



Pediatric Carioreceptivity in Children With Special Needs: A Risk-Based Integrated Management Model for Dental Caries

A. Tarullo, F. Fuggiano, D. Capodiferro, F. Carminucci, P. De Sena, R. Montanaro, D. Giannoccaro, M. Corsalini, S. Sparapano, A. Partipilo, G. Caruso, L. Limongelli

Interdisciplinary Department of Medicine, University of Bari «Aldo Moro», Bari, Italy

INTRODUCTION: Pediatric carioreceptivity is a predisposition to dental caries determined by the interaction of biological, behavioral, and social factors. Enamel and dentin defects, alterations in the oral microbiome, reduced salivary function, a sugar-rich diet, poor oral hygiene, and socioeconomic disadvantage increase caries risk, particularly in children with special needs (Down syndrome, ASD).

MATERIALS AND METHODS: Based on a narrative review of the literature on dental developmental defects, oral microbiome and saliva, habits, systemic diseases, therapies, dental fear/anxiety and behavioral management techniques, a risk-based care model is proposed.

RESULTS: The model includes classification of the child according to autonomy and level of cooperation, selection of the most appropriate care setting, a first visit conducted in a supportive and gradual challenging environment, active involvement of caregivers, and follow-up tailored to the individual risk profile.

DISCUSSION: In medically and socially fragile children, early identification of dental defects and the adoption of intensive, personalized preventive protocols—supported by specifically trained professionals, specialized clinical settings and selective use of nitrous oxide sedation—are essential for reducing inequalities and meaningfully improve oral health.



MINISTERO DELLA SALUTE, «Indicazioni per la presa in carico del paziente con bisogni speciali che necessita di cure odontostomatologiche» Gennaio 2019, https://www.salute.gov.it/imgs/C_17_pubblicazioni_2842_allegato.pdf

Chifor I, Rusu Dascalu L, Picos A, Chifor R, Badea I, Tisler C, Badea M. Chair-side saliva parameters assessment and caries experience evaluation. Med Pharm Rep. 2019 Dec;92(Suppl No 3):S33-S38. doi: 10.15386/mpr-1523. Epub 2019 Dec 15. PMID: 31989106; PMCID: PMC6978928.

Cianetti S., Paglia L., Gatto R., Montedori A., Nardone M., Salvato R., Gallus S., Lombardo G. Validated Psychometric Scales to Measure Dental Fear/Anxiety (DFA) Among Children and Adolescents in Italy. A Systematic Review. Eur J Paediatr Dent. 2017 Jun;18(2):121-130. doi: 10.23804/ejpd.2017.18.02.07

