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## Letter to Editor

# Relevance of teledentistry during the COVID-19 pandemic

Dear Editor,

Coronavirus disease or COVID-19 was declared a public health emergency of global concern by the World Health Organization (WHO) in late January 2020.<sup>[1]</sup> The novel virus responsible for this outbreak, belongs to a family of single-stranded RNA viruses known as Coronaviridae and was named severe acute respiratory syndrome corona virus 2 (SARS-CoV-2), also popularly known as the COVID-19 virus.<sup>[1-3]</sup> The possible sources of nosocomial spread in health care setups like a dental operatory are through respiratory droplets i.e., cough and sneeze of infected patients, contact with contaminated fomites and saliva of the infected patient.<sup>[1-4]</sup> Dental treatments are aerosol-generating procedures and pose a high risk to practitioners as there is a strong possibility of cross-infection and them acquiring the disease or becoming potential carriers.<sup>[2-4]</sup> It is important to emphasize that this disease has followed a sustained human to human transmission through contact with known COVID-19 patients and asymptomatic carriers in the incubation period (0–24 days).<sup>[2]</sup>

In the context of this ongoing pandemic with immense social and economic implications, teledentistry (TD) offers key advantages in the dental management of patients without involving the above-mentioned risks. TD is a combination of telecommunications and dentistry, involving the exchange of clinical information and images over remote distances for dental consultation and treatment planning.<sup>[5]</sup> In the present situation, screening and triage questions such as relevant symptoms, travel history, or contact with known COVID-19 patients can be assessed through TD.<sup>[1,2]</sup> It can support and supplement the existing health care professionals working in the emergency department of the hospitals and primary health centers to provide emergency care to patients who have reported with dental concerns without unnecessary exposure to extra personnel. It can facilitate easier consultations in pediatric patients, especially those with special health care needs who are dependent on their caregivers for their health care including oral hygiene. Caregivers often prefer to use home remedies for the child's dental symptoms instead of consulting a dental professional straight away, which may aggravate the condition and present in the later, unsalvageable stages of the disease. TD provides a stress-free environment for examination of the child patient as the child is reassured and sitting with the parents at home. Timely consultations can in turn reduce the number of emergency visits, which becomes important

in the current time of extra burden on health care systems. The importance of regular tooth brushing and other preventive care can be reiterated to the parents. More importantly, in the periods of lockdown, TD can provide specialist consultation to patients living in difficult terrains/mountains where routine access to dental care is unavailable.<sup>[5]</sup> Ascertaining the nature of the dental emergency is of paramount importance by the primary care physicians. Swellings that can threaten airways and subsequently require hospital admissions should be scheduled for an in-person appointment in a facility equipped with proper personal protective equipment and ambulatory care services.<sup>[6]</sup> Teleconsultation can be delivered via real-time consultation, store-and-forward method, and remote monitoring.<sup>[5]</sup> It is important to select the appropriate technology for TD that can be used by the patient and also arrange the assistance of an authorized person for local coordination. The patient's records should be safely stored in a confidential manner.<sup>[5]</sup> Additional information such as means of technology used; confirming the identity and location of the patient and written or verbal consent obtained from the patient should also be documented.

To conclude, the authors suggest setting up TD services in medical and dental institutes, especially in peripheral areas during the COVID-19 pandemic as it would allow wider visibility of dental professionals in communities and bridge the gap between patients and consultants in a cost-effective and safe manner. Furthermore, diagnosis, pharmacotherapy, emergency dental care, referrals, and follow-up of patients can be done while reducing human-to-human transmission and nosocomial spread. TD consultations can eventually be continued as routine office treatments once the acute phase of the pandemic is over.

Institutional permission has been taken for publication in scientific journals.

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### Conflicts of interest

There are no conflicts of interest.

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## References

1. Peng X, Xu X, Li Y, Cheng L, Zhou X, Ren B. Transmission routes of 2019-nCoV and controls in dental practice. *Int J Oral Sci* 2020;12:9.
2. Ather A, Patel B, Ruparel NB, Diogenes A, Hargreaves KM. Coronavirus disease 19 (COVID-19): Implications for clinical dental care. *J Endod* 2020;46:584-95.
3. Sabino-Silva R, Jardim AC, Siqueira WL. Coronavirus COVID-19 impacts to dentistry and potential salivary diagnosis. *Clin Oral Investig* 2020;1-3.
4. Meng L, Hua F, Bian Z. Coronavirus disease 2019 (COVID-19): Emerging and future challenges for dental and oral medicine. *J Dent Res* 2020;99:481-7.
5. Jampani ND, Nutalapati R, Dontula BS, Boyapati R. Applications of teledentistry: A literature review and update. *J Int Soc Prev Community Dent* 2011;1:37-44.
6. Dave M, Seoudi N, Coulthard P. Urgent dental care for patients during the COVID-19 pandemic. *Lancet* 2020;395:1257.


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