

**MAHARASHTRA INSTITUTE OF DENTAL SCIENCES
AND RESEARCH**

(DENTAL COLLEGE)

Standard Operating Procedure for Special Health Care Need clinic

INTRODUCTION

The dental condition of patients with special health care needs (SHCN) may be directly or indirectly related to their disabilities. The patients with SHCN relatively have poor oral hygiene and increased prevalence of gingival diseases and dental caries. Unfortunately, the importance of dental care for these patients is often been overlooked by the health planners and society. These patients usually do not seek dental treatment as they also have the burden of medical treatment. In the past, the emphasis was based on providing basic dental care, but in recent years, the dental profession has shown increased concern in providing complete oral health care to the mentally- or physically-challenged patients. The SHCN clinic provides both primary and comprehensive, preventive and therapeutic oral health care to patients with SHCN. These patients are entitled to the opportunity to achieve appropriate rehabilitation, to enable them to realize their maximal level of functioning, and to assist them in not only "normalizing" their lives but also lengthening their life span.

After registration patient report to oral medicine and radiology department. Receiving the patient in the clinic: The patient is guided to sit on the dental chair.

- Child patients are asked to be accompanied by their parents / guardians, while disabled / very senior citizens are allowed to be accompanied by their relatives.
- In case of complaint of pain, details including site, onset, severity, radiation, time course, aggravating factors, relieving factors and associated symptoms are asked as required.

- History Taking: The history including the chief complaint, history of main presenting complaint, past medical & dental history, family history, occupational history, habits like smoking & alcohol, allergies, drugs and other treatment history are noted on the case paper.

- The referral documents / other treatment related documents, if any, provided by the patient is noted.

- The relevant history is noted on the patient's case paper.

- Patient Examination: The patient is examined using disposable gloves and mouth mask

- Extra-oral examination is carried out for the Temporomandibular joint, salivary glands, muscles of mastication and lymph nodes, as per the case indications.

- The patient is carefully examined intra-orally using a mouth mirror & explorer. The findings are noted down on the patient's case paper

- Diagnosis: Based on data gathered by the History and Examination, provisional and differential diagnosis is given on the basis of the collected information.

Then patient is referred to special health care need clinic.

Addressing the concerns of special health care need patients

Meeting The Needs of Families with SHCN patients who Have special health care Needs refers to a variety of conditions. Providing information about clinical facilities and working and assisting staff will help families decide if you can accommodate their patients unique needs. Following is the checklist as a starting point to analyze how one can accommodate special needs or where one may encounter difficulties. Rationales for the questions are given.

- Is the office/clinical area accessible to people in wheelchairs?

As per the requirements, reasonable accessibility/ accommodations are made available in the department. Also, an appropriate referral to higher centers can be done if the accommodation is not feasible.

- Is someone of the staff available, if parents need help getting their child into the office from the parking lot?

Parents are grateful for a little help when carrying items, assisting with adaptive equipment or carrying the child. So, they are encouraged to call the staff of the department, if help is needed.

- Do the staff members know how to perform safe wheelchair transfers?

The most effective transfer method is discussed with the parent and demonstrated following the principles of safe transfers. These techniques are practiced by all concerned staff.

- Do the dental chair have movable armrests to facilitate easy access?

It is difficult to lift patients over armrests or move them into the chair if they are wearing leg or back braces so, the dental chair provided in the department have movable arm rest.

- Can a wheelchair fit parallel to the dental chair in the clinical operatory?

Performing exams and some preventive care with patients in their wheelchairs sometimes is preferable to a transfer, particularly if the wheelchair can be adjusted. So, enough space and arrangements are provided in the operatory to align the wheelchair close to the dental chair.

- Can the x-ray equipment reach low enough to accommodate very young patients or patients in wheelchairs?

Trying to take radiographs on young patients is challenging, but adequate arrangements for the same is provided along with the booster seats if required.

- Do the Centre have panoramic/ OPG x-ray capability?

As, some patients may not be able to bite effectively to hold a bitewing or periapical x-ray, provision of OPG is available in Oral Radiology Department if required.

- Are parents/ family members allowed to be in the operatory with the child/ patient ?

Involving the parents or family members in at least some of the care will increase their understanding of the process and may reduce anxiety on the part of the patient. Parental knowledge is particularly important when working with medically-compromised patients, especially if they have frequent seizures, or swallowing or breathing problems. So, parents are allowed in the operatory as and when required.

- Do the center have a policy on use of patient restraints or aids for patient stability?

Use of physical restraints or techniques for stability in cases which require restraints are explained to parents (including the rationale and timeframe for their use) and used with parents permission.

- Do the center have an individualized recall system for exams/preventive appointments?

Patients with certain medical conditions may need more frequent recall intervals if they are on special diets, have compromised immune systems, or are tube fed. Care is taken in such cases with frequent recall and counselling.

SOP FOR OPD MANAGEMENT AT SHCN CLINIC-

Purpose-

To provide a high quality, patient focused and professional outpatient services the needy SHCN patients.

Responsibility-

Dental Surgeon, Specialist Dentist, Assistant, Staff Nurse.

Procedure-

OPD is conducted on all working days where patients are seen on first come-first serve basis.

Patient calling system:

- On arrival, the patient is seated comfortably in the waiting area. In case, patient is wheelchair bound, he is allowed to wait in lobby with the caretaker and department assistant.
- The nurse enters the patient's details in the OPD register (which includes the patient's registration number, name, age, sex, associated medical history) with the help of caretaker.
- The patient with their caretaker is taken to clinical operatory/ department on his / her turn.
- Disabled individuals are attended on priority basis.

In clinic management of patient:

The patient is guided to sit on the dental chair. In most of the cases, patient is allowed to be accompanied by their parents / guardians, relative or primary care giver. In certain

cases, patients may need to be moved from a wheelchair to a dental chair. OPD is also performed on patients wheelchair if the chair is adjustable.

- The patient is seated in the middle of the dental chair with arms and legs as close to the body as possible.
- After the patient is placed properly in a dental chair, the patient is checked whether he/she is comfortable.
- To keep the airway open, the patient is preferably seated at a 45-degree angle.
- The dental chair is moved slowly, and the light reflector is turned on slowly to prevent discomfort to the patient.
- The use of stimuli such as sudden movements, sounds, and lights is avoided.
- The patient's head is kept steady and stabilised during the procedure
- The Dental Specialist/ Dentist asks the patient to open the mouth and check for details regarding chief complaint and other associated findings in and around oral cavity.
- Various mouthguards are used to control involuntary jaw movements and accidental bites, if required.
- Patient's history is gathered with the help of caretaker followed by patient examination.

History taking –

- Prenatal, natal and neonatal history: helpful in explaining any dental abnormalities or immature motor reflexes.
- Developmental history: To help correlate dental growth and development with general developmental milestones.
- Diet/Feeding history: To determine how difficult the baby was to feed; delays in progression of feeding skills; if special formula, tube feeding or therapeutic diets were needed; food likes, dislikes and allergies; and potential risks for development of dental caries.
- Medical history: To know about history of illnesses, medications taken that might have dental sequelae, history of any surgeries, other medical care related to the child/patient's special health problems.
- Dental history: To gain insight into any teething problems, oral lesions or trauma, home care practices, and previous visits to dental offices.

Oral/ Clinical Inspection-

Oral inspection is conducted with a tongue depressor, mouth mirror, probe if required along with gloves and an adequate light source. For very young patients, this may be accomplished using the two-persons, knee-to-knee position rather than placing the child in a dental chair.

The oral inspection should include assessment for conditions with special emphasis on chief complaints with other findings such as:

- Enamel hypoplasia and enamel demineralization (white spots)
 - Dental caries
 - Developmental anomalies, delayed tooth eruption and malocclusion
 - Dental or orofacial malformation/injury.
 - Diseases of the gingiva and other soft tissues
 - Oral reflexes and oral sensitivity & oral injuries
- The Assistant Dentist helps to note down all the details such as chief complaint, findings, investigations advised, departments referred to if any for medical consent/assistance or opinion, provisional diagnosis, charges for investigations on the case paper.
 - The assistant in the department helps the patient to get all investigations, consents done.

As the patient is done with all investigations and physicians/ specialist's consents if any, is seated again on the dental chair in the operatory, and the Dental specialist assesses all the findings arriving at a final diagnosis followed a comprehensive treatment plan.

Diagnosis -

- The final diagnosis for the case is arrived after reviewing provisional diagnosis, results of diagnostic tests. Help or opinion of other specialties is sought if required.

The treatment plan -

- Comprehensive treatment plan for the case is noted down on the case paper including expected treatment charges, number of visits, pre treatment instructions, cautions if any.
- The same is explained to the patient and his care taker in detail.
- Emergency treatment if any is rendered if indicated.

Consent-

- The consent for the treatment is taken from the patient or care taker or guardian in case of minor.

Payment of charges-

- The payment of treatment charges, if any are done by the patient or the care taker.

The patient is scheduled for treatment as per his convenience at the earliest possible date.

SOP FOR TREATMENT PROCEDURES AT SHCN CLINIC-

Treatment of special health care needs patients is a challenging task as every patient is of a different special health background ranging from mentally handicapped to physically handicapped with varying age groups. So, apart from standard SOPs for different dental procedures, every special health condition needs specific special consideration. Treating these patients following standard SOPs with added special considerations help to manage and treat these patients successfully.

Special considerations for different special health care need patients:**Dental management of patients with cerebral palsy-****Purpose-**

To provide a high quality, patient focused and professional outpatient services to the cerebral palsy patient.

Responsibility -

Dental Specialist, Assistant, staff nurse, staff attender.

Considerations for Dental management of patients with cerebral palsy-

Patients with cerebral palsy, are challenging to manage. For them, treatment sessions are kept brief and in the morning session. Certain specific considerations are-

- During dental treatment procedures, the patient's head is steady and stabilised at all stages.

- Various mouthguards are used to control involuntary jaw movements and accidental bites.
- To keep the airway open, the patient is seated at a 45-degree angle, but not in the supine position.
- The dental chair is moved slowly, and the light reflector is turned on slowly to prevent spastic muscle movements and to eliminate the risk of seizure.
- Muscle relaxant is used when necessary.
- Frequent breaks are given to allow the patient to relax and breathe normally.
- To minimize the startle reflex, the patient is informed/ warned at every stage.
- The use of stimuli such as sudden movements, sounds, and lights is avoided.
- Efficient, fast treatment is done using standard SOPs, and chair time is minimized to reduce muscle fatigue.
- In patients with more complex situations, sedation or general anaesthesia is considered an option.

Dental management of patients with down syndrome-

Purpose

To provide a high quality, patient focused and professional outpatient services to patients with Downs syndrome.

Responsibility

Dental Specialist, Assistant, staff nurse, staff attender.

Considerations for Dental management of patients with down syndrome-

The behavior management skills of the dental professional are the key factor in such patients acceptance of dental treatment.

- Before determining the right approach to the Down syndrome patient, the dentist should consider the level of the mental, emotional, and social development of the patient.
- Most Down syndrome patients are affectionate and cooperative for their dental treatment and can be treated easily with the tell-show-do technique.
- When treating Down Syndrome patients, the need for prophylaxis of subacute bacterial endocarditis and the patient's compliance level is considered.
- During treatment, the gag reflex, if present, is reduced by behavioral management techniques, as comforting and distracting patients. It can also be reduced by intraoral massage and pharmacological or non-pharmacological interventions.
- The recall is planned frequently, and preventive dental treatments are included in the treatment plan. Topical Fluorides, gel or foam applications may be especially beneficial for patients who are unable to use home oral rinses with fluoride or who are at high risk for caries development.

- parents or other caretakers are asked to closely supervise brushing to prevent ingestion of toothpaste. If the child/ patients persists in swallowing the toothpaste, consider using a non-fluoride toothpaste or one made just for very young patients.
- Fluoride varnish is advised at intervals of three to six months in patients who are at increased risk for early childhood caries or with high caries index.
- Some patients develop excessive calculus. Causes can include mouth breathing, inadequate salivary flow, metabolic disorders, kidney failure, tube feedings, oral motor dysfunction or inadequate oral hygiene. Scaling with hand or power instruments is carried out when needed.

Dental management of patients with autism spectrum disorder-

Purpose-

To provide a high quality, patient focused and professional outpatient services & better understanding of health care provider.

Responsibility-

Dental Specialist, Assistant, staff nurse, staff attender.

Considerations for dental management of patients with autism spectrum disorder-

The impaired behavioural activities and complicated medical conditions make the dental management of patients with ASD challenges. Patients with ASD have remarkable difficulties in establishing relationships with other people, understanding and the following information, and dentists may be insufficient in providing cooperation during the dental treatment process. Furthermore, the invasive nature of dental treatment procedures along with the hypersensitivity of patients with ASD to sensory stimulation (sound, touch, and light) may trigger undesired responses during dental treatment. Also, a dental office filled with unpleasant smells, sounds, and colors can be an overstimulating environment for patients with autism.

- The dental treatment sessions of autistic individuals are kept short and the sensory stimulation is minimized.
- In the dental treatment of autistic individuals, many basic behavior management techniques such as tell-show-do, desensitization, and voice control behavior management are applied.
- However, in many cases it may necessary to use advanced behaviour management techniques including sedation and general anaesthesia.

Dental management of patients with intellectual disability-

Purpose-

To provide a high quality, patient focused and professional outpatient services & better understanding of health care provider.

Responsibility-
Dental Specialist, Assistant, staff nurse, staff attender.

Considerations for Dental management of patients with intellectual disability-

- It is helpful to familiarize patients and/or caregivers with the clinical environment without any treatment at the first appointment.
- In the next session, Dental office and instruments are introduced patiently, and the tell-show-do method is also introduced.
- The dental instruments that may cause anxiety are introduced, and then treatment is started.
- It is essential to keep the sessions short. The treatment session is started with the easy-to-tolerate procedures and no pain stimulus is created during the first procedure.
- Behaviour management with positive direction and distraction is applied. Perception difficulties are observed in patients with MR.
- In these patients, directions and explanations are short and simple and the instructions are repeated.
- General anaesthesia or sedation is considered in patients who do not comply and cannot cooperate.

Dental management of patients with physical disability- hearing loss, visual impairment-

Purpose-
To provide a high quality, patient focused and professional outpatient services & better understanding of health care provider.

Responsibility-
Dental Specialist, Assistant, staff nurse, staff attender.

Considerations for Dental management of patients with physical disability- hearing loss, visual impairment-

- Individuals with hearing impairment are informed about the procedures to be performed at the first appointment, and an individual method is developed for the communication during treatment sessions.
- The degree of hearing is noted in the patient's medical history and will greatly influence communication strategy.
- In the first appointment, it is necessary to avoid exaggerated facial movements and mimics when communicating with the patient, not to cause difficulty to read lips.
- Comforting the child patient and increasing the sense of trust by smiling help to establish confidence and healthy communication with the dental professional.

- Before starting the dental treatment session, the instruments are introduced using the show-tell-do method.
- Communication is facilitated by reducing external sounds such as high-speed airturbines, dental aspirator, and radio or TV as much as possible. Mirrors, models, pictures, and written information is used to establish communication.

In visually impaired individuals, treatment is explained using the senses of touch, taste, and smell instead of the tell-show-do technique.

- The environment is introduced, and necessary definitions are made before each treatment.
- The dental professional speaks to the patient in a clear, warm tone of voice and use a descriptive manner to explain the procedures.
- Also, patients are informed about how the equipment may feel and sound and how the procedures will be performed before the instruments are inserted into the mouth.
- The dental restorative materials are placed in small pieces as the sharp taste may irritate the patient.
- Since such patients cannot see and remove dental plaque, tooth brushing is explained by the dentist by holding the brush together with the patient.
- Oral hygiene education and motivation is given by the doctor with the help of accompanying person who is accustomed to the treatment of the patient.

SOP for various other commonly done procedures which is followed in SHCN clinic is as follows -

SOP for taking radiographs-

- Dental Assistant shall take the following steps:
- Check complete dental and medical history on dental card.
- Seat the patient. Take the help of caretaker or attender if required.
- Placement of x-ray film in oral cavity.
- Positioning of x-ray cone.
- Disposable barrier envelopes are recommended to use for each intra-oral film. The number required should be predetermined and dispensed onto the bench top. If additional films are required later, contaminated gloved hands shall not be placed in film bins.

- Transfer tweezers, or a chair side scouting assistant, or de-gloving (i.e. removal of contaminated gloves) used to retrieve additional films.
- Disposable barrier envelopes are used for digital radiographic films.
- All staff involved in clinical radiology wear protection / lead apron.
- The pre-set exposure controls is not touched with contaminated hands. The dentist de-gloves before pressing the controls, or the controls are covered with a disposable barrier. If the dentist de-gloves, new gloves are put on to continue the clinical work.
- When positioning the tube, only the portion of the cone which is covered in plastic is touched.
- After exposure of the film, the barrier envelope of the contaminated intra-oral film is opened and the uncontaminated film shall be shaken onto a covered bench top or into a labeled cup for transport to the darkroom. Proper care is taken to avoid the contamination of workbenches and external surfaces of cups.

SOP for root canal treatment (rct/ pulpectomy)-

- Take complete medical and dental History.
- Do complete Oral Examination.
- Ask for aggravating and relieving pain factors on eating and drinking especially sweet, cold and hot.
- Check BP and Blood sugar level for control bleeding and wound healing.
- Seat the patient.
- Carry out the infection control protocols.
- Administer local anesthesia
- Check for effectiveness.
- Access opening and canals location
- Reshape canals with files and (or) reamers from 15-40 number.
- Do X-ray with the master cone to determine length
- Remove dead tissue or pulp from the tooth chamber and root canals.
- Do frequent irrigation with saline during filing.
- Do complete isolation of the concerned teeth.
- Do Drying of canals with paper points.
- Perform Obturation and final filling.
- Take X-ray.
- Give post-op instructions and medications.
- Give Follow-up appointment after 3 weeks for crown preps.

SOP for crown/FPD –

- Take complete medical and dental history
- Do complete oral examination.
- Check BP and BSL for control bleeding and wound healing.
- Seat the patient.
- Carry out Infection control protocols.
- Assess the crown indicated the tooth
- Do tooth cutting as per guideline.
- Give occlusal clearance.
- For preformed crown, select appropriate crown size
- Modify the crown for height, crimping if necessary/ for cast metal or ceramic crown carry out impression and other lab procedures to fabricate the crown or FPD.
- Take trial of crown/FPD.
- after proper fitting do the cementation of crown/FPD.

SOP for scaling and polishing-

- Take complete medical and dental history.
- Do complete oral examination.
- Ask for aggravating and relieving pain factors on eating and drinking especially sweet, cold and hot.
- Check BP and BSL for control bleeding and wound healing.
- Seat the patient.
- Carry out Infection control practices.
- Remove Plaque with scaler.
- Polishing done with polishing paste.
- Post op instructions.
- Medicated, if needed.

SOP for glass ionomer filling (GIC) -

- Take complete medical and dental history.
- Do complete oral examination.
- Do assessment of the tooth in question, ask for aggravating and relieving pain factors on eating and drinking especially sweet, cold and hot.
- Seat the patient.
- Carry out Infection control practices.
- Administer anesthesia, if necessary.
- Remove carious lesion with round burr.
- Explore with spoon excavator for any remaining soft caries.
- Wash the cavity.
- Isolation
- Fill the cavity following standard instructions by the manufacturer.

- Check for high spots.
- Application of petroleum jelly on the restored surface.
- Polishing of the restoration after prescribed time period.
- Medicated, if needed.

SOP for light cure filling-

- Take complete medical and dental history.
- Do complete oral examination.
- Check BP and BSL for control bleeding and wound healing.
- Seat the patient.
- Carry out Infection control practices.
- Administer anesthesia, if necessary.
- Remove carious lesion with round burr.
- Explore with spoon excavator for any remaining soft caries.
- Wash the cavity.
- Isolation
- Etching for 15-20 sec
- Wash thoroughly with water
- Isolation
- Drying of cavity but do not desiccate
- Apply bonding and light curing for 15-20 sec.
- Add the filling materials in small increments and curing each increment for 15-20 sec.
- Check for high spots.
- Give medicines, if needed.

SOP for simple tooth extraction -

- Take complete medical and dental history.
- Do complete oral examination.
- Evaluate through x-ray, the teeth which cannot be saved through fillings or rootcanals.
- Check BP and BSL for control bleeding and wound healing.
- Seat the patient.
- Carry out Infection control practices.
- Administer anesthesia, if necessary.
- Check for effectiveness
- Carry out Infection control protocols.
- Adjust the dental chair position.
- Luxate the teeth by elevator, when fully luxated pull out by forceps.
- Check the socket thoroughly for any remaining debris.
- Pressure pack with cotton soaked in saline.
- Post op instructions.
- Give Medications, if needed.

SOP for surgical tooth extraction -

- Take complete medical and dental history.
- Do complete oral examination.
- Check BP and BSL for control bleeding and wound healing.
- Seat the patient.
- Carry out Infection control practices.
- Evaluate through x-ray.
- Mostly root treated teeth broke during extraction, those impacted in gum.
- Administer anesthesia, if necessary.
- Check for effectiveness
- Adjust the dental chair position.
- Give precise and clean incision
- Raise flap
- Expose the teeth by bone cutting, if necessary.
- Remove tooth,
- Check the socket for any debris.
- Smooth the Sharp edges of bone.
- Replace the flap.
- Suture
- Pressure pack with cotton.
- Give Post op instructions.
- Give Medication.
- Recall for suture removal after 07 days.