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## **EDITORIAL**

## Oral Health, Dentistry and COVID-19 Pandemic

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COVID-19 pandemic, which emerged as a community health crisis, proved to be the terrifying pandemic of the century. It affected all sectors of healthcare and all sections of society by thoroughly shaking the economic, social, mental, and health aspects. The COVID-19 pandemic has led to critical circumstances putting a strenuous load on healthcare services bringing the economy to a standstill [1]. It proved to be another devastating pandemic after the deadly Spanish Flu pandemic [2]. The SARS COV-2 virus, which is highly contagious, spreads through air droplets, close contact, and through fomites and aerosol [3]. The SARS-COV-2 virus is abundant in nasopharyngeal and salivary secretions and spread of COVID-19 via respiratory droplets, which makes dental professionals more vulnerable to infection. The oral manifestations included recent loss of taste sensation as an early symptom, oral ulcerations, herpes simplex virus-1 infection, xerostomia, opportunistic fungal infections, and gingivitis [4]. The dental practitioners got the additional burden of revising the infection control protocols and keep themselves updated about evolving disease as a duty to protect the public and themselves from this novel infection. The key advise to dental care providers included performing procedures in a negative pressure room, following hand hygiene practice, taking extraoral radiographs, avoid intraoral radiographs, limiting the number of care provider and visitors, using high evacuation suction and rubber dams, limiting the use of ultrasonic instruments and 3-way syringes, using 1% sodium hypochlorite solution for endodontic procedures, surface disinfection using EPA-approved chemicals, using N95 mask, face shield or goggles to ensure the protection of the eye, gloves, and gown [5]. Triage policy, Smart Appointment System, and Teledentistry could be helpful to dentists in assisting patients with minimized risk of cross-infection. Teledentistry helped to change the outlook of dentistry and gaining a vital space in dental practice during this pandemic [6]. Oral Healthcare providers and patients together share the responsibility to emphasize preventive care as disparities in

oral health care access are threatened to be increased due to COVID-19 [7]. The frontline healthcare workers need to be kept updated about the trend of COVID-19, and frequent virtual sessions may be used to update them [8].

By virtue of the nature of work and the oral environment of continuous salivary flow, dentists are at greater risk of getting exposed to infectious diseases. In addition, a lot of risks and challenges emerged for the dentists with the upsurge of the COVID-19 pandemic. A thorough understanding of the risks of aerosol transmission and its management can be helpful for safe dental practices [9]. As per a few studies in developed countries, positive views were expressed about teledentistry in terms of satisfaction of the patient, ease of use, and effective accessibility to clinical services. Though teledentistry proved to be a suitable option for improved access to healthcare services in developed countries during the COVID-19 pandemic, problems in developing countries like India are varied, limiting its use, especially in rural settings where the majority of Indian people reside. Increased costs of personal protective equipment and limited flow of patients posed a threat to the business of dentistry during the COVID-19 pandemic. As evident from a number of trials, real-time interactive video consultations are beneficial over simple mobile consultations. However, there are limitations in the disease diagnosis and patient's assessments due to technical difficulties [10].

The other possibilities through which experts from dental public health can manage to contain the spread of COVID-19 is through public awareness and health promotion. There still exists a major scope of community education about practising oral hygiene, a healthy lifestyle, and adopting a positive attitude in this devastating situation. Public Health professionals can undertake various awareness programmes and campaigns to promote health at schools, public places, and remote areas following all the safety measures and protocols. Considering the scope and anticipated risks during a pandemic, many mobile medical vehicles are providing telecare, social services, food, hygiene supplies, and educating people, especially from poor socioeconomic populations in rural and tribal regions. Mobile dental vans can perform oral health screenings and deliver the required primary dental care [11,

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12]. Pandemic paved the way for mobile dentistry for providing care to people with dementia, effective use of teledentistry, and role of the dentist as vaccinator [13].

In India, dental public health is a part of undergraduate and postgraduate academic teaching programs. It focuses on academic research and delivers oral and dental health outreach programs, health promotion, and preventive care activities. Dental outreach programs are routine activities which provide free check-up and basic treatments for simple oral health problems. Usually, a large number of the public attend such programs, and basic treatments are delivered with the aid of portable dental units through mobile dental vans. During the COVID-19 pandemic, this system is bound to be affected. As these programs are helpful to satisfy the dental needs of many underprivileged people, any gaps or negligence in the implementation of strict infection control measures can lead to the increased spread of infections. Due to the suspension of extensive field visits and outreach in the current situation, the research projects are posed with a number of challenges, and many projects had been temporarily halted. There is an urgent need to find alternate methods of data collection through online modes like online survey forms, online focus group discussions, and the Delphi technique. Research projects focused on remote triaging, online disease surveillance, and cost-effective methods for the prevention of oral and dental problems can be promoted and encouraged [14].

The community health practices revolve around the central principle of prevention. Therefore the COVID-19 outbreak has presented a way for the dental healthcare professional to emphasize on prevention of oral diseases rather than surgical intervention. Moving forward, the dental practice needs considerable changes in the post-pandemic period. Refresher courses need to be executed and conducted on infection control for practicing dentists. The dental authorities need to mobilize resources and taskforces, frame protocols and courses for orientation, and refresher training for dental practitioners. Research related to infection control in various dental specialties is needed. For the formulation of best practices, new research needs to be conducted in different specialties of dentistry to cover all procedures and relevant infection control strategies. The Public Oral Health departments need to search avenues for providing insight on patient's perceptions and apprehension towards hospital visits. This information can be helpful for the revival of the financial viability of public sector hospitals and private clinics [15]. The COVID-19 disease has not only led to a wide spectrum of challenges and barriers for the dental public health fraternity but also served as a nidus for the dental healthcare fraternity to revise the oral health policies and guidelines. Prophylactic dental management through regular dental check-ups plays a key role in reducing the burden.

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