

Teleconsultation in Times of COVID-19 Pandemic: Need of the Hour

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ABSTRACT

Introduction: Oral health care reach is becoming difficult in current scenario of COVID-19 Pandemic when physical OPD are completely shut down across the country since lockdown. Study aimed to know effectiveness of teleconsultation as virtual option to deliver oral health care to the patients.

Materials and methods: Total of four hundred patients (N=400) were attended on teleconsultation for Department of Dentistry at All India Institute Of Medical Sciences, AIIMS, Raebareli, UttarPradesh, India for various dental diseases.

Results: Majority of patients responded well to prescribed medicines and home care instructions.

Conclusion: Article highlights the importance of teledentistry in rendering oral health care to the patients thus affirming the importance of virtual consultations in such times of COVID-19 crisis.

Keywords: Teleconsultation, Covid 19, Oral Health

MATERIAL AND METHODS

Total of four hundred patients (N=400) were attended on teleconsultation for Department of Dentistry at All India Institute Of Medical Sciences, AIIMS, Raebareli, UttarPradesh, India. Majority of the patients (n=200) were complaining of pain and decay in the involved tooth. Some patients (n=60) were complaining of pain along with swelling on the involved side of the tooth. Some patients (n=100) took teleconsultation for complain of bleeding gums and foul smell from mouth. Sensitivity to hot and cold (n=10), third molar eruption problem (n=10), oral mucosal lesions (n=10) and neuralgic pain (n=10) were few other complains for which patients took teleconsultation.

Patients were contacting the Department of Dentistry on Phone calls, WhatsApp call, Whatapp Message, Video calls, Text Messages and Emails. As per the chief complain of the patient prescription slips were prepared and sent back to the patients through WhatsApp messages or text messages. Majority of the patients who complained tooth decay with pain and swelling were prescribed antibiotics alongwith analgesics for period of 5 days. Periodontal teleconsultation patients were advised for maintenance of meticulous oral hygiene with proper technique of brushing and emphasis on night time brushing. Medicated dental tooth paste and chlorhexidine mouth rinses were also prescribed. Few patients with periodontal disease were advised antibiotics along with ointments for local application on gums. Patients were advised to call for follow up after completion of due course of medicine. Few patients were also called by the department for their follow up. Most of the patients were doing good on follow up teleconsultation.

DISCUSSION

The Dental professional is particularly at high risk if one is working on an infected patient or an asymptomatic carrier

INTRODUCTION

Telemedicine is the use of information based technologies and communications systems to deliver healthcare across geographic distances.¹ The birth of teledentistry as subspecialist field of telemedicine can be linked to 1994 and a military project of United States Army (U.S. Army's Total Dental Access Project) , aiming to improve patient care, dental education, and effectuation of the communication between dentists and dental laboratories.² The term teledentistry was first used in 1997 and was defined by Cook as "The practice of using video conferencing technologies to diagnose and provide advice about treatment over a distance."³ Teledentistry has the ability to improve access to oral healthcare, improve the delivery of oral health care and lower its costs.⁴ It also has potential to eliminate the disparities in oral healthcare between rural and urban communities.⁵

The unprecedented and extraordinary circumstances has been created because of global spread of Coronavirus disease 2019 (COVID-19) pandemic. Dental professionals are at the highest risk of contacting the infection because they work in close proximity of the patient mouth.⁶ To mitigate the spread of COVID-19 pandemic government has recommended to shut down all kind of outdoor patient (OPD) services (government as well as private) all over the country. In order to deliver health care services in this time of COVID-19 crisis teleconsultation is the only option left and has a vital role to play. This article highlights the importance of teledentistry in order to deliver oral health care services to the remote patients who are in need of dental consultation and treatment.

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because of close contact with the patient and the risk of blood saliva and aerosol (droplet) exposure. Currently almost all dental clinics are closed. Few dental setups that continue to address emergency dental patients it is critical that extra precautions are taken during this period.⁶ In the current COVID-19 pandemic, Dentists, auxiliaries as well as patients undergoing dental procedures are at high risk of cross infection. Most dental procedures require close contact with the patient's oral cavity, saliva, blood, and respiratory tract secretions. Saliva is rich in COVID - 19 viral load. Many patients who are asymptomatic may be carriers. Recently Ministry of Health and Family Welfare (MOHFW) has issued guidelines for Dental Professionals in COVID-19 pandemic situation. These guidelines address dental services in the country and cover Dental surgeons working in government and private hospital setup in cities towns and remote areas of the country.⁷ Teleconsultation through teledentistry can take place in either of the following ways – “Real-Time Consultation” and “Store-and Forward Method”.⁵ Real-Time Consultation involves a videoconference in which dental professionals and their patients, at different locations, may see, hear, and communicate with one another.⁸ Store-and-Forward Method involves the exchange of clinical information and static images collected and stored by the dental practitioner, who forwards them for consultation and treatment planning.⁹ The patient is not present during the “consultation”. Real time consultation method has been followed in our institution. A third method known as “Remote Monitoring Method”, in which patients are monitored at a distance and can either be hospital-based or home-based is also followed.¹⁰

CONCLUSION

In current time of unprecedented crisis of COVID-19 pandemic when whole country was under lockdown and there was no access to oral health care for patient's teledentistry provided the alternative and innovative method of delivering dental care to the needy patients.

REFERENCES

1. Zimlichman E. Telemedicine: Why the Delay? ISr Med Assoc J.2005;7:525-6.
2. Mihailovic B, Miladinovic M, Vujicic B. Telemedicine in Dentistry (Teledentistry) In: Grasczew G, Roelofs TA, editors. Advances in telemedicine: Applications in various medical disciplines and geographic areas 2011. Rijeka (Croatia) InTech 2011.pp.215-30
3. Friction J, Chen H. Using Teledentistry to improve access to dental care for the underserved. Dent Clin North Am. 2009;53:537-48
4. Golder DT, Brennan KA. Practicing Dentistry in age of telemedicine. J Am Dent Assoc 2000;131:734-44
5. Reddy KV. Using teledentistry for providing specialist access to rural Indians Indian J DentRes. 2011;22:189
6. <https://www.docseducation.com/blog/pandemic-and-dentist> (2020)
7. mohfw.gov.in Guidelines for Dental professionals in COVID-19 situation (19/05/2020)
8. Bhambal A, Saxena S, Balsaraf SV. Teledentistry:

Potentials Unexplored. J Int Oral Health. 2010;2:1–6.

9. Chang SU, Plotkin DR, Mulligan R, Polido JC, Mah JK, Meara JG. Teledentistry in Rural California-A USC Initiative. CDA J. 2003;31:601–8.
10. Weerasinghe JU. Clinical Trials on Computer Based Telemedicine-A Systematic Review. Sri Lankan J Bio-Med Inform. 2010;1:12–20.

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