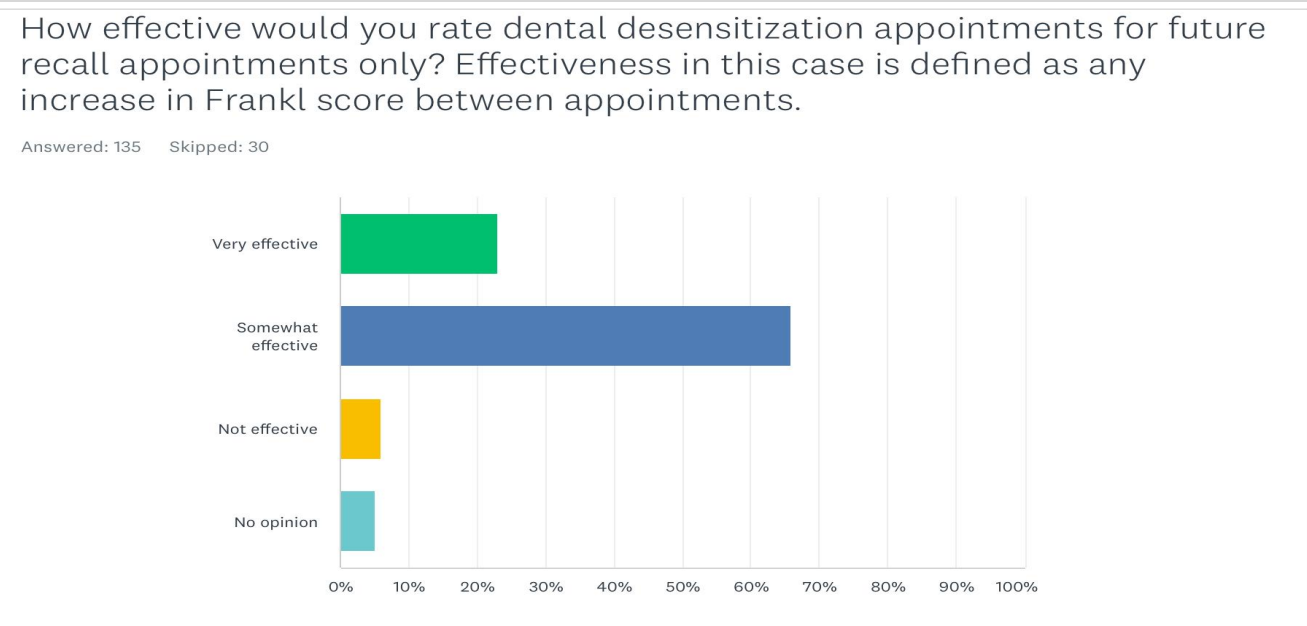
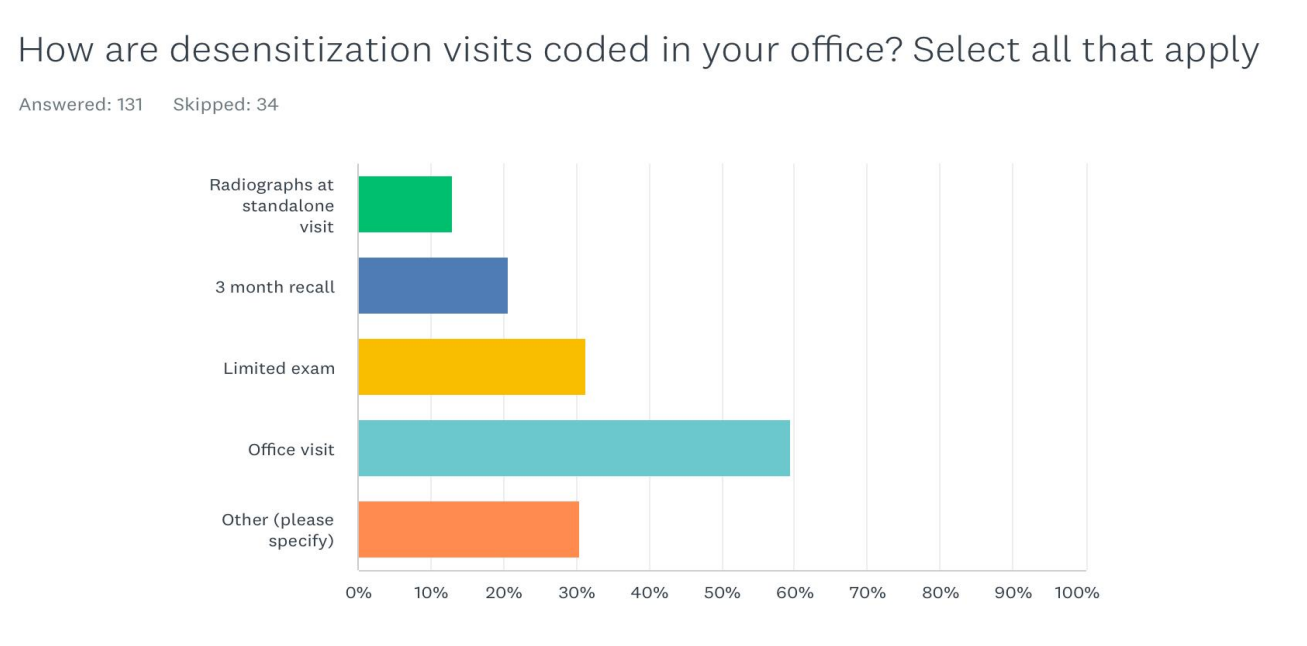
Study Design & Methods

This is a cross-sectional study in which data collection will occur over a period of one month, March 2025. A survey will be sent out via email to active American Academy of Pediatric Dentistry (AAPD) members. Data collection and analysis will then be completed by study personnel. Following approval from the Institutional Review Board of Montefiore Medical Center, a membership list will be obtained from the AAPD. Active AAPD members will receive notification of the study via the provided email, and a link to complete a 10 question survey using a web-based platform, Survey Monkey. Completion of the survey will constitute consent to participate in the study.

Results



Results (cont.)



For this study, specific survey questions were analyzed to assess whether dental desensitization appointments improve behavior in patients with Autism Spectrum Disorder (ASD). A total of 165 pediatric dental providers from across the United States participated. Among them, 60.5% reported primarily utilizing fee-for-service models and Medicaid, while 88.39% indicated they incorporate desensitization techniques during recall visits for patients with ASD. Additionally, 59.54% of providers code these visits as standard office visits. When no urgent dental concerns are present, 36.63% of respondents typically schedule only one desensitization visit. Notably, 65.93% of providers perceived desensitization appointments as somewhat effective in improving patient behavior between visits, based on the Frankl behavior rating scale.

Discussion

The findings of this study suggest that dental desensitization appointments may play a beneficial role in improving behavioral outcomes for patients with Autism Spectrum Disorder (ASD) during recall dental visits. Survey responses from 165 pediatric dental providers across the United States revealed that a significant majority (88.39%) implement desensitization techniques as part of their recall visit protocol for patients with ASD. Among these, 59.54% code such visits as standard office visits, and 36.63% typically schedule only one desensitization session, assuming there are no urgent dental needs.

Financially, 60.5% of providers indicated a reliance on fee-for-service models and public insurance options such as Medicaid, reflecting the accessibility considerations within this patient population. Importantly, 65.93% of respondents reported that desensitization appointments were at least somewhat effective in improving patient behavior, as measured by the Frankl behavior rating scale across appointments.

These findings underscore the perceived clinical value of desensitization strategies in promoting positive dental experiences for patients with ASD. They also highlight variability in practice patterns, particularly in the number of visits scheduled and how these visits are coded and reimbursed. Further research is warranted to establish standardized protocols and evaluate long-term behavioral and clinical outcomes associated with desensitization efforts.

Conclusion

Dental desensitization appointments are perceived by pediatric dental providers as a somewhat effective strategy for improving behavioral outcomes in patients with Autism Spectrum Disorder during recall visits, though practices and implementation vary.

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