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Is It Time to Consider Implementation of Telemedicine in Current Oral Health Care Services?

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Abstract

Telemedicine offers an excellent opportunity to provide continuing health care for those in need during local/global pandemics and disasters. It provides a safe and effective communication tool between health professionals and can be used as "forward triage" to manage medical/dental emergencies and to minimize the contact between the patients and clinicians during the coronavirus disease (COVID-19) pandemic. Patients with noncommunicable diseases, like cancer, diabetes, cardiovascular, or chronic respiratory diseases, may present with critical health problems due to less access to health care systems during global disasters; opportunities for screening oral mucosa might be significantly disrupted, leading to delayed diagnosis of malignant/potentially malignant lesions. Telemedicine and oral health care associated mobile applications should be implemented to provide equal access to care, to eliminate unnecessary visits to health centers, and to improve practical coordination between professionals and health facilities.

Letter to the Editor

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Due to the high transmission rate of coronavirus disease (COVID-19), which impairs the control of the pandemic, people are lawfully required to stay home and are permitted to leave only for urgent conditions or health-related emergencies.[1] All adjacent health care services are postponed until a future date when the disease is more or less under control.[1] This delay inevitably leads to critical health problems for the patients with noncommunicable diseases like cancer, diabetes, cardiovascular, or chronic respiratory diseases,[2] who are also among the high risk group for the COVID-19 infection. This fact has caused a dilemma regarding their administration into hospitals for continuing treatment regimens, or isolation and postponement of treatment in order to prevent their visits.[3] Accordingly, due to limited access to health care services, there has been a dramatic decrease in the number of patients who received an oral cancer diagnosis during the COVID-19 pandemic, which alarms the practitioners about the diagnostic delay of oral cancer cases that leads to worse histological grading, prognosis, increased mortality, and economic burden.[1]

An alternative way to provide basic health care practices is telemedicine, which dates back to the 1900s.[4] It's the use of information and communication technology to provide remote medical practice by connecting the health care providers and/or patients for consultation, treatment planning and patient monitoring via transferring the relevant data, clinical, and radiological images.[4] It can be used as "forward triage" to manage medical/dental emergencies and to minimize the contact between the patients and clinicians during the COVID-19 pandemic.[4] The use of telemedicine for oral and dental health care has been implemented for orthodontic consultation, caries screening, and patient referral. It is also valuable for remote triage of dental infections that don't require immediate care and can be managed by means of pharmacological pain/infection control.[4,5] Oral medicine can benefit most from the use of telemedicine, since opportunities for screening oral mucosa might be significantly disrupted during global outbreaks and disasters, leading to a delayed diagnosis of malignant/potentially malignant lesions.[1] The intraoral photographs of oral lesions taken by the patients via mobile phones have been shown to have an acceptable diagnostic accuracy rate and can be used for remote screening of oral mucosal disorders.[5] While a virtual consultation/interview may not always yield a definitive diagnosis, it does provide an opportunity for problem-solving during disruption of dental health care delivery. Legal concerns about patient confidentiality will emerge with the use of telemedicine for oral health care services, and an informed consent must be obtained prior to transferring the patient's image or data.[4] The American Dental Association Policy (ADA) on teledentistry[6] covers some important aspects regarding the delivery of such services, including patient rights, quality of care, and reimbursement. The licensed dentists and personnel should ensure the safety and quality of teledentistry services, and laws addressing privacy

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and security of a patient's dental/medical information must be abided. The coverage for teledentistry services should be at the same levels as those provided through in-person encounters. It is also emphasized that the patients should be able to choose how they receive a covered service without copayments or coinsurance relative to that of in-person services.

In conclusion, to provide equal access to care, to eliminate unnecessary visits to health centers, and to improve practical coordination between professionals and health facilities, the use of telemedicine and health care associated mobile applications can be suggested during global disasters.[4] The World Health Organization approved the use of digital technologies for maintaining the health care service during the COVID-19 pandemic to establish clinical consultations with remote connections to health facilities.[2] Assessment of proper infrastructures for internet and wireless connections, providing the availability of phones and regulation of health care systems to include telemedicine as a part of a routine protocol, is to be considered for future disaster planning.

References

1. **Arduino PG, Conrotto D, Broccoletti R.** The outbreak of novel coronavirus disease (COVID-19) caused a worrying delay in the diagnosis of oral cancer in Northwest Italy: the Turin metropolitan area experience. *Oral Dis*. 2020; epub, doi: 10.1111/odi.13362.
2. **World Health Organization (WHO)**. Maintaining essential health services: operational guidance for the COVID-19 context interim guidance. WHO website. 2020. https://www.who.int/publications/i/item/WHO-2019-nCoV-essential-health-services-2020.1. Accessed June 1, 2020.
3. **Bhattacharjee A, Patil VM, Dikshit R, *et al.*** Should we wait or not? The preferable option for patients with stage IV oral cancer in COVID-19 pandemic. *Head Neck*. 2020;42:1173-1178.
4. **Ambroise B, Benateau H, Garmi R, *et al.*** The role of telemedicine in the management of maxillofacial trauma in emergency departments – preliminary results. *J Stomatol Oral Maxillofac Surg*. 2019;120:95-98.
5. **Khan SA, Omar H.** Teledentistry in practice: literature review. *Telemed J E Health*. 2013;19:565–567.
6. **American Dental Association (ADA)**. ADA policy on teledentistry. ADA website. 2020. https://www.ada.org/en/about-the-ada/ada-positions-policies-and-statements/statement-on-teledentistry. Accessed June 15, 2020.

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