

# Covid-19, Challenges, Progress and A Path Forward With the Pivotal Role of Tele Dentistry.

Ghulam Rasool<sup>1</sup>, Gulmeena Masood<sup>2</sup>

<sup>1</sup>Department of Orthodontics, Rehman College of Dentistry, Peshawar

<sup>2</sup>Department of Oral Pathology, Rehman College of Dentistry Peshawar

On, 11th March an acute respiratory syndrome also termed as COVID-19 was declared as a pandemic by the world health organization WHO. This virus was not only highly contagious but also deadly and lead to almost 282727 deaths worldwide. The recent outbreak of the COVID-19 Delta variant has raised a serious alarm as the rapid spread has highlighted the severity of the virus. The present-day cases of this variant have originated in the cities of Shenzhen and Dongguan, where the emerging cases of this strain suggests that variant strains of COVID-19 would be an even bigger threat in the global pandemic.<sup>1</sup>

Some serious measures are to be taken by clinical practitioners to avoid the spread of this contagious virus. Since different type of dental procedures involves face to face communication of the clinician with the patient and there is quite a possibility to be exposed to the body fluids and particularly the use of dental tools that can generate aerosols and can lead to airborne spread of the virus therefore many studies have been conducted in this regard which shows the utmost significance of infection prevention and control measures that should be taken in dental practice.<sup>2</sup>

The prevention of infection shall be implemented in both the non-clinical area and clinical area which includes the dental practitioners and staff wearing the protective gear that is PPE (Personal Protective Equipment). Thorough cleaning, disinfection and sterilization of the dental unit and tools is the basic precautionary protocol that shall be followed. The clinicians should be careful in handling the occupational accidents which involves the exposure of blood and bodily fluids can lead to spread of the virus.

Many studies suggests that common biosafety crisis correlates with the behavior of professionals. Therefore, a well-aware and a vigilant clinician is more capable of performing his dental procedures without putting himself or his patient's life at risk of catching the deadly virus.<sup>3</sup> Since COVID-19, Delta variant is a virus that is highly contagious and many facts are still unveiling as to how it is spread, the experts have suggested minimal contact of clinicians and the patients and in this regard Tele dentistry, has emerged as an effective medium in dental

practice. It is defined as "using the medium of information technology rather than direct clinician to patient contact, providing dental assistance, care, advice and treatment."

Tele dentistry is comparatively new evolving technology which includes electronic medical records and referral systems, video and digital images which assist in dental procedures for unapproachable or even patients in quarantine, if they require consultation from the clinicians and guidance therefore solely relying on the tediagnosis and teleconsultations.

It enables the prompt transfer of images, files and documents improving the access, early intervention, and health awareness to improve the successfulness and potency of dental health procedures keeping in mind the severity of highly contagious corona virus. Yet, it has still some short comings that we need to overcome such as reimbursement issues, budget and limitations in physical examination, the equipment requirement, license approval, particularly the images show a Two-dimensional view of Three-dimensional objects thus maintaining the quality is a challenge that we need to overcome. In future, research and studies shall be conducted regarding the financial aspect of Tele dentistry to make it more feasible for the public and the consultants.

It is a rapidly developing field that does have potential in these desperate times of Covid but grants and funds from the government can help us run the clinical trials that will enable us to make the best use of Tele dentistry in healthcare of patients eliminating the fear of contracting Covid.<sup>4-6</sup>

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## Corresponding Author

Ghulam Rasool

E-mail: ghulam.rasool@rmi.edu.pk

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