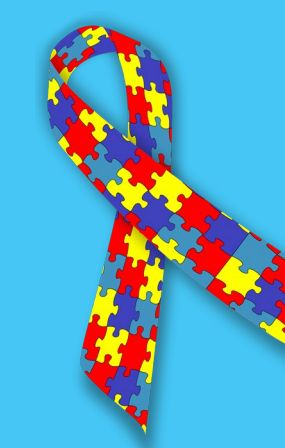


Techniques To Improve The Dental Experience Of Patients With Autism

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INTRODUCTION

The dental operatory can be an overwhelming and scary place for many. Patients with autism face greater challenges and behaviors sometimes unable to receive proper dental treatment due to these obstacles. The patient with autism commonly exhibit uncooperative behaviors which impede oral care. Creating an experience in the dental chair that helps alleviate fear, stress and promotes a positive environment, will help improve the relationship between the patient and their dental team.

OBSTACLES

- ASD is associated with anxieties and diminished coping skills to a variety of stressors, particularly regarding new experiences and surroundings, unfamiliar people, disruptions to routine behavior, anticipation of treatment; excess stimulation, and separation of objects that provide solace and familiarity .
- "Various **sensory hypersensitivities** (visual, aural, olfactory, touch) may also impede the implementation of healthcare measures" (Dailey, 2019, pg. 2).
- The dental team may be faced with increased challenges in rendering diagnostic radiographs in individuals with ASD.
- ASD affects each person differently; therefore, treatment plans are usually multidisciplinary, may involve parent-mediated interventions, and target the child's individual needs (CDC, 2021).

METHODS & MATERIAL

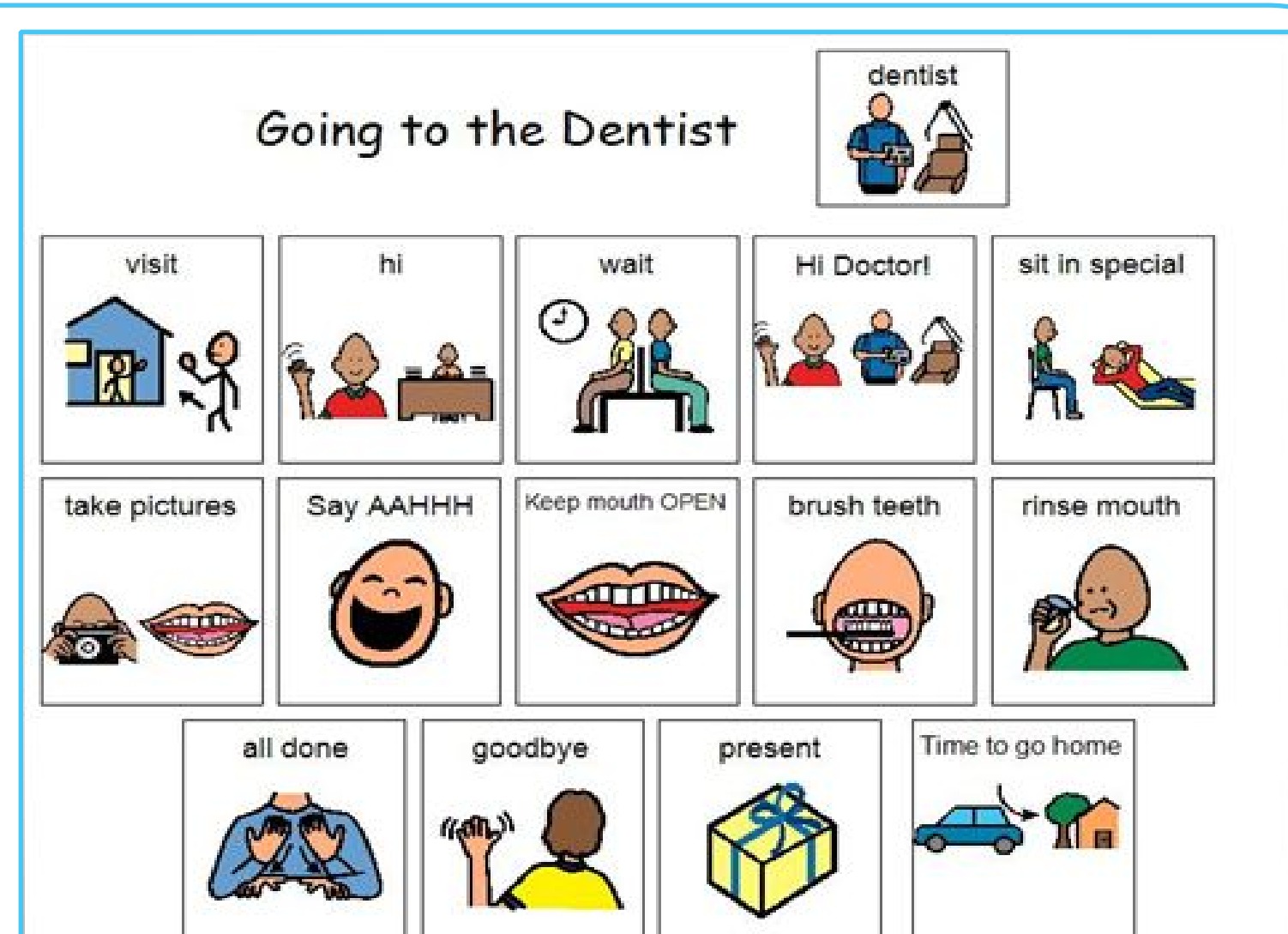
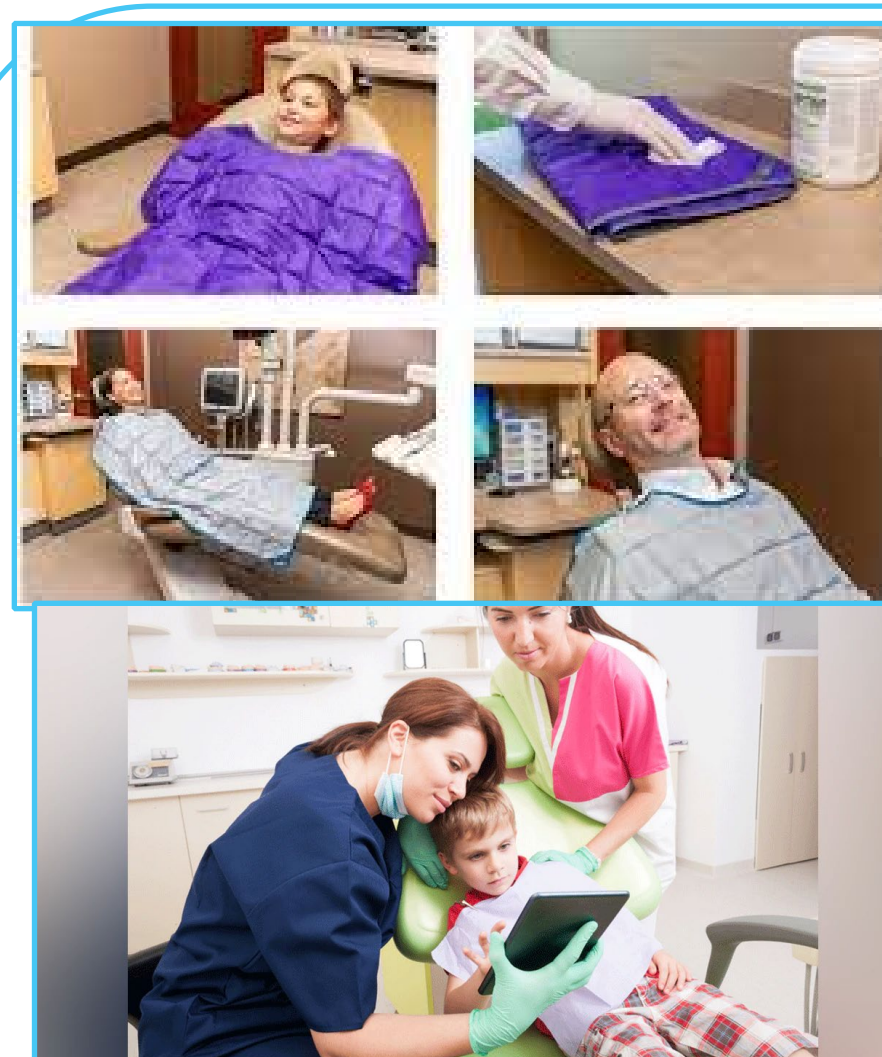
Accommodations such as:

- "Using picture schedules or boards, social stories to prepare children for dental visits, visual aids, speaking in short, concise phrases that are repeated often, behavioral training and modeling, and/or desensitization appointments may be helpful with this population" (Stein, 2014, pg. 10).

Suggestions to diminish the aversive nature of the stimuli experienced in the dental office include adaptations to sensory stimuli encountered, including:

- **Visual stimuli**- (wearing sunglasses, dim lights, and avoiding light shining in eyes)
- **Auditory stimuli**- (listen to music on headphones/ wear earmuffs or an ear-covering hat, counting numbers)
- **Gustatory stimuli**- (allow more frequent rinsing of paste and use no-taste products, such as pumice)
- **Vestibular/movement stimuli**- (have child climb into an already fully reclined dental chair)
- **Tactile**- "deep pressure" stimuli which produce a calming effect could be helpful in the dental office (Ex: laying weighted blankets on the patient's chest) (Stein, 2014, pg. 10).
- For some patients, multiple visits are needed in order to form a relationship between the patient and dental team in order to make them feel as comfortable as possible.

PECS (PICTURE EXCHANGE COMMUNICATION SYSTEM)

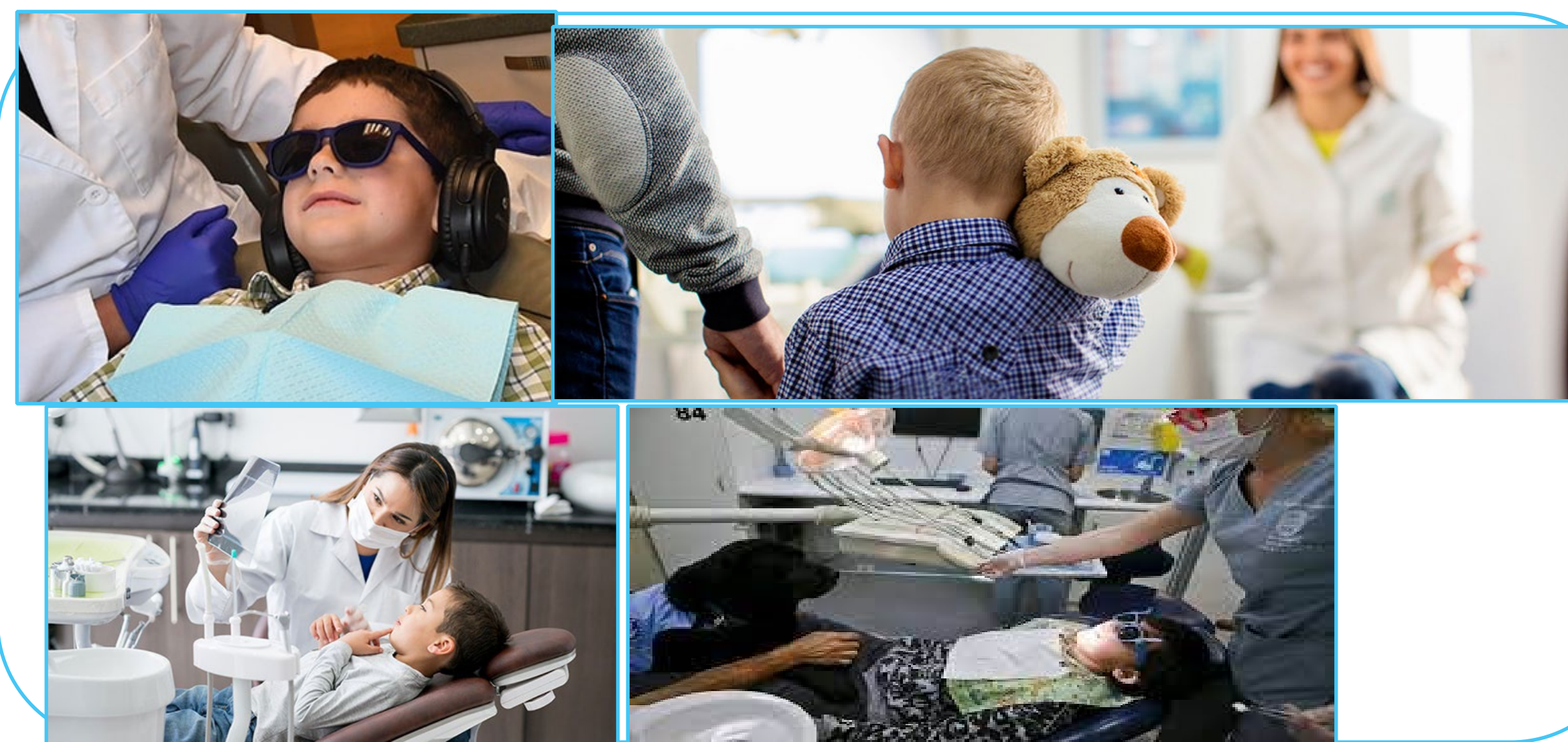


CONCLUSION

Ultimately, the techniques used when handling a patient with autism makes all the difference for not only the patient, but for the dental team as well. Creating an environment that best suits each individual patient with ASD is the goal. Being in a dental chair does not have to be intimidating, which is why dental providers should keep these techniques in mind during the appointment. With a continuing increase of children born with ASD, it is the duty of the dental team to be knowledgeable on how to treat each individual patient. Not every patient with autism is going to be the same. Each of them are unique and has specific needs and approaches.

Autism Spectrum Disorder

- ASD is a developmental disability that causes significant social, communication and behavioral changes.
- ASD can be diagnosed before the age of three.
- 1 in 54 children has been identified with autism spectrum disorder according to estimates from CDC's ADDM.
- "Some are verbally fluent and have average cognitive functioning, while others are non-verbal and engage in frequent repetitive and self-injurious behaviors" (Stein, 2014, pg.1).
- "As a result, patients with autism have a high prevalence of various oral lesions, poor oral hygiene, and periodontal disease" (Center, 1996, pg. 547).



APPROACHES FOR DENTAL VISIT

- Prior to dental appointment, the dental provider should seek parent/caregiver input to consider the best approach when treating the patient with autism.
- Patients with autism have difficulty adapting to change, sitting or standing for a predetermined length of time, tolerate others touching their mouth with gloved hands and follow simple instruction.
- Be sure to assess the patient's anxiety level and ability to cope dental stimuli throughout the appointment.
- **Dental Radiographs:**
 - Patient could rehearse holding the image receptor in their oral cavity while the parent/caregiver counts aloud as a distractor.
 - Patients may be comforted by applying two weighted blankets or radiographic aprons on their chest and abdomen.
 - Soft foam earplugs or headphones, if possible, may reduce the high-pitched sound arising from X-ray machines.

RESULTS

- A study by Luscre and Center (1996), found that the patient with autism is in need of more frequent dental care.
- Results also suggest that children with autism can be trained through a combined desensitization, symbolic modeling and reinforcement treatment.
- "Anti-anxiety stimuli handheld mirrors, music, play-doh, fruit, songs and rhymes elicited a positive response in the subject and helped counter a fear response" (Luscre and Center, 1996, pg.552).
- "Positive reinforcement is important to promote the repetition of desired outcomes. For example, communicating a direct response such as "thank you for sitting still" OR " I like the way you are doing THIS" is preferable to saying "good job" (Dailey, 2019 pg. 3).

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