

ReAttach Therapy as a Component of a Multidisciplinary Approach to Dental Care for Children with Autism - A Narrative Review

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Abstract

This review explores the integration of ReAttach Therapy as a pivotal component within a multidisciplinary approach to dental care for children with Autism Spectrum Disorder (ASD). Children with ASD often face unique challenges in maintaining oral health due to sensory sensitivities, communication difficulties, and behavioral traits. Recognizing the significance of oral care in their overall well-being, healthcare professionals are increasingly adopting multidisciplinary approaches to address these challenges comprehensively. ReAttach Therapy, an emerging therapeutic approach, offers promise in enhancing the social and communication skills of children with ASD, making it particularly relevant to the dental care context. This review introduces ReAttach Therapy, elucidates its principles, techniques, and goals, and summarizes existing research on its effectiveness in improving social and communication skills in children with ASD. It also explores how ReAttach Therapy can be seamlessly integrated into a comprehensive dental care plan for children with ASD, enhancing their overall dental care experience and outcomes. By combining the expertise of dentists, pediatricians, speech therapists, occupational therapists, psychologists, and ReAttach therapists, this multidisciplinary approach aims to provide patient-centered care that addresses the multifaceted needs of children with ASD, ultimately promoting optimal oral health and quality of life.

1. Introduction

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental condition characterized by a range of challenges in social interaction, communication, and repetitive behaviors. According to the latest estimates, ASD affects approximately 1 in 54 children, making it a prevalent developmental disorder in the United States and many other countries worldwide.[1,2]

The significance of oral health and dental care for individuals with ASD cannot be overstated.[3] Dental issues are commonly encountered in this population, ranging from higher rates of dental caries (cavities) to untreated dental problems due to difficulties in accessing appropriate care. These challenges are often exacerbated by

sensory sensitivities, communication barriers, and behavioral issues that can make routine dental visits a daunting experience for both the child and the dental care team.[4]

Recognizing the unique needs of children with ASD, there is a growing consensus among healthcare professionals that a multidisciplinary approach to dental care is not only beneficial but often necessary. This approach involves collaboration among dentists, pediatricians, speech therapists, occupational therapists, and psychologists, among others. By working together, these specialists can address the multifaceted aspects of ASD that impact oral health, ultimately improving the quality of dental care and the overall well-being of children on the autism spectrum. In this review, we will explore the rationale for and benefits of adopting such a multidisciplinary approach in the dental care of children with ASD.

2. Autism and Oral Health

Children with Autism Spectrum Disorder (ASD) encounter distinctive challenges in maintaining good oral hygiene. These challenges can have long-term consequences if not addressed effectively. [5]

a. Unique Challenges in Maintaining Oral Hygiene:

- **Communication Difficulties:** Many children with ASD have difficulties with verbal and non-verbal communication, making it challenging to understand and follow oral hygiene instructions. They may struggle to express discomfort or pain related to dental issues.
- **Sensory Sensitivities:** Sensory sensitivities are common in individuals with ASD. The feel of toothbrush bristles, the taste of toothpaste, or the sensation of water in the mouth can be overwhelming, leading to resistance during brushing.
- **Ritualistic Behaviors:** Some children with ASD exhibit repetitive behaviors or rituals, which may interfere with establishing regular oral care routines. They might resist changes to their routines, including those related to dental care.

b. Prevalence of Dental Issues:

- **Higher Rates of Dental Caries:** Research indicates that children with ASD are at a higher risk of developing dental caries (cavities) compared to their neurotypical peers. Factors such as dietary habits, challenges in brushing, and medication side effects can contribute to this increased risk.
- **Unmet Dental Needs:** Due to difficulties in accessing and receiving dental care, many children with ASD have unmet dental needs. Dental appointments can be distressing for both the child and the dental team, resulting in postponed or avoided visits.

c. Impact of Sensory Sensitivities:[6]

- **Resistance to Dental Procedures:** Sensory sensitivities can lead to resistance during dental check-ups and treatments. The feel of dental instruments, the noise of equipment, and the presence of strangers in close proximity can be overwhelming and trigger anxiety.
- **Anxiety and Meltdowns:** Sensory overload during dental visits can result in anxiety and meltdowns in children with ASD, making it challenging to complete necessary dental procedures. This may necessitate specialized approaches to managing anxiety during dental care.
- **Addressing these unique challenges and understanding the prevalence of dental issues in the ASD population is crucial. Recognizing the impact of sensory sensitivities on oral care routines underscores the need for a tailored, patient-centered approach that considers the individual needs of each child with ASD. In the following sections, we will explore how a multidisciplinary approach can help mitigate these challenges and improve the oral health outcomes for children with autism.**

3. Multidisciplinary Approach to Dental Care

Concept of a Multidisciplinary Approach to Healthcare:

A multidisciplinary approach to healthcare is a comprehensive and coordinated method of addressing complex medical and developmental issues by involving a team of healthcare professionals from various disciplines. In the context of dental care for children with Autism Spectrum Disorder (ASD), this approach aims to provide holistic care that takes into account the unique needs and challenges associated with ASD. Here, we'll explain the core concept of this approach. [7,8,9]

A multidisciplinary approach in healthcare involves:

- **Collaboration:** Healthcare professionals from different fields work together, sharing their expertise and insights to develop a well-rounded treatment plan.
- **Comprehensive Assessment:** Each discipline assesses the patient from their specific perspective, considering medical, psychological, sensory, and developmental aspects.
- **Tailored Interventions:** The team tailors interventions and strategies to meet the individual needs of the patient, recognizing that a one-size-fits-all approach may not be effective.

Roles of Healthcare Professionals in Dental Care for Children with ASD:

In the multidisciplinary approach to dental care for children with ASD, several healthcare professionals play pivotal roles, each contributing their expertise to address various facets of the child's health and well-being. Here's an overview of their roles:[10,11,12]

- **Dentists:** Dentists are the primary healthcare providers responsible for diagnosing and treating dental conditions in children with ASD. They ensure the child's oral health, perform dental procedures, and adapt their approach to accommodate sensory sensitivities and communication challenges.
- **Pediatricians:** Pediatricians collaborate closely with dentists to address any underlying medical conditions, medications, or systemic issues that may impact oral health. They provide guidance on managing overall health to support dental care.
- **Speech Therapists:** Speech therapists assist in improving communication skills and addressing speech-related challenges that may affect the child's ability to understand and follow dental care instructions. They can also help with oral motor skills.
- **Occupational Therapists:** Occupational therapists focus on sensory sensitivities and self-regulation. They can work with the child to desensitize them to the sensory aspects of dental care and develop strategies for self-soothing during dental visits.
- **Psychologists:** Psychologists help children with ASD cope with anxiety and emotional challenges related to dental care. They may use behavioral interventions, such as desensitization techniques and relaxation strategies, to reduce stress during dental visits.
- **Special Needs Educators:** Special needs educators can provide support in preparing the child for dental visits, offering visual aids, social stories, and communication tools to enhance understanding and cooperation.

Together, this multidisciplinary team collaborates to create a patient-centered, customized dental care plan for children with ASD. By addressing both the oral health and the unique needs of the child, this approach improves the overall dental care experience and outcomes for these individuals.

4. ReAttach Therapy

ReAttach Therapy is an emerging therapeutic approach that has shown promise as an intervention for children with Autism Spectrum Disorder (ASD). It is designed to address various challenges associated with ASD, particularly focusing on improving social and communication skills. ReAttach Therapy is a structured therapeutic method that incorporates several key principles, techniques, and goals tailored to the unique needs of children with ASD. Research on the effectiveness of ReAttach Therapy in improving social and communication skills in

children with ASD is ongoing, with promising preliminary findings.[13] Several studies suggest that ReAttach Therapy may contribute to positive outcomes in terms of social engagement, communication, and emotional well-being for individuals on the autism spectrum. However, more comprehensive research is needed to establish its efficacy and potential benefits for a broader range of children with ASD.

Principles:

The principles of ReAttach Therapy are Neuroplasticity, Sensory Integration and Holistic Approach. ReAttach Therapy is founded on the concept of neuroplasticity, the brain's ability to reorganize itself and form new neural connections. It aims to leverage this innate capacity to promote positive changes in the brain's functioning. ReAttach Therapy recognizes the significance of sensory integration in children with ASD.[14] It employs sensory-based interventions to enhance sensory processing and integration, which can lead to improved self-regulation and reduced sensory sensitivities. ReAttach Therapy takes a holistic approach, addressing cognitive, emotional, and behavioral aspects of the child's development. It considers the child's unique profile, strengths, and challenges.

Techniques:

- **Dialogue-Based Therapy:** ReAttach Therapy often involves structured dialogues between the therapist and the child, with an emphasis on creating a safe and nurturing environment for communication. These dialogues help the child express their thoughts, feelings, and concerns.
- **Sensory Integration Activities:** Therapists incorporate sensory integration activities into sessions to help children with ASD regulate their sensory responses. These activities may include tactile, auditory, or visual stimulation.
- **Play-Based Interventions:** Play-based interventions are employed to engage children and facilitate social interaction, communication, and emotional expression.

Goals: The goals of ReAttach Therapy are to improve social skills, enhance communication and emotional regulation. ReAttach Therapy aims to enhance social interaction skills, such as initiating and maintaining conversations, interpreting non-verbal cues, and understanding the perspective of others. The therapy seeks to improve communication abilities, including expressive and receptive language skills, as well as non-verbal communication, like eye contact and body language. ReAttach Therapy targets emotional regulation, helping children with ASD manage their emotions and cope with stress and anxiety.[15]

5. ReAttach Therapy in Dental Care

Potential Benefits of Integrating ReAttach Therapy into Dental Care:

By seamlessly integrating ReAttach Therapy into the dental care routine for children with ASD, healthcare professionals can harness its potential to mitigate sensory sensitivities and reduce anxiety, ultimately promoting a more positive and effective dental care experience for this unique patient population. This multidisciplinary approach, combining the expertise of dental professionals and ReAttach therapists, can lead to improved oral health outcomes and a higher quality of life for children with ASD. Integrating ReAttach Therapy into the dental care routine for children with Autism Spectrum Disorder (ASD) offers a range of potential benefits that can enhance the overall dental care experience and outcomes.

- i. **Improved Communication and Social Skills:** ReAttach Therapy's focus on enhancing communication and social skills aligns with the core challenges faced by children with ASD. By improving these skills, children may better express their dental discomfort, cooperate during procedures, and build a positive rapport with dental professionals.
- ii. **Sensory Sensitivities Management:** ReAttach Therapy incorporates sensory integration activities, which can help children with ASD desensitize themselves to the sensory aspects of dental care. This can lead to reduced sensory sensitivities, making dental visits less distressing.

- iii. **Anxiety Reduction:** Dental anxiety is common among children with ASD due to the unfamiliar environment and procedures. ReAttach Therapy's holistic approach to emotional regulation may assist children in managing anxiety related to dental visits, potentially resulting in calmer and more successful appointments.
- iv. **Enhanced Coping Mechanisms:** ReAttach Therapy equips children with ASD with tools for emotional self-regulation and coping. These skills can be invaluable during dental appointments, helping children manage stress and sensory overload effectively.
- v. **Increased Cooperation:** By improving communication and reducing anxiety, ReAttach Therapy can contribute to increased cooperation during dental examinations and treatments. This, in turn, may lead to more effective and less stressful dental care.

Addressing Sensory Sensitivities and Anxiety:

1. **Sensory Sensitivities:** ReAttach Therapy employs sensory integration activities to help children with ASD gradually adapt to sensory stimuli, including those encountered during dental visits. By systematically exposing the child to various sensory inputs in a controlled and supportive environment, the therapy can reduce hypersensitivities and desensitize the child to tactile, auditory, and visual sensations. This can make dental care procedures, such as teeth cleaning and examinations, less overwhelming and more tolerable for the child.
2. **Anxiety Related to Dental Visits:** ReAttach Therapy's emphasis on emotional regulation and coping strategies can be particularly effective in addressing anxiety associated with dental visits. The therapy provides children with ASD with tools and techniques to self-soothe and manage anxiety-inducing situations. Breathing exercises, relaxation techniques, and sensory grounding activities can help children stay calm and composed during dental appointments, ultimately improving the overall experience for both the child and the dental care team.[16]

6. Challenges and Limitations

ReAttach Therapy holds potential in improving the dental care experience for children with ASD, challenges such as limited availability, time constraints, variable response to therapy, and the need for interdisciplinary collaboration should be acknowledged. Ethical considerations related to informed consent, qualifications, evidence-based practice, and patient autonomy guide the responsible and ethical use of ReAttach Therapy in dental care.[17] Careful attention to these challenges and ethical aspects is essential to ensure the well-being and autonomy of children with ASD receiving this therapy.

Potential Challenges of Using ReAttach Therapy in Dental Care:

While ReAttach Therapy shows promise in the dental care of children with Autism Spectrum Disorder (ASD), there are several potential challenges and limitations to consider:

- **Limited Availability of Trained Therapists:** One of the primary challenges is the availability of ReAttach therapists who are adequately trained to work with children with ASD. In many regions, finding qualified therapists may be difficult, limiting the widespread adoption of this therapy in dental care.
- **Time Constraints:** Dental appointments are often time-constrained, and incorporating ReAttach Therapy into these appointments may require additional time. Dentists and dental hygienists may face challenges in allocating sufficient time for therapy while still addressing the child's dental needs effectively.
- **Variable Response to Therapy:** The effectiveness of ReAttach Therapy can vary among individuals with ASD. While it may have significant benefits for some children, others may not respond as positively. Identifying which children are most likely to benefit from ReAttach Therapy is a complex task.
- **Interdisciplinary Collaboration:** Effective integration of ReAttach Therapy into dental care requires collaboration between dental professionals and ReAttach therapists. Ensuring seamless communication and coordination between these disciplines can be challenging.

Ethical Considerations and Controversies:

The use of ReAttach Therapy in dental care for children with ASD raises ethical considerations and potential controversies:

- **Informed Consent:** Obtaining informed consent from parents or guardians is crucial before implementing ReAttach Therapy. Parents should be fully informed about the therapy's objectives, techniques, potential benefits, and any associated risks. Informed consent is essential to ensure that parents make decisions in the best interests of their child.
- **Qualifications and Training:** Dental professionals and ReAttach therapists must have the appropriate qualifications and training to provide this therapy. Ethical practice mandates that therapists are adequately trained and certified in ReAttach Therapy to ensure the child's safety and well-being.
- **Evidence-Based Practice:** Ethical considerations include the need for evidence-based practice. Dental professionals should critically assess the available research on ReAttach Therapy and its applicability to the specific needs of children with ASD in dental care settings.
- **Patient Autonomy:** Respecting the autonomy of children with ASD is paramount. The therapy should be introduced in a manner that considers the child's preferences, comfort levels, and capacity to make decisions. Consent and assent processes should be respectful of the child's autonomy and developmental stage.

7. Future Directions and Research Needs

As ReAttach Therapy gains recognition as a potential intervention in dental care for children with Autism Spectrum Disorder (ASD), it is essential to direct research efforts toward addressing critical questions and gaps in our understanding.

1. **Efficacy and Long-term Outcomes:** Conduct rigorous clinical trials and longitudinal studies to assess the efficacy of ReAttach Therapy in improving oral health outcomes and long-term dental care experiences for children with ASD.
2. **Individualized Treatment Plans:** Investigate the development of individualized treatment plans that consider the specific needs, strengths, and sensory profiles of children with ASD. Explore whether tailoring ReAttach Therapy to each child's unique characteristics yields better results.
3. **Comparative Studies:** Compare the effectiveness of ReAttach Therapy with other therapeutic approaches or behavioral interventions commonly used in dental care for children with ASD. Determine the relative benefits and limitations of each approach.
4. **Interdisciplinary Collaboration:** Examine the impact of interdisciplinary collaboration between dental professionals, ReAttach therapists, and other healthcare providers on the overall dental care experience and oral health outcomes for children with ASD.
5. **Age-appropriate Interventions:** Explore the suitability of ReAttach Therapy for children of different age groups within the ASD spectrum. Investigate whether age-specific adaptations of the therapy yield more significant improvements.
6. **Parent and Caregiver Involvement:** Assess the role of parents and caregivers in supporting and reinforcing the effects of ReAttach Therapy in dental care. Explore the potential benefits of involving them in therapy sessions and oral care routines.
7. **Generalization of Skills:** Investigate whether the skills and coping mechanisms acquired through ReAttach Therapy in dental care settings generalize to other aspects of a child's life, such as improved self-regulation and social interaction in non-dental contexts.

8. Conclusion

The integration of ReAttach Therapy into a multidisciplinary approach to dental care for children with Autism Spectrum Disorder (ASD) presents a promising avenue for improving the overall oral health outcomes and dental care experiences of this unique patient population. Children with ASD often face distinct challenges in maintaining oral hygiene due to sensory sensitivities, communication difficulties, and anxiety related to dental visits. Recognizing the significance of oral health and the need for a patient-centered approach, healthcare professionals are increasingly embracing multidisciplinary strategies to address these challenges comprehensively. ReAttach Therapy, with its focus on enhancing social and communication skills, sensory sensitivities management, and anxiety reduction, aligns with the core needs of children with ASD in dental care. However, it is essential to acknowledge the potential challenges of limited availability of trained therapists, time constraints, variable responses to therapy, and the need for effective interdisciplinary collaboration. Ethical considerations related to informed consent, qualifications, evidence-based practice, and patient autonomy guide the responsible and ethical use of ReAttach Therapy in dental care.

ReAttach Therapy, when integrated into a multidisciplinary approach, holds promise in addressing the unique needs of children with ASD in dental care. By embracing this holistic and patient-centered approach, healthcare professionals can contribute to improved oral health and enhanced quality of life for children with ASD, fostering a future where dental care is accessible, effective, and accommodating for all.

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