Bapuji Education Association ®

College of Dental Sciences, Davangere.

PATIENT SAFETY MANUAL

PATIENT SAFETY CURRICULUM

SAFETY CULTURE

To demonstrate the burning platform of patient safety and quality improvement in the current healthcare era as it relates to the achievement of zero harm.

To explain how varying improvement methodologies can co-exist to drive improvement in an organization with the use of an adapted simple, common language that fosters improvement across all layers of the enterprise.

To connect the work of patient safety and quality improvement to the mission, vision, and values of an organization.

Making an institutional culture of patient safety through strategic planning, learning from errors, commitment to leadership, documenting and improving patient safety, encouraging and practicing teamwork, spotting potential hazards and using systems for reporting and analyzing adverse events and measuring improvement patient safety is a relatively new discipline, the main objectives of which are to facilitate the avoidance of preventable adverse events (accidents, errors and complications) associated with health care (in this case, dentistry) and to limit the impact of inevitable adverse events.

However, patient safety is multifactorial and very complex; it includes many key elements and has various facets and cannot be simply defined as the provision of safe health care or the protection of patients from harm by health care providers.

Although both the patient and the practitioner are inherently involved in patient safety, there are also economic, social, cultural and organisational aspects that must be taken into account.

It is apparent that almost all health organisations undertake studies and implement measures to improve patient safety.

The World Health Organisation (WHO) has embarked on an initiative that aims to bring a culture of patient safety to all levels of the global health arena through the various strategies encompassed by the World Alliance for Patient Safety.

Similarly, the Organisation for Safety, Asepsis and Prevention (OSAP) has launched considerable efforts in this field.

OBJECTIVES

Educating staff regarding the patient safety culture

A fundamental feature of a culture of patient safety is the sharing of experiences.

A one-time run through of safety guidelines isn't enough to keep these rules top of mind.

All auxiliaries, hygienists and dental practitioners should undertake training, assimilate the culture and share experiences.

Enforce the Guidelines

Do not perform a root canal treatment without using a rubber dam.

Never re-use containers designed for single use only.

Never prescribe any drug without consulting the patient's clinical record and without directly asking the patient about allergies or other health problems.

Never take an X-ray in a woman of childbearing age without protection and without asking about possible pregnancy.

Incorporate the Guidelines into Routine Safety Training

Dental practitioners and patients face many obstacles and responsibilities each day, and safety guidelines can easily make their way down the priority list.

Increased awareness of and familiarity with issues related to patient safety on the part of all dental practitioners and staff are naturally crucial and can be achieved through the provision of materials and documents that aim to improve patient safety and the quality of oral health care and to reduce the incidence of adverse events and errors.

Policy statement

To promote patient safety,

1. Professional continuing education by al licensed dental professionals to maintain familiarity with current regulations, technology, and clinical practices.

2. Compliance and recognition of the importance of infection control policies, procedures, and practices in dental health care settings in order to prevent disease transmission from patient to care provider, from care provider to patient, and from patient to patient.

3. Routine inspection of physical facility in regards to patient safety. This includes development and periodic review of office emergency and fire safety protocols and routine inspection and maintenance of clinical equipment.

4. An accurate, comprehensive, and up-to-date patient data and history including medications and allergy list to ensure patient safety during each visit.

5. Adherence to AAPD recommendations on behaviour guidance, especially as they pertain to use of advanced behaviour guidance techniques (i.e., protective stabilization, sedation, general anaesthesia).

6. Standardization and consistency of processes within the practice. Dentists should emphasize procedural protocols that protect the patient's airway (e.g., rubber dam isolation guard against unintended retained foreign objects (e.g., surgical counts; observation of ' placement/removal of throat packs, retraction cords, cotton pellets, and orthodontic separators), and minimize opportunity for iatrogenic injury during delivery of care (e.g., protective eyewear).

7. Minimizing radiation exposure through adherence to as low as reasonably achievable principle, equipment inspection and maintenance, and patient selection criteria.

8. All facilities performing sedation for diagnostic and therapeutic procedures to maintain records that track adverse events. Such events then can be examined for assessment of risk reduction and improvement in patient safety.

9. Promoting a culture where staff members are empowered and encouraged to speak up or intervene in matters of patient safety.

PATIENT SCREENING

Anticipation of patient needs during treatment is essential to the delivery of adequate treatment in a safe environment.

A. Preparing for Treatment of a Patient

- Inspect the entire dental unit for dust, stains and other potentially contaminating debris.
- While wearing gloves, clean any visibly stained areas with detergent from the soap dispenser, remove the detergent with towel soaked in tap water, and dry wet surfaces with a disposable paper towels.

- Wipe the treatment focus area and adjacent surfaces with disinfectant including exposed surfaces of the air-water syringe, the saliva ejector and the high-speed evacuation system (HVS) hoses.

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B. Receiving Your Patient

- Greet and Seat the patient and make necessary chair adjustments for patient comfort.
- Place patient's drape.
- Open instrument tray and arrange instruments on appropriate work surface.
- Review patient's record and place radiographs on viewer.

C. Patient Treatment

- Provide the patient with a pair of safety glasses to be worn during the procedure.
- Wash hands and gloved, touch only the patient and barrier covered areas or areas that have been cleaned and disinfected.
- After touching the patient's mucosal surface or saliva the treatment gloves becomes contaminated.
- Be continually conscious of restricting contamination to the treatment focus area.
- Do not touch the case sheet or radiographs with contaminated gloves. If an entry has to be made in the record during treatment, remove treatment gloves or an appropriate barrier must be used on the pen and over the portion of the case sheet that may become contaminated.
- A rubber dam should be used whenever possible in tooth preparation.
- Dropped instruments are not to be picked-up or reused; if the instrument is critical to the treatment being provided obtain a sterilized replacement instrument.
- Disposable item should be discarded immediately to avoid contamination of other items.
- Contaminated patient-related items should be cleaned and disinfected prior to the removal from clinic areas.

PATIENT SAFETY IN DENTISTRY

One effective way of prevent damage to patients in dentistry is reporting the adverse events so they can be investigated.

Healthcare Systems to Prioritize Patient Safety

Patient safety in any branch of medicine has to start with the healthcare system as a whole.

They need to be keen on medical procedures so as to prevent any injuries.

Members of a dental team should also make it their responsibility to report errors and accidents and discuss it amongst themselves when they hold staff meetings.

Dentists to focus on clinical records

The importance of clinical records cannot be overemphasized. A dentist ought to check the patient's medical history before treatment.

lt is also important that clinical records showing allergies, pathologies and medication be updated regularly.

All these measures aim at helping the dentist to treat the patient without making any unnecessary errors.

Cleaning, disinfection and sterilization protocol for reusable dental instruments

Instrument reprocessing is the most important aspect of Dental Infection Control as it deals with items that have the greatest potential for disease transmission during dental care.

Contaminated instruments can transmit infections to patients if used during clinical procedures and the adequate reprocessing of instruments between each patient use is essential to prevent the transmission of infection from one patient to another.

The type of instrument and its intended use will determine the method of reprocessing and, as a general rule; if an instrument cannot be cleaned it cannot be safely reprocessed.

Any dental instrument that enters the oral cavity is classified as critical or semi critical surfaces per Spaulding‟s Classification and must be sterilized.

Single use items: Dental items designated as single use by the manufacturer must not be reprocessed and reused on another patient, but must be discarded after use.

Radiation safety

Following the concept of standard precautions, each patient will be managed as though potentially infectious and appropriate barriers will be utilized throughout the exposure and processing of radiographs.

Two different situations arise where radiographs are required:

(A) Intraoral Films

(B) Panoramic Radiographs.

Since the procedures require different preparation and execution, each will be described separately. Approved clinic attire, use of appropriate barriers, hand washing, and gloves are required at all times when radiologic examinations are performed.

A. Intraoral Films

a) The operatory must be prepared prior to seating the patient. This will be accomplished by the person taking the radiographs in the following manner.

- Wash hands with antimicrobial hand soap as described previously.
- Apply adhesive plastic barriers to the following:
- X-ray electronic exposure button,
- Dental chair adjustment switches,
- Designated areas on the portable lead protective shield between adjacent x-ray operatories, when applicable, and
- Examination light handles.

(b) Place disposable head rest cover on headrest of dental chair.

(c) Place barrier on work surface (area on which x-ray film packets will be placed).

(d) The patient treatment sequence should be as follows:

- Disinfect the chair with low to intermediate disinfectant
- Seat patient and adjust the headrest with disposable headrest cover present.

3. Remove any patient ear rings, necklaces and other head and neck jewellery and eye glasses onto bench paper and intra oral removable prosthesis or appliances and have the patient place them into a denture cup.

4. Place the lead apron with the thyroid collar on the patient and adjust to ensure that all appropriate areas of the patient are shielded.(special care needed in case of children and pregnant women)

B. Panoramic Radiographs

These radiographs are taken in rooms containing the specialized equipment required for panoramic exposures. The rooms are not equipped in the same way as the intra-oral x-ray rooms and the stepwise procedures vary slightly from those followed in taking intraoral films. Complete the procedures in the following sequence:

a. Wash hands and put on gloves.

b. Place the disposable cover over the chin rest and place the bite stick on the chin rest. Apply adhesive plastic barrier to exposure switch.

c. Position the patient and expose the film.

d. Remove and discard the bite stick and disposable (chin rest) cover.

Disinfect any contaminated areas. Remove gloves

e. Process the exposed film.

f. Dismiss the patient, re-glove and disinfect all areas that were contaminated during the procedure.

Asepsis related to dental laboratory procedures

Standard precautions and safe work practices must be used in the dental laboratory.

The most important phase is the thorough cleaning of material that has contacted oral tissue (e.g. impressions).

Thorough rinsing with cold running water, followed by the application of a diluted detergent and further rinsing must continue until all visible contamination is removed.

Manufacturers 'instructions for disinfectants need to be carefully followed when cleaning and disinfecting prosthetic items and materials.

Even after cleaning there may still be biological contamination present and at all stages of handling of the prosthetic item standard precautions must be applied.

Be Cautious When Prescribing Medication

Optimizing drug therapy is an essential part of caring for patients.

The process of prescribing a medication is complex and includes: deciding that a drug is indicated, choosing the best drug, determining a dose and schedule appropriate for the patient's physiologic status, monitoring for effectiveness and toxicity, educating the patient about expected side effects, and indications.

Readiness for Emergencies

Emergency cases in dentistry are few but when they happen when the dental team is not prepared.

The goal here is for members of the dental team to be ready with treatment, and know their roles once they are informed that they need to attend to an emergency situation.

During this situation, dentists should keep close to the patients and accompany them in the event that they are transferred to another medical facility.

Many of the adverse events happening in dental care are as a result of a few mistakes.

Patient Safety and Error Management

A safety management system involving error reporting, learning from errors, and the fair exchange of information should be established in hospitals and in doctors' outpatient practices.

An error management system is implemented in which critical incidents are identified, reported, and analyzed so that similar events can be prevented, and measures for the prevention of critical incidents and errors should also be implemented and evaluated. A temporary standing committe will be formed to evaluate the errors and find a protocol of managing specific errors or accidents. The team includes the HOD or a Professor of the respective department in which an incident occurred. whenever preventable adverse events do occur, the persons involved should take action to prevent further harm to the patient and other involved individuals. However, prior to this the institute had incorporated the training through foundation courses and seminars within the PG/UG curriculum regarding the management of general emergencies and errors.

The Possible errors collectively addressed were as follows:

Errors in Clinical Documents, information, and Referral of Patients

- Histories which lack essential data (clinical and allergic background and updated information about medication)
- Failure to provide adequate information to the patient about the procedure, its potential risks or recommendations that must be followed to avoid complications.
- Inaccuracies in patient referrals to other professionals that may lead them to make mistakes.

Prescribing Errors

- Errors in the indication for the drug (in relation to the type of drug, dose or duration of treatment)
- Allergic reactions that occur because of a lack of adequate medical records
- Drug interactions that occurs because the prescribing practitioner lacks the relevant pharmacological knowledge or fails to update the list of drugs taken by the patient.
- Wrong dose of the drug (especially common in children and in patients with alterations in the metabolism or elimination of drugs)
- Duplication of drugs (especially common with anti-inflammatories) because of a lack of coordination among the various professional prescribing for the same patient.

Errors in Surgical Events

- Errors in treatment planning (sometimes associated with lack of adequate clinical records previous to treatment)
- Errors in the type of procedure performed.
- Errors in the area of intervention that occur as a result of forgetfulness or the inappropriate interpretation of records by the professional
- Errors in pre-operative prophylaxis in medically compromised patients
- Errors in the monitoring and control of operated patients (no post-operative instruction sheet or lack of post-surgical control)
- Post-surgical infections (detected late or inadequately treated).

Accidents & Negligence

- The patient falls (due to poorly organized furniture, architectural floors, etc.)
- Heavy or sharp instruments or apparatus fall on the patient
- The patient suffers accidental cuts and burns
- The patient ingests/inhales small dental material
- Error which is difficult to justify due to a lack of knowledge or basic skills, failure to take minimum precautions, carelessness, etc.

FUMIGATION PROTOCOL

Cleaning and Fumigation

- Dairy cleaning should be carried out after the operating sessions are over.
- All the surfaces should be cleaned with detergent and water and may be wiped over
- With a phenol if any spills with brood / body fluid are present.
- All the walls must be wiped down to hand height every day.
- The floors should be scrubbed with warm water and detergent and dried. No disinfectant is necessary.
- The OT table and other non clinical equipments must be wiped to remove all visible dirt and left to dry.
- Weakly cleaning of all the areas inside the operating theatre complex should be done thoroughly with warm water and detergent and dried.
- The storage shelves must be emptied and wiped over, allowed to dry and restacked.

Procedure for fumigation

The windows should be seared and formaldehyde should be generated either by boiling a solution of formalin 40% or by adding it to potassium permanganate, in a metal vessel on the

floor, since heat is also generated. The door is then closed and sealed' For a 10 x 10 x 10 ft room - 150 gm potassium permanganate and 280 ml of formalin are used.

Fumigation should be performed in the evening prior to the weekend holiday.

ln case of procedures with infective cases the fumigation is performed soon after the completion of procedure.

CONTROL MEASURES TO REDUCE RISK

- The procedure must only be carried out by suitably trained and authorised personnel.
- Sufficient warning signs must be displayed to ensure there is no inadvertent exposure to vapour. Where possible rooms should be locked to prevent entry.
- Exposure to liquid formaldehyde during preparation should be kept to a minimum.
- When priming fumigation kettles the exact amount of formaldehyde should be dispensed into a small plastic universal container within a fume cupboard.
- The controls should be operable from outside.
- Suitable respiratory protective equipment [full-face respirator] must be available for use in the event of emergency/inadvertent release.

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