

# Complete Oral Rehabilitation of an ASD Patient: Case Report

REGINDO DE CIENCIAS MEDICINA DENTAL

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#### ABSTRACT

Introduction: Oral health status remains controversial in autism spectrum disorder (ASD) patients. Although dental caries are preventable, the social characteristics of patient's living conditions influence access to oral health care. This study describes the complete oral rehabilitation of an ASD patient in the operating room (OR), and how social determinants of health influence access to oral health care. Case Report: A 13-year-old male, with medical history of ASD, ADHD and oppositional defiant disorder, presented multiple dental caries and was taken to the OR of San Juan City Hospital for Complete Oral Rehabilitation. This case presented recurrence of caries lesions in the first follow-up appointment. Subsequent follow-up appointments are documented but some were cancelled. It is important to identify and recognize current oral health status and social determinants of oral health in special needs patients. Comments: Summarizing, social determinants of oral health may contribute to patient oral health status and access to dental care.

# BACKGROUND

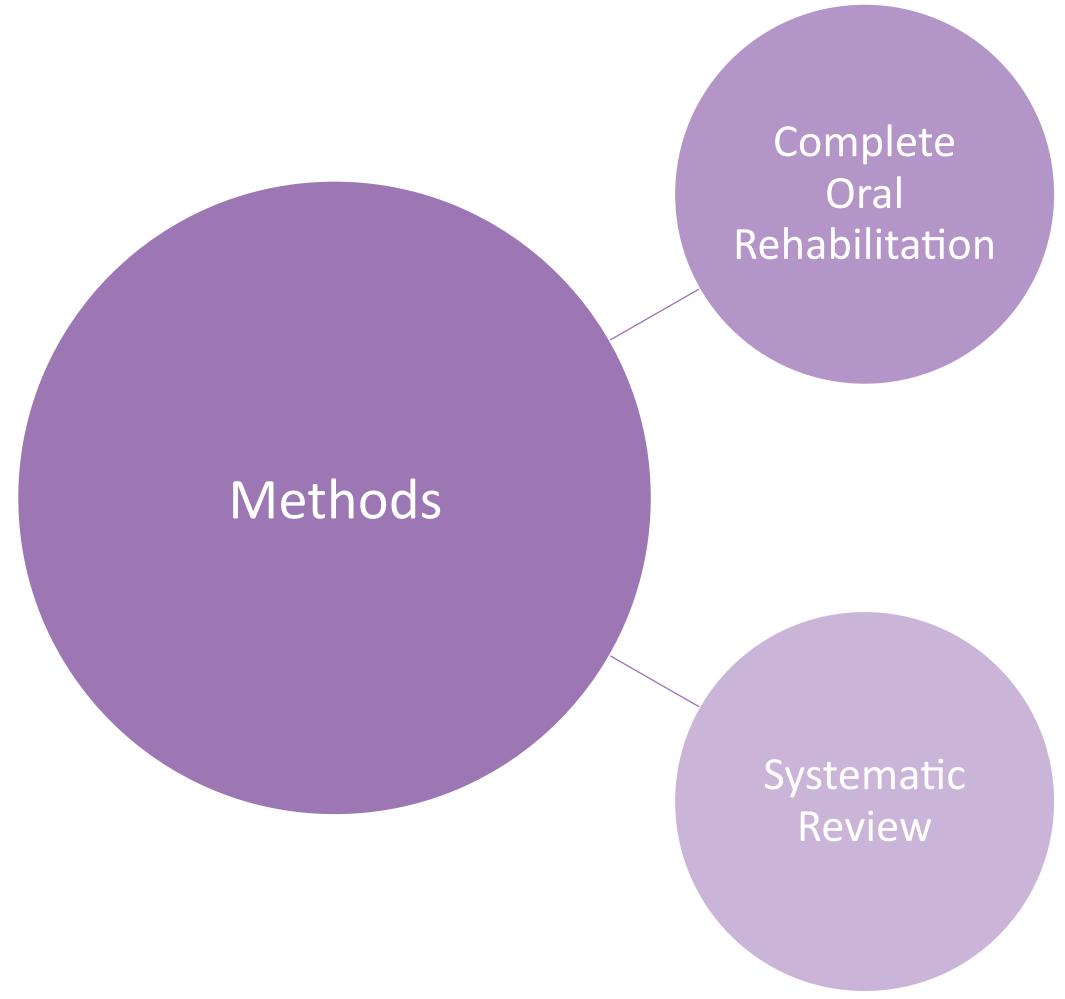
According to the World Health Organization (WHO, 2020), approximately 2.3 billion people have dental caries on permanent teeth and more than 530 million children have dental caries on primary teeth. In Puerto Rico, there is a high prevalence of dental caries among Puerto Rican 12-year-olds, specifically in the Central region of the island (Elias-Boneta et al., 2016). Although dental caries is preventable, there are several factors affecting access to oral health care. Social determinants of health are "the non-medical factors that influence health outcomes" (WHO, 2021); also defined as "the social characteristics within which living takes place" (CSDH, 2010). House, work, income, education, healthcare insurance, among others are determinants of health that may affect individuals. In Puerto Rico, "health disparity persists between children enrolled in public and private schools" (Elias-Boneta et al., 2016), where public/private school enrollment may be considered as a proxy measure for the family's socioeconomic status (Elias-Boneta et al., 2003).

It is important to identify and recognize current oral health status affecting Puerto Ricans' oral health. Simultaneously, it important to address the current oral health status affecting special care pediatric patients. This study describes the complete oral rehabilitation of an ASD patient in the operating room (OR), and how social determinants of health may have influenced access to oral health care.

# OBJECTIVES

- Describe the complete oral rehabilitation of an autism spectrum disorder (ASD) patient in the operating room (OR).
- Develop a research literature review addressing the following question: What social determinants of health affect oral health of children and adolescent patients?

# METHODS



- Oral Prophylaxis and dental sealants.
- Root Canal Treatment in tooth #10.
- Extensive restorative treatment.
- Dental extractions.
- PRISMA guidelines followed.
- PubMed, Lilacs, Scopus and ProQuest were the searched databases.
- 10 articles were selected for evaluation.

## RESULTS

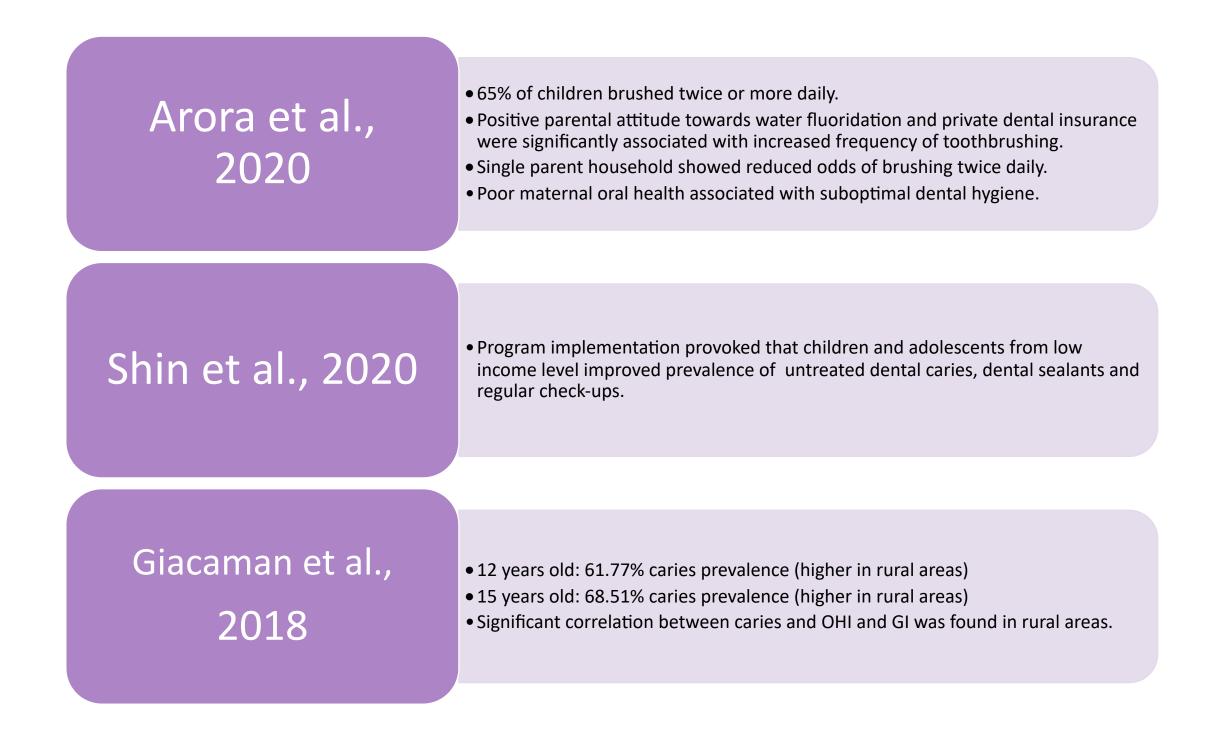
Figure 1. Before and after intra oral pictures.





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Figure 2. Most recent articles of Research Literature Review



#### DISCUSSION

- Initial oral health status of the patient demonstrated multiple dental caries. Although Complete Oral Rehabilitation was performed, patient showed caries recurrence in the follow-up visit.
- It was intended to perform a questionnaire in order to determine if oral health disparities of health may have influenced patient's access do dental care, but parents were not available to answer.
- Literature review identified a variety of social determinants of health affecting the pediatric populations, including parental education, household income, healthcare insurance, and rural residences influences the likelihood of having dental caries..

#### CONCLUSIONS

- Complete Oral Rehabilitation restored patient's oral health, but an effective way of complying with preventative strategies to prevent caries recurrence needs to be devised.
- It is important to asses alternatives to provide oral health care to those individuals with limited access to dental care.

#### FURTHER WORK

• Development of a research project to determine the impact of social determinants of health on the oral health of ASD patients in Puerto Rico is recommended.

#### ACKNOWLEDGEMENTS

- Dr. Sebastián Rodríguez, Endodontics Department, UPR-School of Dental Medicine.
- Dr. Gabriela Palacios and Dr. Livia Santos, Pediatric Dentistry Department,
   UPR-School of Dental Medicine.
- Dr. Damaris Molina-Negrón and Dr. Lydia López-Del Valle, research mentors,
   UPR-School of Dental Medicine.

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