

## Resuscitating Dentistry: A Challenge in Covid 19 Pandemic

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Global outbreak of Coronavirus disease (COVID-19) leads into either complete shutdown or limited to emergency care dental services around the globe. Almost 90 percent of the dental services were either stopped or reduced to significant volume in past six months in Nepal.<sup>1</sup> SARS-CoV-2, a causative agent for Covid 19 is abundantly present in the nasopharyngeal and salivary secretions and it is believed through the respiratory droplets, aerosols and fomites.<sup>2</sup> With the rise in number of cases in different part of the country and considering increased risk among the oral health care providers, Nepal Dental association has recommended dentists to stop elective services and do the needful emergency treatment. This postponement of non-urgent treatment, which have caused significant delays in dental care and dental treatment plans.

Nepal dental association, in collaboration with ministry of health and Nepal medical council provide the evidence based interim recommendations to dental community with guidance on navigating the Covid-19 crisis effectively in dental practice before, during, and after their arrival in the dental office.<sup>3</sup> Similar preventive measures have been proposed and adopted worldwide by other national and international dental organizations and they appear to have proven effective in limiting viral spread in the dental setting.<sup>4,5</sup> According to World Health Organization (WHO) and Centers for Disease Control CDC, till date no confirmed cases of transmission of SARS COV-2 has been reported in dental office. Similarly a recent study conducted among Dentists in United States of America (USA) reported that COVID-19 prevalence and testing positivity rates were low among practicing dentists during current pandemic period.<sup>6</sup>

Oral health which is considered as gateway to systemic health is a vital component of general health and wellbeing. So irrespective of pandemic or not, ideal dental care must warrant optimum infection control practice. Prevention of cross infection in our clinical set up should be the ultimate goal of this noble profession. Dental practice today should well prepared to prevent any infection risks related to the current pandemic, by taking effective measures to remain safe for both patients and practitioners. Neglecting dental health - even for a limited period of time may have a negative impact on overall health because periodontal and dental diseases are linked to serious chronic conditions. According to the scientific evidence, poor oral health can be associated with diabetes, cardiovascular diseases, dementia, and other serious conditions.<sup>7</sup>

Most dental care procedures create tiny drops of liquid that float in the air, called aerosols. Aerosols produced during the use of ultrasonic scalers and airtar hand-piece, which are made of air, water, and the patient's saliva, may also contain micro-organisms such as bacteria, fungi and viruses. Thus increases the risk of spread of COVID-19 during these procedures. Limiting the production of these aerosols and decreasing the contamination in it should be the gold-standard practice today. Pre-procedural mouth rinse with antimicrobial mouth wash, use of rubber dam and saliva ejector, high pressure evacuation, general ventilation and decontamination of airborne aerosols by using ultraviolet light can reduce risk of disease transmission from the aerosols in dentistry.<sup>8</sup>

In our practice today, we may encounter a patient with confirm positive COVID infection who may be symptomatic or asymptomatic, or undiagnosed COVID carrier. Hence every dental patient should be considered as potential carrier and therefore it is recommended to implement standard guidelines and protocol while attending and treating patients in dental set up. Although COVID-19 came as a challenge in this profession, it has shed the some important facts into clinical dentistry. It has been well taken up by the dental community that expanded use of Personal protective equipment's (PPE) must be warranted for care of all dental patients as a part of standard precautions. Continuing dental practice with proper and expanded use of PPE, developing and implementing innovative techniques to reduce aerosols or contamination in aerosols, using tele-dentistry as a part of clinical practice where ever possible can revive, rejuvenate and resuscitate dentistry that has been badly hindered by current pandemic of COVID-19.

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