

Dentistry Department after COVID - 19 in Indian Medical College

Received: 2nd July 2020; *Accepted:* 25th October 2020; *Published:* 01st January 2021

Dear Editor:

“Dentistry, also known as dental medicine and oral medicine, is a branch of medicine that consists of the study, diagnosis, prevention, and treatment of diseases, disorders, and conditions of the oral cavity, commonly in the dentition but also the oral mucosa, and of adjacent and related structures and tissues, particularly in the maxillofacial (jaw and facial) area” [1]. Covid-19 is the outbreak of Novel corona virus disease and has been reported in the city of Wuhan, China in the late 2019. The Dentistry is the most affective profession after this Covid-19 in the world [2].

Dentistry Department now has a bigger challenge to treat a patient as Dentist is very much close to mouth where this virus lies, and we people are at great threat. Chances of Cross Contamination is at high risk. Life of Dentist after Lockdown will change in India. Every Medical College is having their Dentistry Department where we can see Dental Chair- clinical room, X-ray Instrument Room, Sterilization Room, Seminar Room, Faculty Room but after this Pandemic we will see Counselling Room. The purpose of this room is to educate patient toward this deadly virus and the survival rate of this virus in the mouth so that patient can be aware of the severity of this virus. This is because people have a myth that Dentistry is only about extraction of teeth when pain occurs.

But with advances in the Dentistry many of the Medical college is having their Specialist Dentist so called Master of Dental Surgery (MDS) who are efficient and skilled in their work. Advancement in Dentistry not only change the scenario of this field but gives a bigger opportunity to the Dentist. Now a Days we can have Advance Root Canal Treatment with RVG, Implant in the extracted site, Orthodontic

Correction of Malposition teeth to give a beautiful Smile and Confident to the patient in their future life and so on.

In the same way we must change our Daily practice in the Department with Personal Protective equipment (PPE), Sanitization and one-hour duration in between the patient work. Authors suggest one-hour duration not only for the treatment but also for the sanitization of the Departmental clinical floor, Instrument Sterilization, and management of Bio Medical Waste in between the patient. I know at this situation all the Hospital work in the Medical College will hamper but we should also have a unique plan regarding the Dentistry Department in each Medical College in India. Being working in Medical College more than five years what I observe that patient is very uneducated, and they are poor as well. Just like their body appearance their Oral hygiene is also extremely poor.

In 2003 world health Organization [3] (WHO) has proven the relationship of poor oral hygiene to general health condition of the body which clearly focus on the immunity of the patient i.e. low oral health, low immunity. Covid-19 is causally related to immunity of the patient. Rheumatic Arthritis, Diabetes, Cardiovascular Disease, and many more chronic diseases is being related to Periodontitis (Inflammation of the Periodontal ligament present in the root structure of each tooth) [4].

So, beside all the preventive measures in all the field of Medical Science is going on, we should also consider the upliftment of Dentistry Department in each Medical College

of India. In the coming future and after lockdown loads in the Dentistry Department will increase suddenly and it is not possible for Dentist working in Medical College to do their jobs quickly. With this, I will suggest to Medical Council of India (MCI) just to review or increase the Faculty needed to run the department under 50 to 250 MBBS student admission in Medical College.

Now the question arise why Dentistry will change after this Lockdown in India? Dentists are mostly doing aerosol (An aerosol is a suspension of fine solid particles or liquid droplets in air or another gas) treatment in the form of RCT, CROWN CUTTING, BONDING and so on. In each case we use Dental Aerosolization. Particles are classified according to their size such as coarse particle (2.5 - 10 micron), fine particle (less than 2.5) and ultra fine particle (less than 0.1 micron). The nose can filter particle above 10 micron and Covid-19 is an average 0.125 micron in size which predicts that it may enter the nasopharyngeal area and may lead to increased disease severity.

The virus can travel normally up to 6 feet into the surrounding if some positive case even sneeze and if aerosolization occurs in them it can travel up to 20 feet around the infected person and may lead to contamination of other clinical staff, Room, and other things [5]. Longevity of Covid - 19 to various area [6] are - (a) Viability to plastic and stainless steel up to 72 hrs. (b) Viability on cardboard surface up to 24 hrs. (c) Viability on copper surface is 9 hrs. (d) Viability in suspended air droplet is 3 hrs. Cases of inflammation of gums and Periodontitis which might cause

secondary health issue is to be treated first and we used to treat them through Scaling, and this is an aerosol treatment. Pain in the tooth is relieved by RCT (Root Canal Treatment) [7] is also fall in the aerosol treatment and extra care should be taken from now.

Conclusion

Many changes to be done in the Dentistry Department since from chair side diagnosis to treatment outcome. We cannot deny that Oral cavity is the front line of the virus to enter the body. Since Dentistry is in very high-risk category, we must install negative pressure effect, Engineering control, Workplace control and all other positive steps like PPE kit, N95 mask to be regulated to each patient in the Dental OPD.

It will give financial load to the Management system of each Medical College of India to modify their Dentistry Department according to the need of the Covid-19 virus. In the upcoming periods Research should be done on the methodology of working in the Dentistry Department. At last, I stopped my words by quoting one line - *“Determination gives you the resolve to keep going in spite of the roadblocks that lay before you. – Danish Waitley”*

Acknowledgements

Dr. Ahmad Ashfaque Karim, the founder Chairman of Al-Karim Educational Trust, founder Chancellor of Al-Karim University and founder Chairman-cum-Managing Director of Katihar Medical College, Katihar, Bihar for giving me strength in my work field.

Financial Support and sponsorship: Nil

Conflicts of interest: There are no conflicts of interest.

References

1. Wikipedia. <https://en.wikipedia.org/wiki/Dentistry>. (Access on 05th May 2020).
2. The workers who face the greatest coronavirus risk. *The New York Times* (New York) 2020 March 15. Available at: <https://www.nytimes.com/interactive/2020/03/15/business/economy/coronavirus-worker-risk.html>. (Access on 05 May 2020).
3. The World Oral Health Report 2003. Continuous improvement of oral health in the 21st century- the approach of the WHO Global Oral Health Programme.
4. British Society of Immunology. <https://www.immunology.org/public-information/bitesized-immunology/organs-and-tissues/immunity-in-the-oral-cavity> (Access on 06 May 2020).
5. Perio-Implant advisory. <https://www.perioimplantadvisory.com/periodontics/oral-medicine-anesthetics-and-oral-systemic-connection/article/14173521/covid19-and-the-problem-with-dental-aerosols>. (Access on 06 May 2020).

6. Van DN, Bushmaker T, Morris DH, et al. Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1. *N Engl J Med*. Published online March 17, 2020.
7. Root Canal Treatment in Wikipedia https://en.wikipedia.org/wiki/Root_canal_treatment (Access on 06 May 2020).

Cite this article as: Abhishek. Dentistry Department after COVID - 19 in Indian Medical College. *Al Ameen J Med Sci* 2021; 14(1):77-79.

This is an open access article distributed under the terms of the Creative Commons Attribution-Non Commercial (CC BY-NC 4.0) License, which allows others to remix, adapt and build upon this work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Abhishek*

Associate Professor, Department of Dentistry, Katihar Medical College, Al-Karim University, Dalan East, Katihar-854106, Bihar, India

*All correspondences to: Dr. Abhishek, Associate Professor, Dentistry Department, Katihar Medical College, Al-Karim University, Dalan East, Katihar-854106, Bihar, India. E-mail: orthodontist11@gmail.com