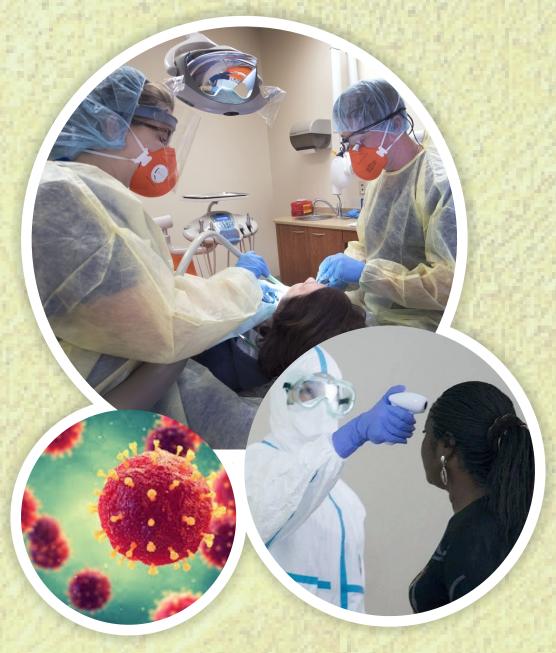


FEDERAL MINISTRY OF HEALTH



COVID-19:

October, 2020

GUIDELINES/STANDARD
OPERATIONAL PROCEDURES FOR
DENTAL PRACTICE IN NIGERIA

COVID-19:
GUIDELINES/STANDARD
OPERATIONAL PROCEDURES
FOR DENTAL PRACTICE IN
NIGERIA

FOREWORD

The outbreak of COVID-19 has rapidly escalated into a global pandemic, creating both a health and economic crises in which transmission occurs primarily through droplet and aerosol spread through close contact routes.

Due to peculiarity of the Dental clinic setting, the risk of cross infection between dental health care personnel and patient is significant. In addition to droplets, procedures on dental patients involving the use of high-speed hand pieces or ultra-sonic instruments may cause secretions such as saliva or blood to aerosolize in the surroundings and increase risk of transmission of the disease.

The development of these Guidelines/Standard Operational procedures for Dental practice in Nigeria is therefore necessary at this period, when nations are committed to curbing the spread of COVID-19. The document provides standard guidelines for day-to-day running of Dental clinics, to promote proper use of Personal Protective Equipment (PPE) and reduce risks of all forms of transmission of the disease.

I approve the implementation of this document and wish it to be widely circulated among all stakeholders in oral health care in Nigeria.

Dr. E. Osagie Ehanire, MD, FWACS

Hounorable Minister of Health

ACKNOWLEDGEMENT

The development of the Guidelines/Standard Operation procedures for Dental practice in Nigeria reflects the commitment of the Government of Nigeria towards the safety of lives of its citizens.

The Federal Ministry of Health, most especially the Dentistry Division of the Department of Hospital Services is sincerely grateful to all the resource persons who dedicated their time and efforts to the entire process.

I must appreciate the Nigerian Dental Association, especially the research and scientific Committee of the Association, the Obafemi Awolowo University Teaching Hospital, Ile-Ife and the World Health Organisation for their valuable inputs.

It is our belief that the successful implementation of this guideline will protect the Dental professionals and curb the transmission of COVID-19 in the Dental clinics across the Country.

Dr. Adebimpe Adebiyi, mni

Director, Department of Hospital Services.

EXECUTIVE SUMMARY

The guidelines for the management of Dental patients during the COVID 19 pandemic are provided for the Dentists and the Dental team on ambulatory patients care. The guidance is subject to change with new information on the disease.

Specific guidelines on Evaluation of patients before treatment, the use of Personal Protective Equipment, Standard practice during treatment, Hand hygiene application, Non aerosol and aerosol generating procedures should be adhered to strictly.

Due to the rapid reduction in the transmission of COVID 19 pandemic in the Country as at 12/10/2020, the Standard Operational Procedures for Dental Practice in Nigeria has been reviewed from Emergency Dental Services to Essential Dental Services.

Dr Boladale Alonge

Rottunge,

Head, Dentistry Division

CONTENTS:

- I) Foreword
- II) Acknowledgement
- III) Executive summary
- IV) Background
- V) Guidance for Dental Management during COVID 19 pandemic
- VI) Evaluation of Staff
- VII) Evaluation of the Patient before treatment
- VIII) Standard practices during treatment
- IX) Hand Hygiene Applications
- X) Personal protective equipment (PPE)
- XI) Clerking and Oral Examination
- XII) Non Aerosol generating Procedures
- XIII) Aerosol generating Procedures
- XIV) Respiratory hygiene/Cough etiquette applications
- XV) Care for Patients with COVID 19 symptoms
- XVI) Applications after treatment
- XVII) Post therapy instructions
- XVIII) Waste Management
- XIX) Bibliography
- XX) Addendum

BACKGROUND

Severe Acute Respiratory Syndrome corona virus 2 (SARS-CoV-2) is the causative organism for Corona Virus Disease-19 (COVID-19), an infectious disease spread by respiratory droplets. It was first described in December 2019 in Wuhan, the capital of China's Hubei province, and has since spread globally. This led to the World Health Organisation declaring COVID-19 a pandemic on the 11thof March 2020.

The first case of COVID-19 was officially reported on the 27th of February 2020. The patient was an Italian citizen, who arrived in Lagos from Europe and who, a few days later, tested positive for the disease. In Ogun state, a neighbouring state to Lagos, another patient was identified and was disc overed to have been in contact with the first patient. The first few cases were persons who travelled into Nigeria from high risk countries. As at the 7th of June 2020; 12,486 COVID-19 positive cases has been identified of which 354 had died. The pandemic had also become a community transmitted infection.

Most people infected with SARS-CoV-2 are asymptomatic. Many of those with symptoms will present with mild to moderate respiratory illness and recover without requiring intensive care. Older people and those with underlying medical problems like cardiovascular diseases, diabetes mellitus, chronic respiratory diseases and immune suppressing conditions are at a higher risk of developing serious illness. The risk of severe disease associated with COVID-19 is considered moderate for the general population and very high for populations with underlying medical problems.

Dentists are specifically vulnerable to SARS-CoV-2 infection. They are categorized as very high-risk category of healthcare providers because of the aerosols produced during dental procedures. The risk of managing asymptomatic patients with COVID-19 using aerosol generating procedures is of huge concern.

The aim of this Standard Operational Procedure / Guidelines for Dental practice in Nigeria is to support both private and public dental practices in

ways that will prevent droplet and contact transmission of SARS-CoV-2 infection, and promote proper use of personal protective equipment and overall Infection, Prevention and Control (IPC) practices.

SYMPTOMS

Symptoms may appear 2-14 days after exposure to the virus. The combination of two or more of these common symptoms of COVID-19 should give a high index of suspicion. The symptoms are:

- High fever: feeling hot to touch on the chest or back
- Child with repeated shaking with chills
- Coughing a lot for more than an hour, or 3 or more coughing episodes in 24 hours
- Shortness of breath or difficulty breathing
- Headache
- Sore throat
- Muscle pain
- New loss of smell
- New loss of taste

Emergency warning signs may include

- Trouble breathing
- Persistent pain or pressure in the chest
- Inability to get up and do daily chores
- Bluish/darkish lips or face

Children usually have same symptoms as adult but the symptoms are mild.

MOST PATIENTS WILL BE SYMPTOMLESS, SO, APPLY STANDARD PRECAUTIONS!

GUIDANCE FOR DENTAL PATIENTS MANAGEMENT DURING THE COVID -19 PANDEMIC

The following guidelines are provided for the Dentists and the Dental Team on ambulatory patients care during the COVID-19 pandemic. The guidance will change as new information becomes available.

The virus spreads mainly through droplets. This puts dentists and dental health professionals at very high risk since they work in the saliva-filled mouth or in the laboratory with saliva-bathed materials. Dentists and dental health professionals should take special precautions while treating or fabricating prostheses/appliances for patients during the COVID-19 pandemic. This is because asymptomatic people can transmit the virus, most people are yet to be tested and so the majority of people in Nigeria do not know their COVID-19 status. It is important to have a high index of suspicion, and to take extra measures at this particular period.

RECOMMENDATIONS

As a result of the rapid reduction in the transmission of COVID 19 pandemic in the in the Country, Standard Operational Procedures has been reviewed from Emergency Dental Services to Essential Dental Services.

Essential Dental Services include Dental check - ups and cleanings without the use of aerosol generating equipment, preventive care, and other emergency dental services.

DENTAL EMERGENCIES

- 1. Life-threatening emergencies: airway restriction or breathing/swallowing difficulties due to facial swelling, intraoral or extra oral infections
- 2. Severe toothache caused by pulpal inflammation
- 3. Severe pain caused by third molar pericoronitis
- 4. Postoperatively developed osteitis or alveolitis

- 5. Localized pain or abscess caused by bacterial infection
- 6. Tooth fracture causing pain or soft tissue trauma
- 7. Dental avulsion/luxation due to trauma
- 8. Maxillofacial fractures
- 9. Acute and painful lesions/ulcerations of the oral mucosa
- 10. Life-threatening or uncontrolled bleeding
- 11. Patients planned to receive radiotherapy/chemotherapy or organ transplants
- 12. Patients who require dental consultation for medical problems
- 13. Removal of stitches
- 14. Treatment of temporary loss of restoration/fractures without generating aerosol
- 15. Pain/infection due to injury of soft tissue
- 16. Feeding plates for new-borns with cleft lip and palate
- 17. Temporomandibular joint luxation
- 18. Biopsy for causes of suspected malignancy
- 19. Oro-dental conditions that is likely to exacerbate systemic medical conditions
- 20. Post-extraction bleeding that the patient cannot control with local measures
- 21. Dental conditions that have resulted in acute and severe systemic illness
- 22. Suspected oral cancers.

EVALUATION OF STAFF

- 1. At the dental centre, all clinic staff should undergo mandatory temperature checks with a non-contact thermometer as well hand washing/use of sanitizer before entering the Clinic.
- 2. Anyone with temperature above 37-30 degree centigrade and any COVID-19 related systems should be immediately referred for care support available to healthcare providers in the institution. The staff should be relieved of duties and the head of the dental team or the designate, informed of the team member
- 3. If staff team member tests positive to COVID-19, the staff should not return to work until discharge from isolation.
- 4. Team lead should check in regularly on the staff to ensure morale support.
- 5. Team member should be fully integrated back to routine work fol lowing discharge from isolation.
- 6. No team member who has recovered from COVID-19 should face stigma or discrimination in the workplace.

EVALUATION OF THE PATIENT BEFORE TREATMENT

- 1. As much as possible, virtual-dentistry should be employed at this time to limit the number of patients visiting the dental centre.
- 2. Staff screening patients and staff at the Dental centre should wear disposable gloves, double fluid resistant surgical masks, and disposable waterproof aprons. The staff screening patients and staff should avoid personal contact with anyone while conducting screening.
- 3. At the Dental centre, patients and all entrants into the premises should undergo mandatory temperature checks with a non-contact thermometer as well hand washing/use of sanitizer.
- 4. Crowding should be discouraged in the Dental centre. Patients should either come in one after the other where a "triage area" is available outside the premises.
- 5. Where a "triage area" is not available outside the premises, a large, well-aerated room with open windows and air-conditioners switched off can be

used as a triage area. Chairs must be spaced at a space of 2meters intervals between patients to maintain social (physical) distancing.

- 6. Anyone with temperature above 37.3 degree centigrade should not be allowed into the premises until after medical attention to ascertain cause of temperature and completing treatment to resolve the cause of the high temperature.
- 7. While in the triage/waiting area, patients should fill a mandatory screening form. Dentists should be careful and should not accept patients with COVID-19 related symptoms into the Clinic.

STANDARD PRACTICES DURING TREATMENT

- 1. Dental team members who treat a patient with COVID-19 without the use of recommended personal protective equipment should consider themselves potentially infected; and report to designated COVID-19 isolation centres as determined by the Nigerian Centre for Disease Control/Federal Ministry of Health.
- 2. Patients whose body temperature is below 37.3 degree centigrade and who do not have any COVID-19 symptoms or associated risk factors should be managed cautiously.
- 3. Use 5cc of 1% hydrogen peroxide to rinse the mouth for 30 seconds before ALL procedures.
- 4. Avoid causing aerosol.
- 5. Rubber-dam should be available for procedures especially when aerosol is inevitable. Also, use high volume suction to limit aerosols. Restrict using of ultrasonic scaler for scaling and high-speed hand pieces to limit aerosol
- 6. Ensure appointment scheduling for all patients.
- 7. Only one patient should be in the consulting room at any point in time. Patients should be alone without accompanying persons wherever possible, and not more than one accompanying person when inevitable.
- 8. Children who need parental support should be attended too while on the parent's lap with parents wearing surgical facemask.

9. Ensure minimal invasive procedures are done as much as possible.

HAND HYGIENE APPLICATIONS

- 1. Visible contamination of hands.
- 2. After touching instruments that may be contaminated with blood, saliva/respiratory secretions.
- 3. Before and after treating patients/ handling a patient (treatment procedures)
- 4. Before wearing and after removing gloves.
- 5. In cases where there is no visible contamination, an alcohol-based hand sanitizer can be used.
- 6. Hand hygiene applies to both dental staff and patients.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

PREAMBLE

- 1. All patients must perform 30 seconds mouth rinse and throat gaggle with 1% hydrogen peroxide with closed mouth before examination and before any procedures.
- 2. All staff, including cleaners, should be trained on how to perform hand hygiene
- 3. All staff, including cleaners, should be trained on how to don and doff their personal protective equipment
- 4. Where possible, the training should include simulations of processes to promote competency.
- 5. Designate a place for donning and doffing personal protective equipment.
- 6. Develop plans on how to do laundries to prevent staff taking home their protective wears

- 7. Discuss the possible reuse of N95 masks where the clinic will have challenges with procurement. It is recommended that N95 masks be reused once in four days or sterilized before re-use.
- 8. No damaged personal protective equipment should be re-used.

CLERKING AND ORAL EXAMINATION

- 1. Use long-sleeved scrubs
- 2. Wear disposable gloves
- 3. Wear disposable waterproof aprons. Disposable plastic aprons should be worn on top of scrubs
- 4. Wear double fluid resistant surgical masks
- 5. Wear face shield

NON-AEROSOL-GENERATING PROCEDURES

- 1. This includes procedures like dental examination, placement of rubber dam, drilling with slow hand piece and non-surgical extraction. These are classified as low-risk procedures
- 2. Use of long-sleeved scrubs
- 3. Wear disposable surgical gloves
- 4. Wear disposable waterproof aprons. Disposable plastic aprons should be worn on top of scrubs
- 5. Wear N95 face mask or double fluid resistant surgical masks when N95 is not available
- 6. Wear face shield

AEROSOL-GENERATING PROCEDURES

- 1. This includes procedures that require the use of high speed drills, air/water spray, ultrasonic scalers, surgical procedures, use of nitrous oxide sedation and having a patients who is crying, these are categorized as high-risk procedures.
- 2. Wear full PPE with gown and gloves. This include surgical gown with water-resistant plastic apron.
- 3. Wear respirators such as filtering face piece 3/ N95 facemask non-negotiable
- 4. Wear Full face shields with head cover and safety goggles as shown below
- 5. Wear shoe covers
- * REMOVE PPE BEFORE LEAVING WORKING AREA. STAFF SHOULD BE TRAINED ON THE CORRECT PPE SELECTION, WEAR AND REMOVAL.

RESPIRATORY HYGIENE/COUGH ETIQUETTE

- 1. Hand hygiene points should be created near the waiting area.
- 2. Patient must wear face masks before entering the dental office.
- 3. When coughing or sneezing, patients should be warned about covering their mouth, coughing into their elbow, properly disposing used tissues into covered trash bins, and washing hands.
- 4. Non-contact trash cans should be placed for waste outside the treatment area
- 5. Patients/Staff with symptoms of respiratory tract infections should not be allowed into the dental premises. Such patients/staff should be referred to the accidents and emergency unit for assessment and management.

CARE FOR PATIENTS WITH COVID-19 SYMPTOMS

1. The Nigerian Centre for Disease Control (NCDC) directs that any patients with COVID-19 symptoms should be directed to the appropriate infectious disease authority within the hospital. On no account should any dentist treat any COVID-19 patient without following this directive. Decision on treatment

will be made only after adequate risk assessment in conjunction with the NCDC through the appropriate institutional infectious disease authorities.

- 2. Dentists cleared to care for COVID-19 positive patients must use recommended PPE.
- 3. Opt for extra-oral radiographs when there is a need to take radiographs
- 4. COVID-19 positive patients should be managed only after the care of non-COVID-19 patients.
- 5. Dentists should not manage non-COVID-19 patients on the same day as COVID-19 patients
- 6. Dentists should only provide first aid management/basic care to COVID-19 positive case(s) with underlying systemic conditions and only in consultation with their physicians.

APPLICATIONS AFTER TREATMENT

- 1. The door of the clinic should be closed.
- 2. The windows should be opened and ventilated/air-conditioning system should be disinfected.
- 3. Clinical surfaces should be cleaned and disinfected using medium strength disinfectant, and environmental surfaces with low strength disinfectant.
- 4. The dental unit can be reused after an appropriate waiting period.
- 5. According to the NCDC recommendations standard measures to prevent the spread of respiratory viruses, including washing hands with soap and water for at least 20 seconds after contact with patients, or using an alcohol-based hand disinfectant.
- 6. No hospital attire should be taken out of the clinic.

POST THERAPY INSTRUCTIONS

After specialty-specific post-consultation/post-operative instructions, the following added instructions should be given to all patients;

- 1. Advice all patients that if feeling unwell from non-dental conditions, they should not come to the clinic. Patients should call the Clinic or the attending oral dental care professional to inform them of the need to cancel their appointment.
- 2. Dentist/dental health professional should give care instructions over the phone and document this.
- 3. If the symptoms fit the COVID-19 profile, the patient should be advised to either call the NCDC or visit the accidents and emergency unit of the hospital.

WASTE MANAGEMENT

- 1. Cleaners should wear disposable gloves, double fluid resistant surgical masks, and disposable waterproof aprons.
- 2. All surfaces in the clinic should be cleaned with disinfectants at defined regular intervals
- 3. All wastes produced in the dental clinic should be considered hazardous.
- 4. Regular dental waterlines disinfection should be instituted in all Clinics.

BIBLIOGRAPHY

- Extracts from Nigerian Centre for Disease Control.
- Dental care during the Covid-19 crisis, Universidad de Valparaiso, Chile.
- Management of Acute Dental Problems during COVID-19 Pandemic, SDCEP-MADP-COVID-19- guide-300320.
- COVID-19-TURKEY.
- American Dental Association Return to Work Toolkit.
- Guidelines-on-Emergency-Treatment-5.4.2020.
- Updated PPE Guidance, Cardiff and Vale University Health Board.
- IPC during the COVID-19 outbreak, Prof Sachem Mehtar ICAN.

ADDENDUM – COVID-19 PREPARATORY CHECKLIST

Prepare the entrance to the building or office:

Provide a hand sanitation station upon entry into facility, with a not ice to people to use it before entry into the rest of the office.

Prepare the waiting area, bathrooms and patient consultation rooms:

- Provide supplies:
- Tissues
- Alcohol-based hand rub
- Soap at sinks
- Trash cans
- Place chairs 6 feet apart. Use barriers (like screens), if possible. If your office has toys, reading materials, remote controls or other communal objects, remove them or clean them regularly.
- On a regular schedule, wipe all touchable surface areas with an approved surface cleaner. Remember to include tables, chair arms, doorknobs, light switches, hangers, and anything else with which people come in contact.
- If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection. To disinfect, NCDC-approved products in the cause of COVID-19, and are appropriate for the surface.

Chair side Checklist

Limit paperwork in the operatory area as much as possible.

- If using paper chatting, cover with clear barrier so you may read what is needed for appointment.
- Place new chart notes into document away from patient contact area where possible.
- Cover keyboard of computer with disposable flexible clear barrier (e.g. plastic wrap) and change between patients.
- Limit access to the operatory area to the patient only when possible.
 Supply a mask and shield to anyone who accompanies the patient.
- REMINDER: In certain circumstances, it may be impracticable to limit others in the operatory when their presence is legally required e.g. Translators, parents.

Keep staff level in operatory to the minimum required.

- Mask pre entry (for chair side staff also as virus-containing aerosol particles may exist.
- No hand shaking or physical contact
- Wash hands and gloves in room
- Review overall health history, confirming that the screening questions were asked during the check- in procedure and review if necessary.
- Decide on treatment using clinical judgement and known facts,
 combining patient health/risk factors/geographical incidence of COVID-19.

Procedural requirements/clinical risks (production of aerosol, inducement of patient cough during procedure, ability to employ use of rubber dam.

- Availability of Personal Protective Equipment with relation to risk.
- Use professional judgement to employ the lowest aerosol generating armamentarium when delivering any type o restorative or hygiene care-use hand scaling rather than ultrasonic scaling.
- High velocity evacuation should be employed whenever possible
- o Ensure mask removal and replacement between patients
- o If you are removing your mask, do so outside the treatment room.
- If the mask 9s soiled, damaged, or hard to breathe through it must be replaced.

- If scrubs are to be worn, change between street clothes and scrubs upon entry and exit, or do the same with other office garb.
- o Long sleeved garments should be worn.
- Pregnant staff members should seek and follow medical guidance from their physicians regarding work.