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Effective Communication and Multidisciplinary Collaboration for Improved Oral Health in Patients with Autism Spectrum Disorder

Strategies to enhance interactions with patients and to meet their oral healthcare needs

Autism spectrum disorder (ASD) refers to a neurodevelopmental condition that affects communication, behaviours, and social interactions

The prevalence of ASD is increasing worldwide, currently affecting 1 in 100 children, as per the World Health Organization estimate[1,2]

Oral health in individuals with ASD[1,3]

Individuals with ASD may face challenges with their oral health, such as:

- Oversensitivity to sensory stimuli
- Motor coordination impairments, necessitating support from parents and/or caregivers
- Challenges with undertaking effective daily oral care
- People with ASD may find toothbrushing difficult due to sensory challenges posed by the taste of toothpaste, feel of bristles, smell or taste of dental products, and difficulty in handling the toothbrush due to motor coordination issues
- Restricted range of foods, including flavours and textures

Effective communication is important for individuals with ASD to improve their access to dental care and acclimatise to future visits to the dental professional[1]

Communication strategies that dental professionals can adopt when treating individuals with ASD[3]

Tell-show-do method

Involves explaining and demonstrating the procedure prior to the treatment

- Familiarise and desensitise children and adults
- Less effective due to lack of joint attention
- Provide one instruction at a time to avoid overwhelming the patient

Voice and speech control

Individuals with ASD may feel overloaded by information, so it is important to use slow and simple communication

- Communicate slowly
- Use direct short sentences or single words when appropriate
- Ask more close-ended questions
- Limit the use of words

"Just like me" method

- Involves adopting modelling techniques to reinforce the desired behaviour, since children learn by imitation
- Demonstrate the procedure on a sibling or peer when possible

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Communication strategies that dental professionals can adopt when treating individuals with ASD[3]

Positive reinforcement

Involves positive smiling, word reinforcement, good body language, praises, smiles, and care during treatment

- Prior conditioning is essential to achieve desired behaviour
- Positive reinforcement should be related to individual attachments of children with ASD

Body language

Body language is an important form of non-verbal communication when attending to individuals with ASD

- Use calming gestures to build trust
- Try to gain cooperation in the least restrictive manner
- Maintain eye level while speaking and make eye contact if they are comfortable with it
- Use non-verbal cues to elicit appropriate behaviour when verbal communication is limited

Augmentative and alternative communication

Involves the use of manual signs, speech-generating devices, and picture-based systems

Combining multiple communication-enhancing techniques and tailoring them to address individual requirements is key to ensuring long-term cooperative behaviour[1]

Anticipating and preparing patients for dental visits

Desensitisation techniques help patients become familiar with and adapt to dental settings, preparing them for future dental visits[3]

Visual interventions to enhance communication

- Individuals with ASD tend to be visual learners, and visual interventions can help with behaviours
- Using videos or apps before the visit can help prepare patients for appointments

Picture exchange communication system (PECS)[3] uses pictograms and visual aids to explain procedures, such as:

- Effective tooth brushing technique twice daily with special/modified brushes, electric toothbrushes, or three-headed toothbrushes and fluoride toothpaste
- Dental procedures
- Prevention such as fluoride applications and sealants

Benefits of PECS[3,4]

- Helps communicate patient needs
- Reduces fear/anxiety
- Improves oral hygiene skills
- Can improve behaviours and ensure regular dental visits
- Induces better acceptance of treatment
- Leads to improvements in oral and gingival health

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Caregiver education and participation

Caregiver knowledge about oral health drives a positive attitude that fosters healthier oral hygiene behaviour in the cared-for children[5]

Visual interventions and caregiver training, along with increased frequency of visits to dental professionals can provide behavioural support[1]

- Improve interactions with the dental personnel, caregivers, and the environment[1]
- Enhance oral hygiene practices at home and improve compliance with future visits
- Decrease the need for intervention under sedation and general anaesthesia

Patient and caregiver education, along with regular dental visits, can build trust and increase comfort, promoting cooperative behaviour during subsequent dental visits[6]

Role of multidisciplinary collaboration[7]

Individuals with ASD often have complex medical conditions that require integrated healthcare

Multidisciplinary care in autism is important for considering:

- Any additional medical and social considerations
- The medication they take
- Techniques to ensure better adaptation to dental treatment

Dental practitioners can work with:

- Speech and language therapists
- Occupational therapists
- General practitioners
- Nurses

Develop comprehensive care plans

Conduct interdisciplinary meetings to review and adjust care plans

Occupational therapists are the early healthcare professionals to interact with individuals with ASD and can assist dental professionals to[7,8]:

- Identify behaviours of individual patients
- Facilitate dental care by providing:
  - Desensitisation strategies (social stories)
  - Emotional regulation
- Plan modifications to the dental environment
- Adapt and modify dental procedures
  - Reduce barriers
  - Facilitate participation

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Integrating oral health into general health

This is achieved through:

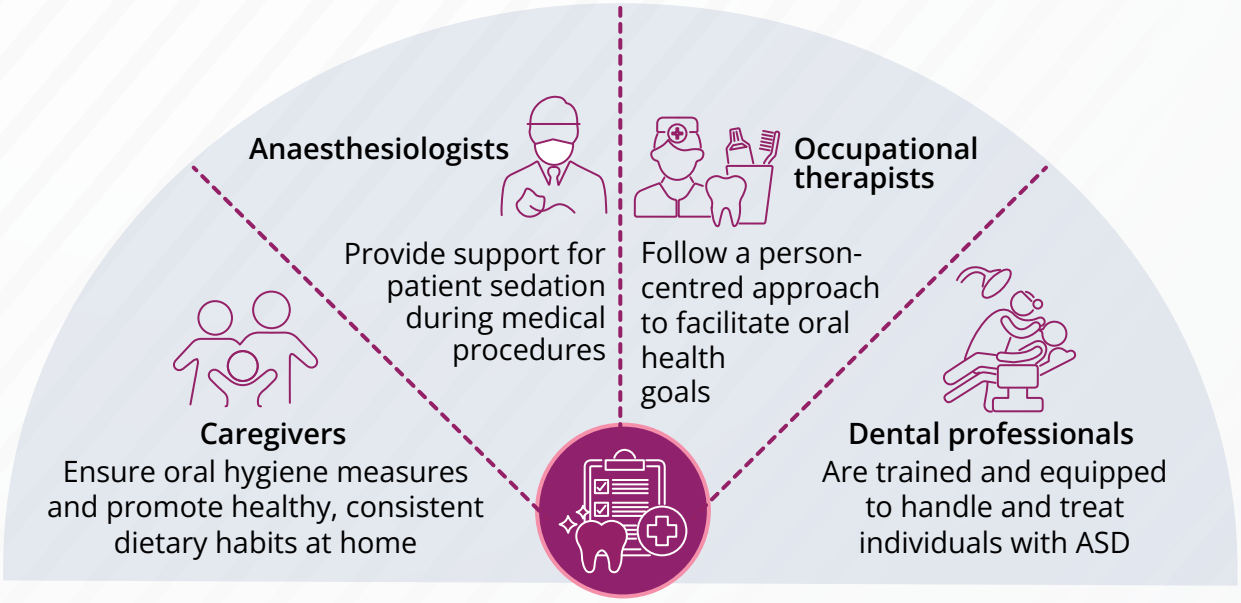
Fostering interdisciplinary collaboration with other fields on care strategies, which may involve[6]:

- Improving desensitisation approaches using virtual reality or video modelling
- Creating sensory-friendly dental environments
- Providing high-tech alternative techniques to decrease anxiety and improve cooperation

Integrating oral health and systemic health education, which may involve[7]:

- Enhancing dental curriculum
- Including oral health content in general medical curricula

Optimal oral health in individuals with ASD requires the collaboration of multiple actors[7,8]



Key messages

Promoting oral health is an essential part of overall health from birth to adulthood, and individuals with ASD require special care and strategies to improve their access to and acceptance of dental care

Caregivers must be educated on the importance of preventive oral health services and dental treatment to ensure optimal care of the individuals they care for

Enhanced dental curricula and interdisciplinary collaboration are essential to support oral healthcare management in individuals with ASD

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