

An Overview of the Literature on Teledentistry and its Applications in Pediatric Dentistry

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Abstract

Face-to-face encounters in dentistry were restricted during the disastrous COVID-19 pandemic to create social separation and decrease viral transmission. Teledentistry was used to give dental care. The purpose of this article is to evaluate the literature and information on the supply and use of teledentistry as a strategy to treat pediatric patients' oral health requirements. In the pediatric population, teledentistry has been used for oral health education and promotion, remote diagnosis and monitoring, and behavior coaching. This practice strategy is beneficial in providing dental treatment in remote locations with little access to pediatric dental specialists, monitoring patients between appointments, conducting remote diagnosis and screening programs, promoting the oral health of children through dental education, and in pre-appointment behavior guidance in studies involving pediatric populations for the aforementioned applications. During the current COVID-19 outbreak, dentists used their mobile phones and computer webcams for patient appointments while keeping a safe distance and avoiding exposing themselves and their patients to the virus. Teledentistry can be used to enhance traditional face-to-face child dental treatment, resulting in improved patient management. This technology has the potential to significantly reduce the supply-demand gap for pediatric dentistry experts in areas where healthcare facilities are few, as well as to assure patient safety when delivering dental care to pediatric kids during a pandemic. In the realm of pediatric dentistry, further research is needed to ensure that teledentistry is safe, effective, and evidence-based.

Introduction

Telemedicine is the delivery of healthcare services across large distances utilizing electronically produced data and communications equipment [1,2]. It is used in the diagnosis, consultation, treatment, and education of patients [3]. As the usage of mobile phones and wireless technology has grown across the world, it has influenced how dentistry is conducted. Teledentistry, like telemedicine, is a discipline of dentistry that leverages the internet and information technology [2,4]. It is telemedicine in the context of oral health and dentistry [5]. Cook coined the word "teledentistry" in 1997, and it is defined as "the profession of providing advice and diagnosis concerning treatment across a distance using video conferencing technology" [1]. The US Army adopted the idea, which was created in 1994, to communicate in real-time and stored forward mode as part of the Total Dental Access initiative [1,6]. Since then, research has been undertaken that supports the concept's global growth. Teledentistry arose from the notion of dental informatics, which entails the collection and administration of patient data to improve patient care.

Teleconsultation can be established in two ways: a) a real-time consultation involving a video conference in which the dental professional and the patients can see, hear, and communicate with each other over long distances; and b) a teleconsultation involving a video conference in which the dental professional and the patients can see, hear, and communicate with each other over long distances. b) A store-forward technique, which entails the interchange of clinical data and static pictures obtained and saved by the dental practitioner, which are then forwarded to a specialist for consultation and treatment planning [4]. It might be a near-real-time consultation that delivers low-resolution medical information or a remote monitoring system that monitors patients from afar. This provides a complete platform for dental practitioners to discuss, preserve, and organize treatment for patients through multidisciplinary collaboration. Mobile health or mHealth apps have also been created, which are supported by mobile devices such as phones, patient monitoring devices, Personal Digital Assistants (PDAs), and other wireless devices. To interact with patients, health makes use of the core features of mobile phones, such as voice and Short Messaging Service (SMS), General Packet Radio Service (GPRS), third and fourth generation mobile telecommunications (3G and 4G systems), Global Positioning System (GPS), and Bluetooth technology.

The Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) can be disseminated by nasal and salivary secretions as a droplet infection. This needs social distance, which is facilitated by the use of teledentistry. Because of the disease's extended incubation period (2-14 days) and the fact that children are generally asymptomatic or only have moderate symptoms, youngsters undergoing dental treatment may be possible carriers of infection. As a result, the adoption of teledentistry will reduce face-to-face interaction and help pediatric dental offices run more efficiently. As a result, the purpose of this paper is to evaluate the research and information on the availability and use of Teledentistry to address the oral health requirements of pediatric patients.

Conclusion

Teledentistry, which is based on the internet and improvements in information technology, can be used as a complement to traditional pediatric dental treatment, resulting in improved patient management. Pediatric dentists may use this technology to reduce anxiety in children by providing patient/parent education, monitoring preventative care and post-treatment follow-up, assessing dental development, diagnosing dental illnesses, treatment planning, and pre-appointment behavior advice. This development in dentistry has the potential to significantly reduce the gap between supply and demand for pediatric dental experts in areas with limited oral healthcare resources. The usage of teledentistry during the pandemic has increased the technology's ability to decrease viral spread. In the realm of pediatric dentistry, further research is needed to ensure that teledentistry is safe, effective, and evidence-based. Despite its disadvantages, teledentistry can be used to deliver long-term dental healthcare to children, overcoming disparities in access to expert treatment. The health authorities and pediatric dentists must work together to achieve this.

References

1. Chen, Jung-Wei, et al. "Teledentistry and its use in dental education." *J Am Dent Assoc.* 134.3 (2003): 342-346.
2. Jampani, N. D., et al. "Applications of teledentistry: A literature review and update." *J Int Soc Prev Community Dent.* 1.2 (2011): 37-44.
3. Sanchez Dils, E., C. Lefebvre, and K. Abeyta. "Teledentistry in the United States: A new horizon of dental care." *Int J Dent Hyg.* 2.4 (2004): 161-164.

4. Mihailovic, Branko, et al. "Telemedicine in dentistry (teledentistry)." *Advances in telemedicine: Applications in various medical disciplines and geographical areas*. Croatia. (2011): 215-230.
5. Giraudeau, Nicolas. "Teledentistry and COVID-19: Be mindful of bogus "good" ideas!" *INQUIRY: J. Health Care Organ Provis Financ*. 58 (2021): 00469580211015050.
6. Baheti, Mayuresh J., et al. "Teledentistry: A need of the era." *Int J Dent Med Res*. 1.2 (2014): 80-91.