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**Jitendra Sharan**  
Department of Dentistry, All  
India Institute of Medical  
Sciences, Bhubaneswar, Odisha,  
India

**Ashok Kumar Jena**  
Department of Dentistry, All  
India Institute of Medical  
Sciences, Bhubaneswar, Odisha,  
India

**Smriti KC Basnyat**  
Department of Prosthodontics,  
Kathmandu University School  
of Medical Sciences, Panauti,  
Nepal

**Corresponding Author:**  
**Jitendra Sharan**  
Department of Dentistry, All  
India Institute of Medical  
Sciences, Bhubaneswar, Odisha,  
India

## Feasibility of COVID-19 oral health care guidelines in day to day practice: Our experience in a tertiary care hospital

**Jitendra Sharan, Ashok Kumar Jena and Smriti KC Basnyat**

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### Abstract

The COVID-19 has spread throughout the world since December 2019 and brought the delivery of the oral health facilities to a standstill. Customization of oral health care guidelines during the COVID-19 pandemic at the dental division of a tertiary health care setup in India. Existing literature was searched regarding any available information regarding oral health care guidelines at the tertiary health care set up. Further, various health regulatory authorities' websites were searched for guidelines related to COVID-19 and patient management and infection control. Adhering to the health regulatory protocols for COVID-19, a total of 24548 patients were provided with dental consultations and various dental procedures, including teeth extraction, orthodontic interventions, teeth restoration, root canal treatment, and oral prophylaxis, major and minor oro-maxillofacial surgeries from April 1, 2020, to August 31, 2021. Emphasis was on providing a safe working environment to the oral health care team and the patient. None of the members of the dental health team became positive for COVID-19 during the study. On the basis of our experience, we highlight that it is very much possible to efficiently and effectively treat the patients which oral health care during and post-COVID-19 pandemic. Frequent change in the guidelines regarding COVID-19 infection by various authorities, so keeping an eye on the same is also advised because various aspects of COVID-19 infection are yet to be confirmed and brought to the light. In our setup, patient satisfaction was good among the treated patient, and they applauded the efforts put by our team.

**Keywords:** COVID-19, oral health care, dental set up, dental treatment, tertiary health care

### 1. Introduction

A cluster of cases of pneumonia with unknown etiology was reported at the beginning of December 2019 from Wuhan of Hubei province of the People Republic of China, where wild and exotic animals were traded for consumption<sup>[1,2]</sup>. Very soon, on January 7, 2020, a virus of novel coronavirus family was identified as the etiological factor of this condition. The World Health Organization (WHO), on January 12, 2020, named this virus as *2019 coronavirus (2019-nCoV)*; but it was renamed as severe acute respiratory syndrome coronavirus-2 (*SARS-CoV-2*) by Coronavirus Study Group of International Committee on February 11, 2020. The *SARS-CoV-2* virus is presumed to be of zoonotic in origin and possess very close similarity of the genetic cluster of Beta coronavirus of subgenus lineage B of SarbeCo virus. It has been shown that their genome possess very close similarity and over 96% identical genome level of other bat coronavirus samples (BatCoV RaTG13)<sup>[3]</sup>.

In a short duration of time *SARS-CoV-2* virus has spread rapidly to all the provinces of the Public Republic of China. As of August 31, 2021 the COVID-19 infection has been reported across 188 countries and territories, infecting close to 223 million population and more than 3.9 million deaths<sup>[4]</sup>. Due to rapid geographical spread, the Director-General, WHO has declared the COVID-19 a "Public Health Emergency of International Concern" on January 30, 2020<sup>[5]</sup>. Later the WHO has declared this condition a pandemic on March 11, 2020. Even before, the primary mode of transmission can be identified, and the world gets ready to face the rapid spread of COVID-19 the outbreak has resulted in chaos, major health, financial and humanitarian crises<sup>[6-12]</sup>.

There is strong evidence about the spread of COVID-19 from individuals who are either minimally symptomatic or not at all symptomatic [13-15]. The aerosol and droplet transmission of COVID-19 is considered to be the primary mode of transmission; fomite transmission also plays a key role in the spread of the virus as it can remain viable and infectious for hours on the surface up to 3 days [16-18]. This leads the enforcement agencies to frame advisory and rules for very limited movement in various countries leading to lockdown and national emergencies [19-21]. The partial or complete lockdown enforced by the federal agencies does have affected the access to basic medicare facilities and thus affected the quality of life in some or the other way [22-23]. The enforcement of rules for very limited human movement by the respective federal agencies in various countries leading to national emergencies and lockdowns. Such a move has led to the hardship of the public and left with very limited options and essential services. Most of the hospitals and healthcare setups were converted to COVID-19 centers with the purpose to cater the COVID-19 infected patients. All elective surgical and dental procedures were discontinued by almost all healthcare setups primarily to prevent the spread of infection and to channelize the resources towards better management of COVID-19 infection. Further, all the resources were directed towards fulfilling this goal.

To the best of our knowledge, literature is lacking about the dental care execution at dental set up during the COVID-19 1<sup>st</sup> and 2<sup>nd</sup> waves of pandemic. In this article, we are sharing our experiences at a Dental Unit of All India Institute of Medical Sciences, Bhubaneswar, a tertiary care health Centre in Eastern India during 1<sup>st</sup> and 2<sup>nd</sup> waves of COVID-19 infection.

### **Pre COVID-19 Outbreak Preparation**

The COVID-19 has caused a global impact on health, politics, and economy in a very short duration. The WHO, Centres for Disease Control and Preventions (CDC), and other leading health monitoring Institutes on time to time has updated the guidelines related to various aspects to COVID-19 infection. Countries that have been affected by this disease earlier, such as the United States, China, Italy, Spain, South Korea, Japan etc. We're not prepared to face the COVID-19 challenge, leading to widespread infection and higher mortality. The pattern of COVID-19 spread in the United States, China, and other parts of the world has made us realize the fact sooner or later; this issue is going to come and hit India very hard.

Keeping the mortality as well spread to the minimum was the main goal for many health authorities and governments throughout the world. The health care setup is ethically bond to provide the best possible service to the patients. During the COVID-19 pandemic, the focus was shifted to prevent the spread of infection to the health care providers and supportive team members due to the increase in the symptomatic cases along with asymptomatic cases in the healthcare setups. There is still confusion regarding the infectiousness, whether it starts before the onset of symptoms? Recent studies have proven that even asymptomatic patients of COVID-19 can also spread the infection [13-15].

Good awareness and well-trained manpower (doctors and health care support team, security guards, sanitary workers) are the frontlines warriors in this war. Thus it was prudent to train the health care support team about the various aspects related to COVID-19 efficient and smooth running of the department and the setup. Optimal disaster response necessitates knowledge, preparedness, and coordination to

ensure adequate resource availability and allocation at the time of need and to create a surgical department action plan in conjunction with key stakeholders and content experts vital to institutional response such as emergency medicine, anesthesia, pulmonary critical care, infectious disease, internal medicine, facility and nursing management, and sanitary team.

Along with that, for patient awareness printed materials (poster regarding the spread of COVID-19, signs, and symptoms of COVID-19, the importance of maintenance of social distancing etc.) and signages for respiratory hygiene, hand hygiene, and cough etiquette were put at entrance, registration, waiting area, staircase, lifts, and every department in the local language. Also, frequent public awareness programs were conducted at various places in the Institute.

### **Pre-registration screening**

All patients and their attendants (one attendant only with a patient were allowed) were screened at COVID-19 screening OPD at the entrance of the hospital. It was ensured that every patient and their attendant had covered their own face by either a surgical mask or cloth mask. Patients were asked for any recent travel history and the presence of fever, cough, and other associated symptoms of COVID-19. Also, recording of the temperature with a handheld contactless forehead infrared thermometer was done. If the temperature was < 99.2<sup>o</sup>F and without any COVID-19 symptoms, then the patient or their attendant was allowed to reach the registration area for making a consultation card [24, 25]. If symptoms of COVID-19 were present, then the patient or their attendant was referred to the COVID-19 outpatient department (OPD) for further evaluation and management as per the protocol approved by Govt. of India and State Government (Figure-1 and 2).

### **Patient registration protocol**

At the entrance of the registration area, the temperature was checked again and, patients and their attendants were asked to rub their hands for at least 20 seconds with an alcohol-based hand sanitizer. Patients were asked to fill a specially designed form containing various demographic data like name, age, sex, address, mobile number etc. At least a 6 feet distance was maintained between the patients during the registration [26, 27]. Patients were instructed to contact back to the hospital in the helpline number if they develop COVID-19 symptoms or are diagnosed with COVID-19 within 14 days following their visit to the dental department at the hospital. Following registration, patients were advised to remain seated in the waiting area while maintaining the social distance.

### **Waiting area protocol**

Once the registration formalities were completed, the patients and their attendants were advised to proceed towards the waiting area. Seating arrangements were made in such a way that an appropriate prescribed distance is always maintained between two persons at any given point [26, 27]. In three-seater chairs, the middle seat was blocked by putting a cross (X) mark on that seat. All reading materials like newspapers, magazines, and TV remote were removed. The crowd management at registration and waiting areas was done by security personnel and social health care workers.

### **The dental clinical area management protocol**

Only one patient was allowed to enter into the clinical area at any point in time. The patient's attendant was advised to

remain seated in the waiting area to maintain minimum crowding in the clinical area. In the case of Paediatric or any non-ambulatory patient, one of the parents or, attendant was allowed to enter into the clinic with the patient. Patients were instructed to keep their footwear outside the clinical area at the designated place. The patient and attendant (if allowed inside the clinical area) sanitized their hands for at least 20 seconds with an alcohol-based hand sanitizer. The door of the clinic was kept open to avoid touching of door handles. A minimum number of dentists and assistants were posted daily for patient management (consultation and dental treatment). Few ball pens (called as *COVID pens*) were earmarked with specific stickers for their use only in the clinical areas. Also, very few numbers of various investigation forms were kept in the clinical area. The central air conditioning was kept off. The use of ceiling fan was avoided while performing any aerosol-generating procedures.

### **Dental intervention protocol**

Before intervening and extending any dental care to the patient, risk assessment was again done by the treating dentist as per the guidelines suggested by the Ministry of Health and Family Welfare, Government of India (Table-1) [28]. All patients who came for dental consultation and intervention were considered asymptomatic COVID-19 positive, and standard guidelines were followed.

The heavy aerosol-generating procedures like oral prophylaxis by ultrasonic scaler and air rotor tooth cutting for restorative procedures were avoided where ever possible. All dental consultations were done in the forenoon, and specialty interventions were done in the afternoon. During moderate to the heavy aerosol-generating dental procedures, cross ventilation was maintained to minimize the accumulation of aerosol particles in the clinical area; further windows were kept open for easy movement of fresh air. This had a positive effect on the quality of air inside the dental operator areas.

Various elective dental procedures such as restorations for cervical abrasions, oral prophylaxis, and incipient pit and fissure caries were postponed whenever possible. The minimum cavity preparation for restoration was considered, and Glass Ionomer Cement (GIC) was considered as the choice for the same. Whenever possible, four-handed dentistry was used for all types of dental interventions. High evacuation suction was always preferred. The procedures and prescriptions were recorded after dental interventions.

### **Personal Protective Equipment (PPE) protocol**

The extended use of PPE protocol was followed, as suggested by WHO, CDC, and the Ministry of Health and Family Welfare, Government of India [31, 32]. All staff who do not engage directly in the patient care used only a surgical mask or cloth mask during the duty hours. The cloth mask was cleaned daily by detergent. The dentists, dental attendant, dental hygienist, and nursing officer who engaged in direct patient care used a three-layered surgical mask, face shield, goggles, head cap, cloth surgical gown, and a pair of sterile gloves. Surgical masks, gloves, and face shields were changed after each aerosol-generating procedure. The goggles and face shields were cleaned and decontaminated daily till their adequate functionality is maintained. The surgical gloves were changed if they become torn or soiled. Hand washing was done after each patient consultation. The cloth surgical gown was cleaned daily by detergent and dried and then decontaminated by steam sterilization, i.e., by autoclave.

### **Clinical area sanitization protocol**

The floor of the dental operator was cleaned after every ten patients or as when soiled by blood or saliva or body fluids by a two-step cleaning procedure. Routine floor cleaning involved initial cleaning by detergent followed by freshly prepared 1% sodium hypochlorite solution with a contact period of a minimum of 10 minutes [31, 32]. Cleaning for blood or any fluid body spillage was done as per the Institute protocol. The dental chair and unit were cleaned after every five patients by wiping with Bacillocid™ (Raman & Weil). Other types of equipment were cleaned as routine protocol twice daily by Bacillocid™. Cleaning of the waterline was done by 1% sodium hypochlorite solution after every dental intervention, and possible fomites at a regular interval. Air fumigation of the dental operator was done every day before closing with Bacillocid® Extra (100 grams Bacillocid Extra contains 14.1 grams of Ethylene dioxydimethanol and 5 grams of Glutaraldehyde). For fumigation purposes, 10 ml of this solution was mixed with 1000 ml of water.

### **Major maxilla-facial surgery protocol**

All major surgical procedures were done at dedicated dental OT. Hospital had created COVID-19 OT for the patient with a confirmed positive status. There were two patterns observed which required major surgical procedures. First the cases of maxillofacial trauma; in such a case, first aid management was done in casualty, with all the precautions as COVID-19 status of the patient was not confirmed (Figure 2.). Once the condition was stable, the patient was shifted to the COVID-19 suspect ward, and during this time, the sample was collected to confirm the COVID-19 status of the patient. If the COVID-19 test was negative, the patient was shifted to the earmarked regular dental ward, and the planned surgery was done in regular dental OT. On the other hand, if the COVID-19 report was positive, then the patient was shifted to the COVID-19 ward, and the desired surgery was done at dedicated COVID-19 OT. During the post-surgical phase, the COVID-19 test was repeated after 7-days. When the test turned out to be negative, the patient was shifted to the regular dental ward and was discharged when they were fit for that.

The second pattern was patient directly reported to the dental OPD after trauma or with any acute oral lesions such as severe facial space infections. For these patients, triage and screening were done at the hospital entrance, so all these cases were considered asymptomatic for COVID-19. With all the precautions, these cases were clinically evaluated and, if required, admitted to the COVID-19 suspect ward before the surgery. A sample was collected to confirm the COVID-19 status, and depending on the report, they were managed, as mentioned earlier.

### **Medical waste disposal protocol**

There was no difference in the principles of medical waste disposal protocol. All wastes were disposed of as per the biomedical waste management protocols of Govt. of India [28, 33].

### **Instrument sterilization protocol**

There was no difference in the instrument sterilization protocol. However, cleaning and packing of the instruments were done after wearing appropriate PPEs.

### **Dental Health Care Personnel Care protocol**

All dental health care professionals were trained about hand hygiene, donning and doffing procedure, and proper use of

PPEs. Long working hours were avoided, and staffs were rotated frequently. After each consultation, hands to be washed with soap and running water for 20 seconds, and sanitize with an alcohol-based sanitizer. If the face shield, masks were physically soiled, they have to be taken off and disinfected in the case of the reusable face shield, and masks to be discarded.

Dental health care workers, on the way back home, were advised to follow all the precautions on return, such as removal of shoes, change of clothes, wash and disinfection of watch and mobile. Further, they were advised to have a balanced meal and increase the intake of citrus fruits and ayurvedic preparation such as chawanprash, tulsi, amla to improve the immunity.

### Staff training protocol

All the administrative and housekeeping staff were trained every week on the latest updates on COVID-19, the importance of hand hygiene, social distancing and use of face masks etc. All dental health care personnel were informed regarding the proper use of PPEs and various guidelines issued by the CDC, WHO, Ministry of Health and Family Welfare, Government of India etc.

### Discussion

The COVID-19 pandemic has brought many challenges and forces us to adopt new norms for providing effective and efficient oral health care compare to the pre-COVID-19 scenario. The COVID-19 cases were first detected in China, and later on, it spread throughout the world [1, 2]. In India, the first COVID-19 case was detected on January 30, 2020, and till February 2020 end the number of cases was very less, thus given sufficient time to prepare ourselves [34, 35]. In countries which were affected by COVID-19 outbreak in early days, many health care institutes and dental setups have shared there experienced, which was a boon for many countries as these experiences provides the preliminary guidelines and any changes in the existing one for better management of the oral health-related issues during the pandemic [36-38]. To be very true, we were also very much concerned about the SARS-CoV-2 viruses and COVID-19 pandemic in the initial stages. But with the passage of time, many studies and guidelines by health regulatory authorities have come up, and to a great extent, it resolved our concerns. On the basis of these guidelines, we felt that there was a need for modification/changes in our dental set up for effective and efficient management of oral health-related issues during the COVID-19 pandemic.

First of all, a department meeting was called, and issues related to dental treatment, patient management, disinfection of dental treatment area, waste disposal, sterilization, and other related aspects were critically discussed, and the role of each member of dental setup was highlighted. Further, the duty roaster was made in such a way that there was an effective rotation of the manpower with a sufficient gap between the following duties.

As most of the private oral health care facilities were closed during the complete and partial lockdown, so we have

expected a good no of patients to turn out at our dental setup for various dental health-related issues. During the COVID-19 1<sup>st</sup> and 2<sup>nd</sup> waves of pandemic and the post lockdown phase, the patient seeking consultation and various dental interventions was relatively low compared to pre-pandemic days. In spite of complete to partial lockdown, a good number of patients visited and utilized the dental facility. Table-2 shows the total patient turn over and various dental interventions executed during the period from April 1, 2020 to August 31, 2021. Patients' movements were managed in a well defiend and planned way.

Not all dental treatment options were given to the patient. They were told about the limitations, and if it were elective procedure, conservative management of the same was given priority. Patients were told to use the facility of teledentistry for follow up, and for this, a dedicated mobile telephone number was given to them. Treatment was provided only for emergency dental care. The aerosol-generating procedures were usually avoided, unless or until it was must such as cavity preparation and restoration under very good ventilation and appropriate suction. Proximal carious lesions were included as an emergency problem, and appropriate treatment was carried out. A heavy aerosol-generating procedure, such as oral prophylaxis and root planning, was avoided. For management maxillofacial trauma, a well-planned strategy was formulated in coordination with other concerned departments. Overall, patient satisfaction was good with dental care.

Further guidelines regarding the use of the sensor-based door, light switches, and water taps have been given by various health regulatory authorities to minimize the fomite born contamination and spread of the COVID-19 infection [28, 39, 40]. We felt that it was not possible to accept these guidelines as these require changes in the existing setup of the hospital, which was not possible at present. Also, these suggestions are good options to be followed for a dental set up which is new, and alteration in the layout plan can be done easily. The efficiency of such a system is yet to be proven, as theoretically yes, they do reduces the chances of spread of COVID-19 infection through fomite, but with universal precautions, it is possible to get the same result.

During this phase of the study, we used PPE kits such as triple-layer surgical mask, head cap, shoe cap, the surgical gown of various thicknesses, and face shield. Even though the level of protection from fluids and spillage provided with the higher thickness (GSM) of the surgical gown was optimal, but there were issues related to the exchange of body temperature and breathability leading to the wetting of cloths beneath it and thus increased discomfort level during the dental procedure. To overcome this, we considered a cotton-based surgical gown, which, after the dental procedures were washed with detergent, dried, and steam sterilized. This has worked well with us. All the measures were taken to keep the working environment and setup safe for both patients and the health care providers, and the outcome was satisfactory for both patients and the dental team. None of the dental health care providers developed any signs and symptoms of COVID-19 infection to date.

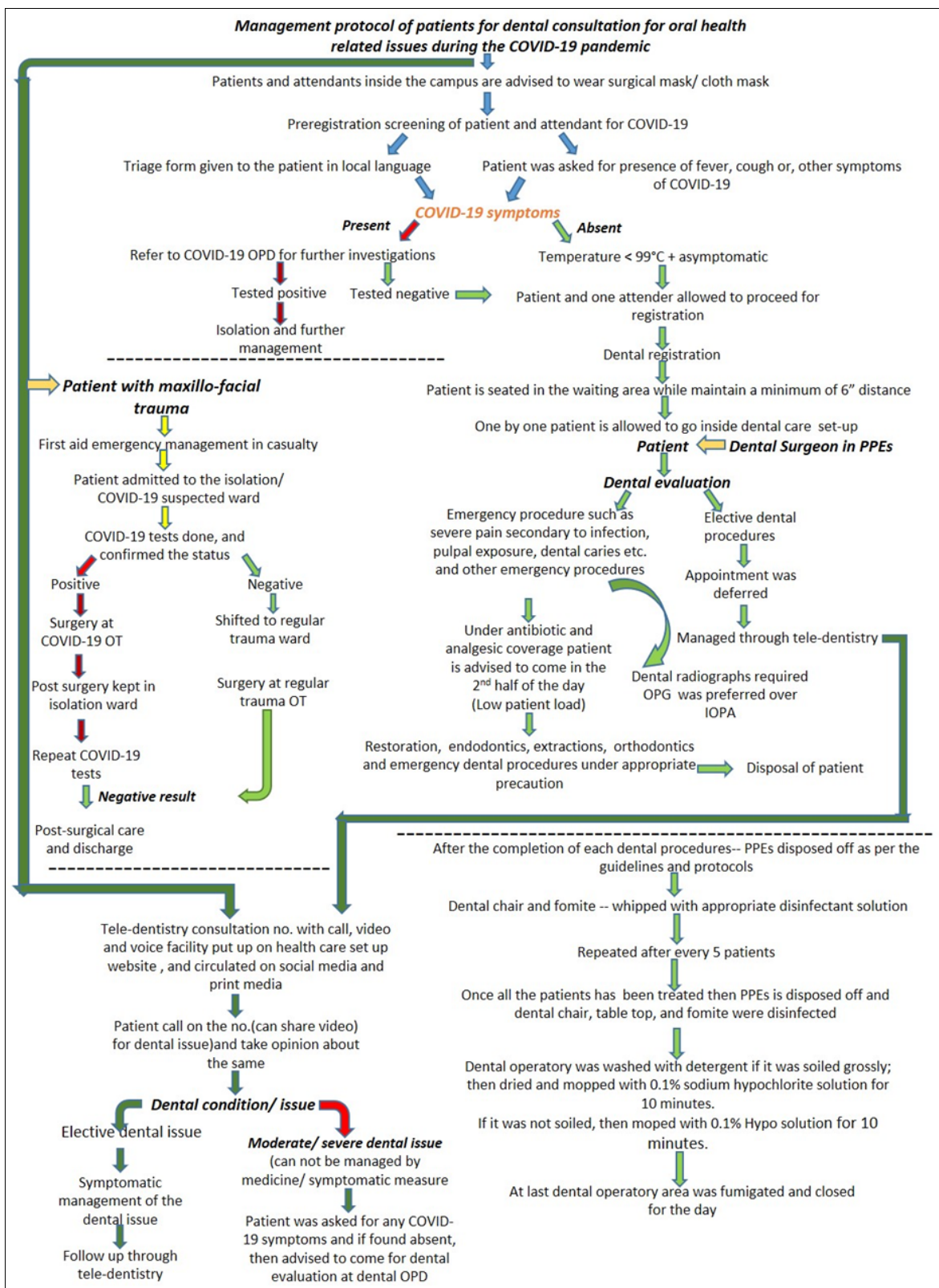
**Table 1:** Summary of dental/ oral examination and procedures and their risk levels.

Nature of dental conditions	Clinical condition/ Procedures	Risk Level	Patient wears	Clinician/ staff wears
Dental consultation	For dental or oral problems	Moderate to high	Surgical Mask	<ul style="list-style-type: none"> <li>N95 mask</li> <li>Face shield or goggles (N95 mask, may be appropriate to reuse when used with face shield)</li> </ul>
Emergency Dental Procedures	<ul style="list-style-type: none"> <li>Fast spreading infections of facial spaces/ Ludwig Angina/ Acute cellulitis of dental origin/ Acute trismus</li> <li>Uncontrolled bleeding of dental in origin</li> <li>Severe uncontrolled pain of dental in origin and nature, not responding to the routine measures</li> <li>Radiographs such as PNS, OPG, CBCT in the cases of facial trauma and in the medico-legal situations</li> </ul>	<ul style="list-style-type: none"> <li>Very high</li> <li>Very high</li> <li>Very high</li> <li>Very high</li> </ul>	Surgical mask	<ul style="list-style-type: none"> <li>N95 mask</li> <li>Face shield or goggles</li> <li>Head cap</li> <li>Double gloves</li> <li>Gown</li> </ul>
<i>Children and Adolescents</i>				
Urgent procedures	<ul style="list-style-type: none"> <li>Acute pulpitis</li> <li>Dental abscess</li> <li>Dentoalveolar trauma</li> <li>Pain due to dental caries and cavity requiring temporization</li> <li>Unavoidable dental extractions</li> <li>Orthodontic procedures</li> </ul> <p><i>Adults and Geriatric</i></p> <ul style="list-style-type: none"> <li>Dental pain of pulpal in origin not managed by analgesic and antibiotics</li> <li>Acute dental abscess of pulpal/ periodontal/ endo-perio origin/ vertical split of teeth</li> <li>Completion of ongoing root canal treatment</li> <li>Temporization of cavity in teeth which are approximating the pulp but do not need pulp therapy</li> <li>Broken restoration/ fixed prosthesis causing sensitivity of vital teeth/ endangering to the pulpal vitality/ significant difficulty in mastication</li> <li>Unavoidable dental extractions/ Post extraction complications</li> <li>Already prepared teeth/ implant abutments ti receive crowns</li> <li>Peri-implant infections endangering the stability of implant/ Pericoronitis/ Operculectomy</li> <li>Oral mucosal lesions requiring biopsy</li> <li>Long-standing cysts and tumours of the jaw with abrupt changes</li> <li>Sharp teeth/ Trigeminal Neuralgia</li> <li>Orthodontic wire or appliance, impinging or piercing on the oral mucosa</li> <li>Orthodontic treatment causing iatrogenic effects</li> <li>Delivery of clear aligners</li> <li>Patients on skeletal anchorage</li> <li>Repair of broken complete dentures</li> <li>Implant prosthesis related issues</li> <li>Oral mucosal infections such as candidiasis</li> <li>Oral mucosal lesion/s showing sudden changes or suspicion of causing severe problem/ oral cancer requiring biopsy</li> </ul> <p><i>Patients with medical conditions</i></p> <ul style="list-style-type: none"> <li>Diabetic patients requiring treatment for periodontal conditions</li> <li>Dental treatment for patients requiring cardiac surgery</li> <li>In patient, requiring dental care for acute dental problems</li> <li>Patients requiring dental treatment for radiotherapy</li> </ul>	<ul style="list-style-type: none"> <li>High</li> <li>Very high</li> <li>High</li> <li>High</li> <li>Very high</li> <li>Moderate</li> </ul> <ul style="list-style-type: none"> <li>High</li> <li>High</li> </ul> <ul style="list-style-type: none"> <li>High</li> </ul> <ul style="list-style-type: none"> <li>High</li> </ul> <ul style="list-style-type: none"> <li>High</li> <li>Very high</li> <li>High</li> <li>High/ Moderate</li> <li>High</li> <li>High</li> <li>Moderate</li> <li>Moderate</li> <li>Moderate</li> <li>Moderate</li> <li>Moderate</li> <li>High</li> <li>High</li> <li>High</li> <li>High</li> </ul> <ul style="list-style-type: none"> <li>High</li> <li>Very high</li> <li>Very high</li> <li>Very high</li> </ul>	Surgical mask	<ul style="list-style-type: none"> <li>N95 mask</li> <li>Face shield or goggles</li> <li>Head cap</li> <li>Double gloves</li> <li>Gown</li> </ul>

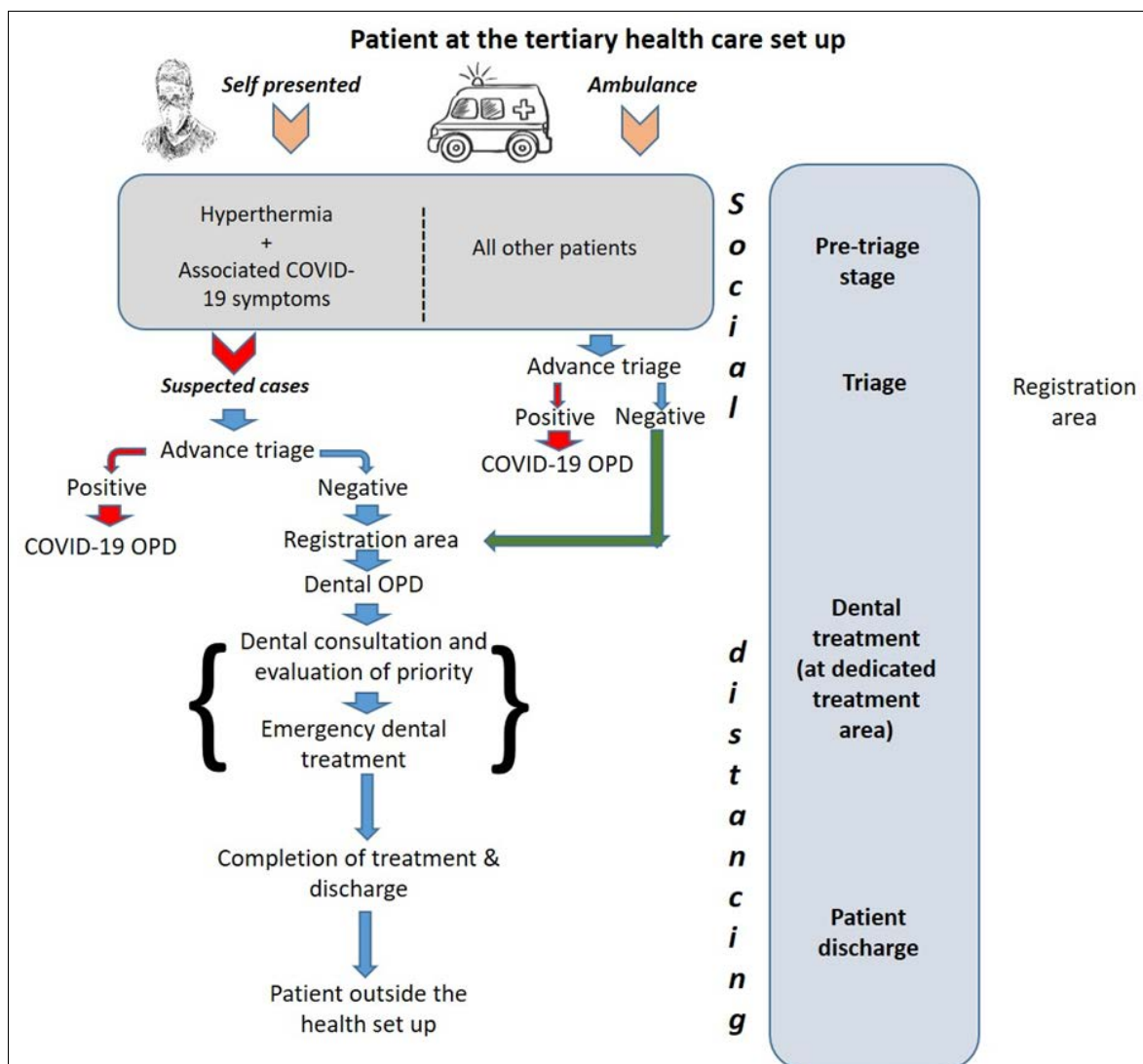
(a--Adapted and modified from <http://www.mohfw.gov.in/pdf/DentalAdvisoryF.pdf>. Issued on 19.05.2020.)

**Table 2:** Various oral health care procedures provided to the patients during the 1st and 2<sup>nd</sup> waves of the COVID-19 infection.

Serial No.	Oral health care procedures	No. of procedures
1	Dental consultation (including teledentistry)	13372
2	Teeth extraction (with forceps)	2380
3	Orthodontic interventions	2578
4	Teeth restoration	878
5	Root canal treatment	574
6	Ultrasonic scaling and root planning	98
7	Minor surgery (Incisional biopsy and Teeth Impaction)	375
8	Major surgery (Requiring major OT facility)	145
9	Radiographs (IOPA, OPG, Cephalogram & CBCT)	4148



**Fig 1:** Management protocol of patients for dental consultation for oral health-related issues during the COVID-19 pandemic.



**Fig 2:** Patient movement within the tertiary care set up for emergency dental consultation and treatment.

### Conclusion

During this uncertainty of the COVID-19 pandemic, adhering, and following to the guidelines and practice protocols advisories issued by federal, state/provincial, local health and regulatory authorities, it is possible to provide satisfactory oral health care at a tertiary set up. Knowledge and awareness towards the various aspects of COVID-19 disease were the keys to the prevention and intervention along with the new norms of personal protection, including tele screening and triaging dental care practice, and patient management provided to optimal care maintaining the balance between service and needs. Various dental procedures were provided to the patients at the time of their need while adhering to universal precautions with was satisfactory to us as a dental team and for patients who were satisfied and appreciated our efforts at the time of need.

Refining the tertiary health care set up, adapting to the need and demand can help the dental care team to provide service, relief, or at-least alleviate pain timely until the total eradication of the COVID era.

### Ethical Compliance

1. Source of Funding: Nil
2. Potential Conflicts of Interest: Nil
3. Informed Consent: Not required
4. Statement of Human Rights: Not required

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