COVID-19 disease and paediatric dentistry: a review on dental management.

Quaraniello M¹, Cantile T¹, Desiderio F¹, Papa C¹, Ingenito A¹, Ferrazzano GF^{1,2}.

- 1.Department of Neuroscience, Reproductive and Oral Sciences, Paediatric Dentistry Unit, University of Naples "Federico II", Naples, Italy.
- 2. Staff Member of UNESCO Chair on Health Education and Sustainable Development, University of Naples, Federico II, Naples, Italy.

Background

Coronavirus disease 2019 (COVID-19) has spread rapidly across the globe, becoming a major public health challenge for countries around the world. The viral transmission is through droplet inhalation, as well as contact transmission via oral, nasal and eye mucous membranes.

In dentistry, most procedures generate significant amounts of droplets and aerosols, posing potential risks for viral transmission. The risk of spreading the virus is more serious in paediatric dentistry, because children are often asymptomatic. The aim of this study was to carry out a narrative review on dental management in paediatric dentistry, during and after the COVID-19 pandemic, in order to ensure higher safety standards for both dentists and children.

Literature Review: The literature research was performed using the PubMed database. The following keywords were used: "COVID-19 and Paediatric dentistry" and "COVID-19 and dentistry and children". The results of this literature research showed that dentists should avoid or minimize operations that can produce droplets or aerosols (Aerosol Generating Procedures) (AGP): four hands technique, rubber dam, double and high-volume saliva ejectors, anti-retraction hand-pieces and hand instruments are strongly suggested in order to contrast viral spread. Furthermore, when possible, Minimally Invasive Treatments (MITs), like Atraumatic restorative technique (ART), Interim therapeutic restorations (ITR), the Hall technique (HT) and the use of Silver Diamine Fluoride (SDF), should be considered.

Conclusion: Wherever possible, it is recommended to avoid elective AGP. Moreover, paediatric dentists should keep a high level of awareness to help patients, minimizing risk and preventing viral spread.