

Teledentistry during COVID-19

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Abstract

Since coronavirus disease 2019 (COVID-19) was reported globally pandemic, dentistry is known as one of the most critical disciplines. Teledentistry as a sub branch of telemedicine which can be a useful modality is defined by using any telecommunication technology facility, including digital photo and video to deliver oral care to isolated patients in distant places by low cost(1). Although teledentistry has been introduced as a valid tool to prevent unnecessary referrals, policy makers have not shown much interest on it yet (2,3).

Diagnosis, treatment, and monitoring could be performed, meanwhile research and continuing education or public education could be done via teledentistry. In COVID-19 pandemic, teledentistry can prevent human and non-human resources burden. Oral chronic diseases like vesiculobullous and painful conditions are so dreadful and exhausting needing more care. Pediatric patients and those who are suffering from cancer are no more exceptions to this point. Tablets, smart phones, and all types of electronic gadgets can facilitate virtual communication which is helpful in telehealth.

Traditional visual examination is a gold standard, in order to reach a better diagnosis and treatment plan. In teledentistry, intra oral or other high quality cameras can provide essential documents. There are so many investigations to compare visual and virtual examination, which showed only some problems in diagnosing interproximal carious lesions which is solved by digital radiography (3).

Teledentistry examinations are valid, feasible, and comparable to visual examination for oral screening. Data storage is another crucial part in teledentistry due to privacy policies (2,3).

Pediatric dentistry, oral medicine, orthodontics, and periodontics are the most common disciplines that have studied the efficacy of teledentistry rather than effectiveness. In developing countries, where emergency care is more important than preventive care, conservatism of decision makers, lack of resources and ICT infrastructure are the most common problems in providing teledentistry (4).

Meanwhile there is a hidden advantage for teledentistry and telemedicine that it can avoid feelings of isolation and stress for patients; so, it can be more useful during COVID-19 quarantine (5).

Teledentistry performs in two ways; asynchronous by transmission intraoral or extraoral images that are not used in real time; also, known as the store and forward method, synchronous by use of real-time interactive technologies, such as video or photoconferencing, and mobile health care services via smartphone apps and text messages.

All the process should be recorded in patients file for further information. Accurate triage is another prominent advantage of teledentistry, which is so important during COVID-19.

For people in need of care like geriatrics or patients with special needs telemedicine can eliminate some barriers (6).

Besides to teledentistry's advantages, especially in a situation like a pandemic infection even with very primary facilities teledentistry can be performed and be useful for triage. By introducing dentistry as a very dangerous discipline, teledentistry can play a very specific role to solve the majority of patients' problems as a helpful facility in this crisis and may be it can also persuade policy makers to perform teledentistry in a vast program.

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