

*Ahmadigorji S.*

## **COVID-19 CONSIDERATIONS IN PEDIATRIC DENTISTRY**

*Tutor PhD, assoc. prof. Klenovskaya. M. I.*

*Department of Pediatric Dentistry*

*Belarusian State Medical University, Minsk*

One of the most important current medical concerns across the globe is the COVID-19 pandemic, it has substantially affected all aspects of human lives and forced most people to self-quarantine and stay home in order to remain safe. Pediatric dentists as a part of the health care system have to manage emergency situations and need to beware of the symptoms and risks of the emerging dental disease and, accordingly, change the policies in our offices to minimize the risk of transmission while checking up and treating our patients in the safest possible way.

Clinical manifestation of COVID-19 infection in children include fever, dry cough, fatigue, symptoms of upper respiratory tract infection (runny nose), and gastrointestinal symptoms (anorexia, diarrhea, nausea, and vomiting). Oral and skin manifestations of COVID-19 are also observed in pediatric patients, with erythematous rashes on the limb ends and torso being the most common. It is also reported on swollen lips and oral ulceration as an early feature of pediatric multisystem inflammatory syndrome associated with COVID-19. The mild symptoms of the infection among the children, the possible aerosol transmission, and the incubation period without symptoms prompt the dentists to take certain precautions to minimize the risk of the transmission in the dental office.

The emergency treatments are divided into 4 levels (Iranian Dental Association, 2020):

relieving patients' pain (pulpotomy, dry socket, extraction, root canal treatment, removal of sharp fractured restorations or teeth, avulsed teeth);

control of advanced or progressive infection (abscess drainage);

control of patient's hemorrhage (bleeding after extraction, suturing laceration);

cases that might lead to potential complications (loose restorations or bridges, removal of non-resorbable suture, correction of denture causing pain, reattachment of detached orthodontic bracket, biopsy of malignant suspicious lesions, evaluation of suspicious swelling in jaws or face).

Pediatric dentists might consider the following criteria during patient's visit:

1. Each patient's temperature should be checked by a contact-free forehead thermometer and fingertip pulse oximeter before entering the dental office. Patients and their companions should be provided with disposable medical cover shoes and disinfecting gels to sanitize their hands thoroughly just before entering the dental office.

2. Patients should be equipped with coveralls to minimize the contact. In this regard, children are encouraged to fantasize that they are putting on special power suits. Making the children dress like the clinic staffs in the dental office could decrease the fear of children seeing everyone in gowns and coveralls.

3. In the reception area, we should ensure that all individuals remain at social distancing.

4. Due to the possibility of airborne transmissions, patient appointment times should be properly arranged so that no more than 1 child patient with only 1 accompanying adult are present in the office.

5. The office should be equipped with a good ventilation system (ultraviolet germicidal irradiation, active air ionizer). Use personal protective equipment, including surgical N95 respirators, protective eyewear, gloves, caps, face shields, and protective outwears.

6. Non-aerosol techniques and minimally invasive procedures will be preferable whenever possible. Anti-retraction dental handpieces specially designed to reduce cross-infection during epidemic period of COVID-19.

7. During dental treatments, using rubber dam isolation could significantly reduce airborne particles in a 3-foot diameter of operational field by 70%, and its use is highly recommended. As a preoperational antimicrobial mouth rinse, chlorhexidine may not be effective in killing COVID-2019, then oxidative mouth rinses such as 1% hydrogen peroxide or 0.2% povidone are recommended.

8. To keep in contact with our patients, social media such as Instagram are activated.