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## GUIDELINES AND INSTRUCTIONS FOR DENTIST WORKING IN DENTAL HOSPITALS/CLINICS FOR PREVENTION OF COVID- 19 INFECTION.

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#### 1. POSSIBLE TRANSMISSION ROUTE OF COVID-19 IN DENTAL CLINICS

#### **DENTAL PROCEDURES AND COVID -19**

Dental care settings invariably carry the risk of infection due to the specificity of its procedures, which involves near face-to-face communication.

MANY DENTAL PROCEDURES INVOLVE USE OF AIRROTERS AND ULTRA SONIC SCALERS, GENERATE AEROSOLS THAT REMAIN SUSPENDED IN SURROUNDING AIR FOR LONG PERIODS. It is hard to avoid the generation of large amounts of aerosol and droplets mixed with patient's saliva and blood in dental practice.

Airborne transmission may occur through such aerosols generated during procedures which remain suspended

- Direct transmission by respiratory droplets (cough, sneeze and droplet inhalation).
- Contact and fomite transmission (oral, nasal, eye mucous membranes, patient fluid, and even the contaminated dental instrument, environmental surfaces).
- Transmission from person to person through direct or indirect contact
  It should be noted that the incubation period is <u>around 14 days</u> so the patient or the by stander may be asymptomatic while he comes to your clinic.

#### 2. MINIMIZING CHANCES OF EXPOSURES

- Post visual alerts icon (e.g., signs, posters) at the entrance and in strategic places (e.g., waiting areas, elevators, cafeterias) to provide patients with instructions (in appropriate languages) about hand hygiene, respiratory hygiene, and cough etiquette. Instructions should include how to use tissues to cover nose and mouth when coughing or sneezing, to dispose of tissues and contaminated items in waste receptacles, and how and when to perform hand hygiene.
- Post a sign at the entrance to the dental practice which instructs patients having symptoms of a respiratory infection (e.g., cough, sore throat, fever, sneezing, or shortness of breath) to please reschedule their dental appointment and call their physician. The same thing applies if they have had any of these symptoms in the last 48 hours.
- Reschedule appointment if your patients have travelled outside country/state/to the area affected by the corona virus disease.
- Take temperature readings for the screening and as part of the routine assessment of patients before performing dental procedures.
- Take the contact details and address of all patients treated.

#### 3. AT RECEPTION/ FRONT OFFICE

- Verify with each patient if they have any symptoms like fever, cough, running nose, sneezing.
- A patient in the febrile state of the disease is not recommended to visit the dental clinic.
- Dental professional should be able to identify the patient with suspected COVID-19 infection and should not treat the patient in the dental clinic, but immediately quarantine the patient & report to the infection control department as soon as possible.
- Verify if patient or their family members have travelled outside country/state/to the area affected by the corona virus disease and if so have they reported to the health officials.
- If the patient has been to epidemic regions within the past 14 days, quarantine for at least 14 days is suggested.
- It is mandatory to have contact details and proper documentation of each patient who comes to clinic for treatment.
- Reception staffs do not require personal protection equipment (PPE).
- Caution !! Avoid touching your own eyes, mouth and nose.

#### 4. PERSONAL PROTECTIVE MEASURES FOR DENTAL PROFESSIONALS

## AVOID OR POSTPONE TREATMENT OF PEOPLE HAVING HIGH FEVER, COUGH, SNEEZING ETC. UNDERTAKE ONLY EMERGENCY ELECTIVE TREATMENT.

Universal infection control procedures should be adhered to. All clinic staff should necessarily wear personal protective equipments.

#### **Facial Protection**

 Use three layered masks and practice adequate hand hygiene procedures as corona virus is large in size where the cell diameter is 400- 500 micron and for this reason "any mask prevents its entry".

Wear a surgical or procedure mask and eye protection (face shield, goggles) to protect mucous membranes of the eyes, nose, and mouth during activities that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.

#### Gown

Wear gown to protect skin and prevent soiling of clothing during activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.

Remove soiled gown as soon as possible, and perform hand hygiene.

#### Linens

Handle, transport, and process used linen in a manner which prevents skin and mucous membrane exposures and contamination of clothing. Avoids transfer of pathogens to other patients and the environment.

#### Hand Hygiene

Wash hands with soap and water for at least 20 seconds:

a) After contact with patients or use an alcohol-based hand sanitizer, Chlorhexidine with at least 60% alcohol if soap and water are not available. (These recommendations already are part of Standard Precautions.)

b) Before and after any direct patient contact and between patients, whether or not gloves are worn.

c) Immediately after gloves are removed.

d) Before handling an invasive device.

e) After touching blood, body fluids, secretions, excretions, non-intact skin, and contaminated items, even if gloves are worn.

f) During patient care, when moving from a contaminated to a clean body site of the patient.

g) After contact with inanimate objects in the immediate vicinity of the patient.

#### 5. RESPIRAORY HYGIENE AND COUGH ETIOUETTE

Persons with respiratory symptoms should cover their nose and mouth when coughing/sneezing with tissue or mask,

Provide tissues and no-touch receptacles to throw away used tissues and offering face masks to patients who are coughing.

Dispose off used tissues and masks, and perform hand hygiene after contact with respiratory secretions.

Dental personnel should use N95 respirators or respirators that offer a higher level of protection instead of a facemask when performing or present for an aerosol-generating procedures,

Use red bins for segregation of N95 masks.

#### 6. WASTE DISPOSAL

Ensure safe waste management. Treat 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 associated with specimen processing should also be treated as clinical waste. Discard single use items properly.

#### 7. PAITENT CARE EOUIPMENT

Offices also should follow routine cleaning and disinfection strategies used during flu season.

Handle 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.

#### 8. DENTAL PROFESSIONAL'S CARE

Three- level protective measures of the dental professionals are recommended for specific situations.

- Primary protection (standard protection for staff in clinical settings). Wearing disposable working cap, disposable surgical mask, and working clothes (white coat), using protective goggles or face shield, and disposable latex gloves or nitrile gloves if necessary.
- Secondary protection (advanced protection for dental professionals). Wearing disposable doctor cap, disposable surgical mask, protective goggles, face shield, and working clothes (white coat) with disposable isolation clothing or surgical clothes outside, and disposable latex gloves.
- Tertiary protection (strengthened protection when in contact with patient suspected of or confirmed of COVID-19 infection). Working clothes (white coat) with extra disposable protective clothing outside should be worn. In addition, disposable doctor cap, protective goggles, face shield, disposable surgical mask, disposable latex gloves, and impermeable shoe cover should be worn.

## 9. PRECAUTIONS FOR DENTAL PROCEDURE

# MOUTH RINSE BEFORE DENTAL PROCEDURE:

The recommended agents include 1% hydrogen peroxide and 0.2% povidone iodine and this pre-procedural mouth rinse is useful when rubber dam isolation is not possible.

Precautionary Measures for all cases in places where COVID-19 has been confirmed.

- Reschedule appointments for elective scaling, crown preparations, restorations to reduce splatter contamination of clinic for a suitable period of time.
- Use of disposable drapes for patients and barrier films recommended.
- Four handed dentistry is effective in preventing the infection.
- Infective cases like surgical dental extractions, incision and drainage of abscesses etc. to be done with extra precautions.
- If a tooth needs to be extracted and suturing is necessary then absorbable sutures is preferred.
- Rubber Dam can significantly reduce the production of blood contaminated aerosols.
- The use of saliva ejectors with low or higher volume can reduce the production of droplets and aerosols.
- Carisolv or other chemo mechanical caries removal can be made if a tooth is diagnosed with symptomatic irreversible pulpitis.
- The high speed dental hand piece without anti-retraction valves may aspirate and expel the debris and fluids during the dental procedures.
- Hand scalar, are recommended for periodontal scaling, in order to minimize the generation of aerosol as much as possible.
- Intraoral X-ray examination can stimulate saliva secretion and coughing. Therefore, extra oral dental radiographies, such as panoramic radiography and cone beam CT, are the appropriate alternatives during the outbreak of COVID-19

### 10. ENVIRONMENTAL SURFACE DISINFECTANTS

Preferably Accelerated hydrogen peroxide (0.5%) Benzalkonium chloride (0.05%), ethyl alcohol (70%), isopropanol (50%), sodium hypochlorite (0.05-0.05%) is very effective against corona viruses.

## 11. TRAINING AND EDUCATION OF HEALTH CARE PERSONNEL

Provide task- specific education and training on preventing transmission of infectious agents, including refresher training.

#### **References:**

- Xian Peng 1, Xin Xu 1, Yuqing Li 1, Lei Cheng 1, Xuedong Zhou1 and Biao Ren, Tranmission routes of 2019-nCoV and controls in dental practice, international Journal of Oral Science (2020) 12:9.
- L.Meng1, F. Hua2, & Z. Bain1, Coronavirus Disease 2019 (COVID-19): Emerging and Future Challenges for Dental & Oral Medicine, Journal of Dental Research 2020.
- 3. COVID-19 INFECTION- PREVENTIVE GUIDELINES BY IDA, Kerala State Branch 2020.
- 4. Novel Corona Virus standard operating procedures by NHS England and NHS improvement.
- 5. Corona Virus English Advisory by Health & Family Welfare Department of Tamil Nadu.
- 6. Indian Dental Association's preventive guidelines for Dental Professions on the Coronavirus Threat.

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