



Research Article

GUIDELINES FOR THE DENTAL SETUP FUNCTIONING IN COVID-19 PANDEMIC

**Dr. Y. Satya Sai Sruthi¹, Dr. B. Lakshmana Rao², Dr. P.S.H.L.Parvathi³,
Dr. V. Chakradhar⁴ and Dr. B. Santhi⁵**

¹Postgraduate Student, Department of Prosthodontics, Lenora Institute of Dental Sciences

²Professor & Head, Department of Prosthodontics, Lenora Institute of Dental Sciences

^{3,4}Postgraduate Student, Department of Prosthodontics, Lenora Institute of Dental Sciences

⁵Postgraduate Student, Department of Prosthodontics, Lenora Institute of Dental Sciences

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ABSTRACT

Coronaviruses (COVs) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel coronavirus (nCoV) is a new strain that has not been previously identified in humans. This pandemic effected entire world and we need to fight this pandemic following the few precautionary measures. Through this article we would like to bring about the guidelines to be followed in a dental clinical set up during this pandemic.

Key words:

Pandemic, dental guidelines, Covid 19, dental practice

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INTRODUCTION

Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. It was initially reported to the WHO on December 31, 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. On March 11, 2020, the WHO declared COVID-19 a global pandemic, its first such designation since declaring H1N1 influenza a pandemic in 2009. Illness caused by SARS-CoV-2 was termed COVID-19 by the WHO, the acronym derived from "coronavirus disease 2019." The name was chosen to avoid stigmatizing the virus's origins in terms of populations, geography, or animal associations. As Covid-19 has altered the life style all over the globe even we as dental surgeons have to alter our protocols for protection of our patients, to prevent spread of COVID-19 and protect ourselves.

"Physical Distancing is Key"

The dental professional is particularly at risk if one is working on an infected patient or an asymptomatic carrier because of close contact with the patient and the risk of blood, saliva and droplet exposure.

[1] In Italy, there were 7 dental professionals who died of COVID-19 during the pandemic.

Even general population has started to develop a dilemma to visit dental clinics as they fear of acquiring infection. There are certain measures which we can apply in our clinical setup to provide better care and fulfil the need of hour.

1. Reduced number of staff at all times. The members can follow a rotation posting to avoid unnecessary exposure.
2. No intraoral x-rays. Prefer panoramic view (OPG) if at all required.
3. Wear mask and gloves at all times in the clinic or department except for eating.
4. Minimum use of cell phones during the working hours. Use plastic sheets to cover as cell phone is the most common device to harbor fomites and contaminants.
5. All surfaces of dental chair to be disinfected with appropriate disinfectant (70% alcohol/ 0.5% hydrogen peroxide/ 0.1% sodium hypochlorite) after OPD of every patient.
6. Use of high-volume suction near the OPD chair for suctioning of saliva directly from patient's mouth instead of allowing patient to spit in the spittoon or basin of dental chair.
7. Patients to be positioned on the dental chairs in such a way so that they are at a distance from operator's face.

*Corresponding author: **Dr. Y. Satya Sai Sruthi**

Postgraduate Student, Department of Prosthodontics, Lenora Institute of Dental Sciences

Clinical Design

Waiting Area

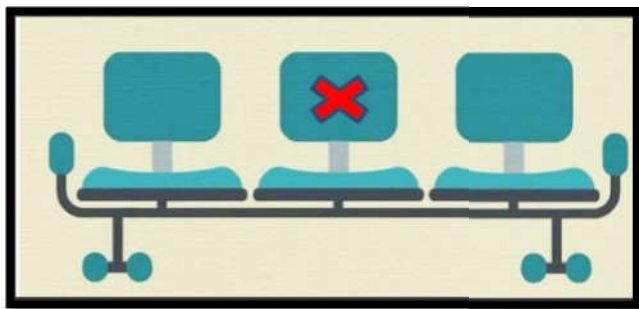


Fig 1 Markings on Chairs in waiting area to maintain Social Distancing

1. Patient waiting area to be spacious and arrangements of chairs to be made following the norms of Social Distancing.
2. Fomite bearing articles like magazines to be removed from waiting area.
3. Only patient to be allowed in waiting area.
4. Commonly touched surfaces like door knobs, reception tables, chair handles to be sprayed regularly by auxiliary staff with sodium hypochlorite.
5. An arrangement of hand hygiene practice (Sensor based Sanitizer dispenser) to be kept at entry of waiting area.
6. 1 staff with Infrared Thermal Scanner at the entry of waiting area for thermal scanning.
7. Covid-19 awareness signage provided by MOHFW of India to be printed and pasted in waiting area.
8. Pens, record books and appointment books to be kept in a closed formalin chamber to keep it free from any contaminants.

Operating Area

1. Operating area should be spacious with windows/vents for air circulation.
2. Only equipment/material to be used at that point of time to be kept outside.
3. Keep all extra equipment in storage area.
4. Cover all fomite bearing surfaces like x-ray viewer, computers, pulseoximeters, micromotor, scaling unit with plastic sheets.
5. Remove all text books, models from operatory.
6. All the bins with respective biomedical color coding to be filled with diluted sodium hypochlorite.
7. 3 staff to be present in operatory with complete PPE (6 hand dentistry) [4]
8. 2 staff to perform procedure and one to act as runner and to help maintain disinfection protocol

Changing Area

1. Changing area to change from personal clothing to Surgical Scrubs.
2. Doffing area where PPE and Surgical Gown can be removed and immersed in disinfectant solution or disposed of as per recommendation.
3. Provision of hand hygiene to be present in doffing area.

Patient Records

Demographic Data

Physical Distancing, testing and contact tracing is the crux to control Covid-19 pandemic.

So as health care providers it's our duty to help the government of India in contact tracing so maintaining record of every person visiting to our health care facility is our responsibility

Covid-19 History

With the emergence of COVID-19 virus, many uncertainties remain for dental fraternity about carrying out dental practice and preventing transmission of COVID-19 from because of their health care facility.[5]

COVID-19 Consent:[6]

As the Indian Penal Code put Doctor-Patient relation under Consumer Protection Act for us being health care providers we have to protect ourselves from virus as well as medico-legal issues. Although informed consent about any procedure is still mandatory an additional covid-19 consent to be procured and kept in records

Reason for COVID-19 Consent

1. Patient may acquire infection while travelling to and from the dental clinic
2. Patient can hide travel history/history of exposure to positive case hence a written consent instills a sense of seriousness about situation.
3. Even after all the precautionary measures by the health care staff as we are facing a global pandemic and virus being droplet borne there can be a transmission from dental setup and patient has to be preinformed about the risk.

Patient Discipline

"Patient Discipline is as important as Health Care Professional Discipline"

Patient needs to follow certain guidelines to procure utmost care with complete safety. Following are the guidelines which every health care professional should make sure that every patient reporting to his facility is following.

1. All patients should visit dental clinic only after telecommunication with the doctor.
2. Only patient to visit the clinic unless age, physical/mental morbidity demands so.
3. Every patient and relative to wear mask while visiting Clinic "No mask, No entry"
4. Every patient to perform hand hygiene measures before entering the clinic.
5. Patient to follow all post operative instructions strictly
6. Recall and follow-up will be done only through telemedicine.
7. strict execution of social distancing norms.

Waiting Area Protocol

1. Appointment based practice
2. Use teledentistry in initial screening on "any virtual online platform"
3. In between two appointments 15-20 mins time for preparation

4. Ask patients to wait in their cars before they report to dental operator

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