

## Coronavirus COVID-19 and Dentistry

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Nowadays we are in a state of battle with a tiny creation that is known as Coronavirus or COVID-19, So being a dentist I must share some text with my colleagues and readers, As dental professionals play great roles in preventing the transmission of COVID-19 and I recommend practicing the infection control measures during dental practice to block the person-to-person transmission routes in dental clinics.

### What is COVID-19?

This virus suddenly appears on the map of the earth as a big challenge of human health. Researchers and microbiologist are spending too much time to identify this virus, at least they identified COVID-19 belongs to the family of Coronaviridae, and it is single strand RNA virus, its common route of entrance in the human body is, by binding to the epithelial cell receptors known as ACE2 (Angiotensin converting enzyme 2) like sever acute respiratory syndrome SARS please keep in mind that this is not a final information.

Most common transmission routes of COVID-19 are direct from cough, sneeze, and inhalation of infected droplet or direct contact with nasal, oral and eye secretions, most like rest of viruses, in short any type of internal fluids of infected person is alarming for healthy person that's why social distance is recommended by infectious control authority.

Experts also studied that this virus can be transmitted direct or indirect contact from infected individuals and saliva as well so keeping in mind all these points Dentists have to be very careful while treating COVID-19 +ve Person.

Furthermore, they found COVID-19 is airborne through aerosols formed during dental treatment, how long it will remain in the air, it is not clear yet. They suggest that incubation period of infected with Coronavirus is 1 - 14 days, so it is confirmed that those who are carrier of coronavirus can spread the infection very easily without knowing, which is a very dangerous and alarming situation.

If we study a little deeper we come to know that it has been confirmed that this virus enters the human body like sever acute respiratory syndrome virus, attack on ACE2 cell receptor in the human body which is present from oral cavity to the lungs and some other human's organ too.

As Coronavirus choose to attack human body through ACE2, so my suggestion that this situation is not a favorable for dental treatments. Because ACE2 cells present from oral cavity till all airway passage. Past studies shown that ACE2 epithelial lining of salivary gland ducts is the first invading place of Sever Acute Respiratory Syndrome infection, due to this reason health authority advise those Dental clinics to shut down in this situation who have not been taken enough safety protocol according to WHO, and my humble request to my colleague please follow WHO rules.

Health workers especially Dentist with Dental workers and patients can be infected to Coronavirus, or other viruses and bacteria that invade first in the oral cavity and respiratory Organs. Dentist office always have chance to get infected because close contact to the patient

while dental treatment, Dentist cannot save himself from touching of patients saliva, and we all must know that we are playing with sharp dental tools. For your safety here are some useful points for all colleagues:

1. Microorganisms can be inhaled by dental team.
2. Again, direct contact with blood is one of the common transmission route.
3. Saliva is the major and easy route of transmission (why) even in simple filling ultimately, we have to touch saliva first.
4. Be aware the danger of conjunctival secretion too.
5. Don't forget about nasal secretions well.
6. Due to very close contact always you are the first one who can get infection from the patient's cough.
7. Even simple examination carry danger of infection transfer because you cannot advise patient that please cover your mouth while examination.
8. If you take all above precaution still you cannot hide your hand from contaminated dental tools, ultimately you have to touch and handle them.
9. Moreover, Dental office furniture and counters are very important to be disinfect.

Major safety steps before emergency dental procedures, please ask patient these questions first:

- A. Although you measure fever but still take a past history of fever.
- B. Do you have or had cough or you feel or felt difficulty in breathing within the past few days?
- C. Must take travelling history of the patient, patient's family members and neighbors.
- D. Ask him or her that do you have visited any infected person of COVID-19?
- E. All information about patient's social and official gatherings.

### Here's how we can control infections in dental Offices:

1. Very detailed history.
2. Save yourself with standard protocols as per hygiene rules like, Mask, Gloves, Face shield, Eye protecting glass, wear sterilized disposable surgical coat.
3. Antiseptic Mouth wash before dental procedures.
4. Handmade plastic mouth protector if you don't prefer using rubber dam.
5. Anti-retraction hand piece.
6. Before and after every patient Disinfect clinic settings.

7. Don't forget to dispose of Dental waste according to WHO instructions.
8. Good ventilation and maximum exposure of sunlight in the clinic.

As we all know, this is first time in our life we are facing this type of situation, we cannot say that this is complete and final study on COVID-19, may be researcher find some more facts about this virus or may be studies prove in future that previous study was not completely correct. So, as I mentioned in the beginning that we are in the state of battle with this tiny creature and you know in the battle situations always keep changing.

I tried to gather some facts and preventive measure from all different sources [1-5].

### **Bibliography**

1. Own clinic safety measures.
2. IJOS International Journal of Oral Sciences.
3. Some Friends from China (Lily Lingchen and Mandy) Dentists working in the Hospitals.
4. Volunteers' colleague working in current situation in the medical and dental centers.
5. Instagram.

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