

PRECAUTIONS IN DENTAL CLINIC DURING COVID-19 PANDEMIC – ORIGINAL REVIEW

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INTRODUCTION

Corona viruses can make human and animals sick , some corona viruses can cause illness similar to common cold and others can cause serious condition including Severe Acute Respiratory Syndrome and Middle East Respiratory Syndrome . This new corona virus originated in Hube province in China, and the new virus is named COVID- 19 . In final weeks of 2019 , a novel corona virus outbreak occurred in city of wuhan central china China might have opted to suppress enforced social distancing , closed cafes , super markets , malls , clubs and in India too lockdown has been clamped , advice the people to stay at home , all the business activities were shut down and halted public transport system including the domestic and international travel . As per the worldometer information . As of 24 th august 2020 the global corona virus cases is around 24 ,031,320 deaths is around 8 , 22, 233 recovered 16,579,882 1 .

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SYMPTOMS

Patients having COVID-19 have been found to have wide range of symptoms ranging from mild symptoms to severe illness. Fever, cough, muscle pain, headaches, sore throat and loss of taste and smell and shortness of breath.

PATIENT ORGANIZATION

Prior screening of patient should be done before appointment.

Every fresh travel history to place affected with COVID 19 is gathered?

Patients having symptoms of febrile respiratory illness such as fever or cough.

Exposure to patients with positive or suspected COVID-19 history.

Any positive response to these questions, dental treatment has to be postponed for at least 2 to 3 weeks. These persons should be advised to remain self quarantine for at least 3 weeks.

AEROSOL GENERATING PROCEDURES

Procedures in dental practice which includes procedures that use any of the following devices – high speed hand pieces, low speed / prophylaxis hand pieces, surgical hand pieces, ultrasonic and sonic devices, air polishing devices and hand tissue lasers

. Aerosol producing and other elective procedures should be avoided.

PERSONAL PROTECTION

The application of standard precautions including hand hygiene, PPE, safe use and disposal sharps, routine environmental cleaning, reprocessing of instruments and equipments, respiratory hygiene and cough etiquette and septic technique and waste management is a most important way we minimize transmission of infection. In whichever health care setting including dental practice, we have to ensure a base level of infection prevention and control. We should be directing patients who perform hand sanitation by using alcohol based hand rub or washing their hands with soap and water. This needs to be done when they enter the clinic and when they leave the clinic. Temperature readings Has to be taken as an element of routine evaluation of patients before performing dental events. Wiping down handles and chairs that patients touched and inclusion of pre-operative mouth rinse such as 1% hydrogen peroxide. Include patients rinse with a 1% hydrogen peroxide solution ahead of every appointment. Autoclave hand-pieces after each patient.

Respiratory Hygiene and Cough Etiquette :

Patients having respiratory symptoms supposed to Cover their nose and mouth when coughing/sneezing with tissue or mask, supply tissues and no-touch receptacles to throw away used tissues and offering face masks to patients who are coughing. Discard of used tissues and masks, and perform hand sanitation after get in touch with respiratory secretions. Dental workforce should use N95 respirators or respirators that provide a superior level of safety instead of a facemask when performing or present for an aerosol-generating procedure. Put on a high filtered non-valved respirator (EU FFP2/ NIOSH N95 or EU FFP3/ NIOSH N99), ensuring its face fitting. 2

BASIC INFECTION CONTROL PRACTICES 3

1. Hand sanitation.
2. Personal protective equipment (e.g., gloves, masks, eyewear.
3. Respiratory sanitation /cough etiquette .
4. Sharps safety (engineering and work practice controls) & waste management.
5. Safe injection practices (i.e., aseptic technique for parenteral medications).

6. Sterilization of instruments and devices.

7. Cleaning and disinfection of environmental surfaces.

Place a sign at entrance to dental practice which guides patients having symptoms of a respiratory infection like cough, sore throat, fever, sneezing, or shortness of breath to reschedule their dental meeting and consult general physician .

MAINTAIN THE ENVIRONMENT

Frequent environmental cleaning is a requirement for high patient touch areas 4. Maintain the environment promoting and practicing respiratory hygiene and cough etiquette, and observing high standards of surface hygiene remain critically important. Clean and disinfect public areas regularly like the door handles, chairs and rest rooms. WHO is of opinion that we have to ensure environmental cleaning and disinfection work are being done at periodic intervals and in right manner .We also have to ensure that cleaning environmental surfaces with appropriate quality disinfectants in adequate quality which will yield desired results .” 5

POSTERS / SINGHAGE FOR CLINIC

Posters / singhage to be put in waiting room and in other publicly visible areas in the clinic. So that patients and staff are aware

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of what behavior and symptoms to be mindful of . Placement visual alerts icon (e.g., signs, posters) at entrance and in strategic places (e.g., waiting areas, elevators, cafeterias) to provide patients with commands (in appropriate languages) about hand hygiene, respiratory hygiene, and cough etiquette. Directions should include how to use tissues to cover nose and mouth when coughing or sneezing, to dispose of tissues contaminated in waste bins, how and when to carry out hand hygiene .

IMPORTANT GUIDELINES

The key information / guidelines resources for infection control .

Establish high standards and operating procedures ensure the clinics remain **COVID SAFE** .

All patients are screened over phone before their appointments . 6

Prior to entering the clinic , patients will have temperature checked and asked screening questions .

Any one , attending is asked to apply hand sanitizer upon entering .

Waiting areas are adapted for social distancing .

Employ a rubber dam , when suitable , to decrease possible exposure to infectious agents 7 .

Use high-speed evacuation for dental measures producing an aerosol.

Ensure safe waste management. Collect waste contaminated with blood, body fluids, secretions and excretions as clinical waste, in accordance with local regulations. Human tissues and laboratory waste that is directly in accordance with specimen processing should also be treated as clinical waste. Discard single use wastes properly.

Patient Care Equipment Offices also must follow routine cleaning and disinfection strategies used during flu season. Make sure equipment soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of pathogens to other patients or the environment. Clean, disinfect, and reprocess reusable equipment appropriately before use with another patient.

Train and Educate Personnel Provide task-specific education and training on preventing transmission of infectious agents.

CONCLUSION

Operatory should be well equipped and stringent infection control and waste management protocols should be followed to reduce nosocomial infection. Dentists, by nature, are at high risk of exposure to contagious diseases. The emergence of COVID-19 has brought new challenges and responsibilities to dental professionals. In addition to standard precautions, implementation of special precautions could prevent disease transmission from asymptomatic carriers. These special precautions would not only help control spread of COVID-19 but also serve as a guide for managing other respiratory diseases.

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