

**Knowledge and perception towards tele dentistry among dental practioners in Ghaziabad City- A survey of knowledge and skill requirement.**<sup>1</sup>Dr. Rafia, P.G student, Department of public health dentistry, D.J college of Dental Sciences and Research Modinagar.<sup>2</sup>Dr. Ashish Singla, Head of the Department of public health dentistry, D.J College of Dental Sciences and Research Modinagar.**Corresponding Author:** Dr. Rafia, P.G student, Department of public health dentistry, D.J college of Dental Sciences and Research Modinagar.**Citation of this Article:** Dr. Rafia, Dr. Ashish Singla, “Knowledge and perception towards tele dentistry among dental practioners in Ghaziabad City- A survey of knowledge and skill requirement”, IJDSIR- February - 2023, Volume – 6, Issue - 1, P. No. 208 – 211.**Copyright:** © 2023, Dr. Rafia, et al. This is an open access journal and article distributed under the terms of the creative commons’ attribution non-commercial License. Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.**Type of Publication:** Original Research Article**Conflicts of Interest:** Nil**Abstract****Background** With the rise of COVID-19 pandemic and the advancements in communication and technology, tele dentistry has emerged as a supportive tool for dentists and patients. Tele dentistry connects dentists and patients for real time consultations by live streaming or video conferencing.**Aim** The objective of this study was to assess the knowledge and perception regarding tele dentistry among dental practioners in Ghaziabad.**Materials and Methods:** A cross-sectional and descriptive study was carried out among 150 dental practioners of Ghaziabad, by using a close-ended, survey questionnaire, comprising 12 questions, that were distributed electronically via e-mail, WhatsApp, and Facebook.**Results:** it was seen that 60.5% of dentists did not have any knowledge about tele dentistry before the onset of

COVID-19. 62.4% of dentists considered the practice of tele dentistry in future even in non-pandemic situations. About 82.6% showed interest in tele dentistry training.

**Conclusion:** In this study, it was seen that prior to Covid 19 pandemic there was limited use and knowledge about tele dentistry, but in the present scenario the awareness and perception regarding tele dentistry is satisfactory among the dental professionals in Ghaziabad. More and more education should be given to dentists, for safe dental practice during times of pandemic and even after.**Keywords:** Covid 19, Tele dentistry, supportive tool.**Introduction**The alarming rapid spread of COVID-19 caused an unprecedented public health crisis worldwide and changed the landscape of the health system.<sup>[1,2]</sup> In order to combat COVID-19 pandemic, several countries established social isolation and quarantine protocols to limit the proliferation of the virus and possible mass

contagion.<sup>[3,4]</sup> Since dental procedures can potentially create particle and aerosol inhalation from infected patients, they are at a high risk for being exposed to COVID-19, and hence the use of tele dentistry is expected to reduce the risk.<sup>[5,6]</sup> Tele dentistry uses electronic health records, digital imaging, and Internet to link health care providers with remote communities to enhance communication, exchange health information, and provide access to care for underserved patients, including socially disadvantaged people.<sup>[7,8]</sup> Cook in 1997 defined tele dentistry as “The practice of using video-conferencing technologies to diagnose and provide advice about treatment over a distance.” Tele dentistry approach holds the potential to address many of the problems related to access, cost, efficiency, and quality of medical care and to eliminate the disparities in oral healthcare between rural and urban communities.<sup>[9]</sup> Tele dentistry in the current scenario of COVID-19 focuses on “dental triage,” and providing relief from pain and infection, provision of dental care by remote consultation, planning, and scheduling of definitive dental treatment.<sup>[10]</sup>

### Aim

This study was carried out to assess the knowledge, and perception of dental practitioners of Ghaziabad towards tele dentistry.

### Materials and methods

The study was conducted over a period of 4 months, from September 2019 to December 2019. Data was collected using google forms and a self-structured closed ended questionnaire comprising 12 questions (yes/no response) was distributed to the participants by email, WhatsApp, Facebook, and Instagram.

### Questionnaire

Q1. Had you come across the term teledentistry before COVID-19?

Q2. Do you know what tele dentistry means?

Q3. Do you know tele dentistry requires a good knowledge of smartphones and computers.

Q4. Do you think tele dentistry can help us to monitor the oral health of patients and avoid frequent dental visits?

Q5. Do you think tele dentistry can help facilitate the access of oral healthcare during a pandemic situation?

Q6. Should the practice of tele dentistry in non-pandemic situations be considered?

Q7. Can tele dentistry increase accessibility of the specialists to underserved communities and rural areas for their dental needs?

Q8. Do you think tele dentistry can prove to be a beneficial tool for giving oral hygiene instructions?

Q9. Will you recommend to the government to take an initiative whereby patients can obtain advice on treatment need from a central facility connected through tele dentistry?

Q10. Do you plan to practice Tele dentistry in future?

Q11. Do you think all dental students and dentists should be made familiar with tele dentistry through CDE programs and workshops?

Q12. Are you interested for tele dentistry training in future?

### Results

The results showed that 60.5% of the dentists were not aware about tele dentistry before the pandemic, but today 75% are aware about tele dentistry. 90% of dentists believe T during COVID-19 tele dentistry offers a reliable way for consultation and treatment, 65% of dentists were willing to practice tele dentistry in a non-pandemic situation as well. About 84. % of the dentists would recommend the government to take the initiative whereby patients could obtain treatment needs from a central facility connected via tele dentistry. In this study,

most dentists 82.6% showed interest in the tele dentistry training program. About 70.5% dentists agreed tele dentistry is a supportive tool for patient treatment and oral hygiene training.

### Discussion

Tele dentistry has allowed long-distance communication and avoided person-to-person contact, helped observe social distancing, permitted exchange of clinical information and images, and facilitated remote dental care and guidance which is recommended by healthcare authorities across the world.

Advanced internet technologies, such as tele communications, video conferencing, and e-data, have led to substantial improvements in health-care services. This study revealed that 75% of the participants agreed that they had heard about tele dentistry, which is in line with a surveys conducted in the US, and Rwanda, where awareness about tele dentistry among dental professionals was very high.<sup>[11-13]</sup>

In the present study it was found that 70.5% dentists agreed tele dentistry is a powerful tool in oral hygiene instructions which is in accordance with other studies by Aboalshamat<sup>[14]</sup> Pradhan et al.<sup>[15]</sup> Singh et al.<sup>[16]</sup> Sen et al.<sup>[17]</sup> In our study 95.4% of practioners were aware of use of telecommunication, internet and smart phones for tele dentistry. This finding is similar to the study reported by Pradhan et al. in 2019 where 96.2 % dentists agreed to it.

### Conclusion

Overall knowledge and awareness was fair among dental practioners regarding tele dentistry. It has strengthened healthcare during covid 19 and provided a cost effective, accessible treatment option to the patients. However, it is required to train dental professionals in tele dentistry through workshops, conferences and inclusion in the dental circulum.

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