

EDITORIAL

COVID-19 and its Impact on Dentistry

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COVID-19, the dreadful pandemic that marked its entry in December 2019 has set its footprints aggressively as we see the devastating effects in the second wave. The COVID-19 pandemic caused by a coronavirus (CoV-2) is a large family of viruses, several of which cause respiratory diseases in humans, from the common cold to rarer and serious diseases such as the Severe Acute Respiratory Syndrome (SARS) and the Middle East respiratory syndrome (MERS).¹ The COVID-19 virus is considered to have its ecological reservoir in bats, and the intermediate animal host through which the virus could have found its way to humans is still to be identified.² WHO named the novel coronavirus as 2019-nCoV³ which attacks the host cells by targeting the human angiotensin-converting enzyme 2 (ACE2) receptor by binding to the S protein.⁴ Human-to-human transmission seems to occur mainly through close contact with symptomatic people affected by COVID-19, and the main way of contagion is respiratory droplets when patients sneeze or cough.⁵ The incubation period for the 2019 nCoV ranges from 1-14 days during which the patient can be symptomatic or asymptomatic.⁶ The studies have reported that the 2019 nCoV can spread from asymptomatic individuals which pose a challenge to effective screening, isolation, and management.⁷ This disease has umpteen symptoms ranging from weariness, headache, fever, myalgia, nasal congestion, rhinitis, sore throat, coughing, vomiting, diarrhoea, and dyspnea. The upsurge of this pandemic has put the healthcare workers in jeopardy, particularly dentists because of their propinquity to the patients, exposure to body fluids, and performing aerosol-generating procedures. This noxious organism not only lives inside an organism but also outside of it, like in aerosols and on surfaces of other inanimate surfaces. Studies show that the SARS-CoV-2 remains viable in aerosols for up to 3 hours with a half-life of 1.5 hr. The virus can survive longer on stainless steel and plastic with an average half-life of approximately 5.6 hr and 6.8 hr respectively, and the viable virus was detected up to 72 hr after application on these surfaces.⁸

Considering the various dental emergencies which require pressing attention and monetary exigency of the dentists, standard operating protocols are required to protect the dentists from this appalling disease. The various special precautions considered in the management of dental emergencies ranging from patient screening in well-ventilated waiting and operating room with good personal protective equipment (PPE) to pre-procedural mouth rinses and frequent hand hygiene and surface disinfectants.⁹ The prosthodontic treatment requires at most care in preventing gagging by proper selection of impression trays and at times use of analgesic topical gels as well. Fixed prosthodontics may require placement of supragingival margins or require skillful use of rubber dam with split rubber dam technique.⁵ Care must be taken to thoroughly disinfect dental prosthesis, impressions, and other prosthodontics materials (e.g., bite registration) upon removal from the patient's mouth before sending it to laboratories. Clinical preparation by dental professionals via protective and infection control elements are considered and well documented, further challenges must be directed towards dental education and research. Lockdowns limit access to learning opportunities for students in pre-clinics and clinics. The list of problems further includes losses in revenue sources; economic instability, the collapse of research programs and grants; suspension of academic conferences, graduation ceremonies, and ceremonies of convocation; and dramatic shifts in pre-planned projects and activities. Moreover, COVID-19 influences recruiting new academicians and scientists, causing psychological impacts on students and faculty. The surfacing of the COVID-19 pandemic has brought new challenges and difficulties in practicing dentistry, nevertheless following special precautions and stringent protocols will help us in protecting our fraternity and family members from this minuscule living organism.

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CONFLICT OF INTEREST

There is no conflict of interest

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