

A Survey on AAPD Pediatric Dental Residents and Private Practitioners preferred behavioral guidance techniques when managing patients with autism

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BACKGROUND

A dentist who treats children should be able to accurately assess the child's developmental level, dental attitudes, and temperament to anticipate the child's reaction to care. Factors that may contribute to noncompliance during the dental appointment include fears, general or situational anxiety, a previous unpleasant and/or painful dental/medical experience, pain, and parental practices amongst other things. There are many different ways for a dentist to provide behavior guidance for children with special needs, i.e. autism. Such methods include Sensory-adapted dental environments, animal-assisted therapy, picture exchange communication system, nitrous oxide/oxygen inhalation, protective stabilization, sedation/general anesthesia.

However, due to how conventional pediatric dental offices set up their schedules, more and more dental clinicians are opting for pharmacological intervention in treating children with severe autism. If the child's behavior is considered highly disruptive, it may incline the dentist to want to do oral conscious sedation, IV sedation, or general anesthesia to help provide quality dental care.

While there is a good amount of research on the many different ways a dentist can treat special needs patients in the dental chair setting, this research can help shine a light on the preferred methods of behavior guidance pediatric dentists and pediatric dental residents use when dealing with children with autism.

PURPOSE

To survey current American Academy of Pediatric Dentistry (AAPD) residents and practicing Pediatric Dentists on: Their preferred method of behavioral guidance technique when treating patients with autism.

METHODS

Participants received an email via the AAPD listserv advertising the study. The email included details concerning the study (e.g., name of the PI, title and purpose of study) and a description of consent. It also included the link to an online survey form.

Participation was voluntary. All the information gathered was kept anonymous. No personal identifiers was required or collected. The survey took approximately 10 minutes to complete.

The survey was completed using Google Forms.

Upon completion of the survey, participants were thanked for their time and provided with contact information for the PI.

RESULTS

2000 dentists were emailed the survey: 1000 practicing pediatric dentists and 1000 pediatric dental residents. Out of the 2000 dentists that were surveyed, 101 responses were collected (5.05%), 41 responses were from practicing pediatric dentists (40.6%) and 60 responses were from pediatric dental residents (59.4%).

101 responded for where they are currently located in the country, with the NorthEast being the largest percentage (32.7%). For years of experience, the majority of responses (51 responses) dictated that they have been practicing for 15+ years (39.2%), the second majority have been practicing for 0-3 yrs (29.4%).

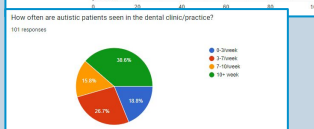
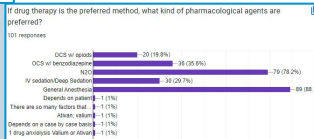
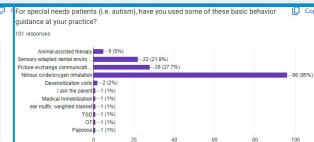
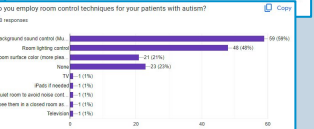
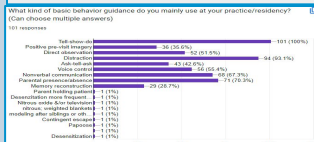
In terms of practicing location (100 responses), 34 of the practicing pediatric dentists work in private practice (34%), then 9 work at a DSO (9%), then lastly, 7 work at a FQHC (7%). The remaining responses were from pediatric dental residents working in a resident clinic (59-59%).

The three most popular basic behavior guidance techniques were Tell-show-do (101-100%), distraction (94- 93.1%), and parental presence/absence at (71 - 70.3%). The least common of options are viewed in the graph below with only 1% of providers utilizing these techniques.

For patients with autism, the most common basic behavior guidance techniques used were N2O/O2 inhalation (96 - 95%) If advanced behavioral techniques were needed to be used to treat patients with autism; passive restraints (63- 63%), active restraints - parent restraining (54- 54%), and drug therapy (N2O, OCS, GA) were utilized the most (90-90%). The most preferred pharmacological agent is GA (89- 88.1%) with N2O following (79-78.2%).

When treating patients under GA, an outpatient hospital is preferred (54- 54.5%) followed by an in-house anesthesiologist/CRNA provider (33- 33.4%). 49 dentists (49%) preferred having parents in the operating during treatment (non-GA) while 13 dentists (13%) did not allow parents to be in the operating. For room control techniques, the most common technique used was background sound control (59-59%) and room lighting control (46-49%).

39 dentists (38.6%) see 10+ autistic patients a week, with 19 dentists (18.8%) seeing 0-3 patients with autism in a week. The age range for the majority of patients with autism is 3-10 years old (91 -91.9%) and 44 dentists (43.6%) say that they allot more time for patients with autism while 26 dentists (25.7%) do not.



CONCLUSIONS

Overall, out of the 101 responses received by practicing pediatric dentists and pediatric dental residents, the preferred basic behavioral guidance techniques vary amongst many dentists. However, the consensus was 100% for tell-show-do, with distraction being the second most popular form of basic behavior guidance. The least preferred basic behavior guidance technique was memory reconstruction which was selected by 29 dentists.

For treating special needs patients that have autism, the most preferred basic behavior guidance technique was the use of nitrous oxide/oxygen inhalation, with picture exchange communication being the second most commonly used technique for children with autism. The least commonly used techniques were desensitization visits and animal-assisted therapy. Advanced behavioral techniques that were the most commonly preferred were drug therapy (N2O, oral conscious sedation, and general anesthesia), followed by passive restraints (papoose, etc), and then lastly active restraints (parent restraining patient).

If drug therapy was the selected method of behavior guidance, then the most preferred pharmacological agent was General Anesthesia, followed by N2O, and lastly oral conscious sedation (OCS) with a benzodiazepine. IV sedation was close in popularity with OCS at 30 dentists preferring to use this route of behavior guidance. Outpatient hospitals were the most preferred location in administering GA with in-house GA with an anesthesiologist/CRNA present administering the medications.

If room control techniques were employed to help patients with autism, background sound control and room lighting control were the most preferred. Lastly, most pediatric dentists and residents see more than 10 patients with autism each week and the average age range is around 3-10 years of age.

For future studies on this topic, more practicing pediatric dentists and residents would need to participate as this survey had a limited number of respondents. This could help paint a more accurate picture in the preferred methods of treating patients with autism in the dental setting.

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