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Short Commentary

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COVID-19 and dentistry: Identifying the challenges of dentist during the coronavirus outbreak

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Short commentary

Since the beginning of 2020, the COVID-19 pandemic has intensely influenced different clinical specialty lines [1]. Nonetheless, a number of medical practitioners such as different types of oral health care providers are more susceptible to COVID-19 infection than others. The nature of the dental procedures (including the potential of aerosol generation from dental instruments), and prolonged close contacts of the dental team with patients are two important factors that can help COVID-19 occurring and spreading from infected patients to the dental team, and vice versa. Moreover, the causative agent of COVID-19 is a respiratory virus that mainly transmitted through respiratory droplets and can be detected in different body fluids and sites such as saliva and oral mucosa. These characteristics can increase the risk of getting or transmitting COVID-19 in the dental office.

The above mentioned evidence clearly indicates that optimal control of virus spread in dental settings is an urgent requirement. Unfortunately, there is no one solution to controlling the spread of this deadly disease. Moreover, each country of the world has been required to develop a COVID-19 safety plan that defined the procedures and policies in place to reduce the risk of COVID-19 infection. For these reasons, the concern about dental practice coronavirus transmission has been widely different and the response of dental associations and the recommended methods of preventing the spread of COVID-19 are heterogeneous. Some associations have suggested complete paralysis of routine dental care, while the others have proposed that access to dental services should be limited to the emergency dental services only [2]. These strict recommendations were gradually reduced with the decline in the steep prevalence of COVID -19 cases. The dental associations have permitted dental offices to resume providing routine services under special circumstances by taking the precautionary measures to safeguard both the dentists and their patients during the treatment. In spite of many challenges, national health authorities around the world set out detailed recommendation in order to minimize the risk of virus transmission in dental offices [3].

Teledentistry for patient triage, evaluation, and treatment was one of the first safety concerns that can be applied to re-

duce the occupational hazards. Despite all the advantages of this method, it has some drawbacks. For instance, teledentistry can limit the clinically accurate diagnosis and may lead to inappropriate management strategy [4].

Thus, several guidelines, and suggestions must be prepared in relation to the re-opening or reorientation of dental clinics. These protective measures can be classified on three levels: before, during and after dental treatment. The key points that should be considered before entering a dental office are: patient triage, identification and management of dental problems, the suspension of non-emergency dental care, regular and active screening of dental staff. Other essential steps of controlling procedures at the dental office include the following: active screening of patients for COVID-19, social distancing management in the dental office, use of facemasks and shoes cover by everyone before entering the dental office, providing patient education mainly on the sanitation measures, management of safety and health in the operatory room and use of personal protective equipment in the workplace by dental team members [5]. In addition to the abovementioned protocols, the following recommendations provide a beneficial support for effective reduction of SARS-CoV-2 transmission during dental procedures. Some of these include maintaining hand hygiene(regular handwashing and wearing disposable gloves), the use of an antimicrobial mouthrinse by the patient prior to dental treatment, the use of a disposable high-volume saliva ejector, the use of rubber dam, the use of 4-handed dentistry, minimizing the aerosol-generating procedures, routine cleaning and disinfection of environmental surfaces, and single visit treatment.

Conclusion

Finally, dentists should give some serious consideration after dental treatment. The most important among them are: cleaning or decontamination/sterilization of reusable facial protective equipment; safe management of medical wastes after routine procedures and laundry management [6]. In summary, oral healthcare professionals can play an invaluable role in preventing and controlling the spread of COVID-19. The two most important aspects of their job responsibilities are (1) applying the core principles that help prevent the transmission and spread of SARS-CoV-2 and (2) minimizing cross-contamination risk with dental equipments. Todate, there are guidelines that are required to attain these identified goals. Nonetheless, clinical decisions will ultimately depend on the needs of the individual patient, the local prevalence of disease and the accessibility of supplies. Overcoming these obstacles requires clear guidance and harmonised standards. It seems that national and international collaboration can be a useful tool to create comprehensive guideline for prevention and control of this pandemic. But, it is necessary to bear in mind that these protocols will evolve as the knowledge about COVID-19 evolves.

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