



AL-AZHAR DENTAL COLLEGE

(APPROVED BY DENTAL COUNCIL OF INDIA & AFFILIATED TO KUHS)

RUN BY NOORUL ISLAM TRUST

PERUMPILLICHIRA P. O., THODUPUZHA, IDUKKI DIST., KERALA– 685 605

PATIENT SAFETY CURRICULUM

PATIENT SAFETY MANUAL



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Affiliated To

KERALA UNIVERSITY OF HEALTH SCIENCES





PATIENT SAFETY MANUAL

Introduction:

Patient safety is the primary concern in any medical practice, and dental clinics are no exception. A patient safety manual is essential for every dental clinic to ensure that patients receive safe, high-quality dental care. This manual outlines the policies and procedures that dental clinics must follow to ensure patient safety. The purpose of this patient safety manual is to provide guidelines for dental clinics to follow to ensure the safety of patients. It outlines the procedures and protocols that must be in place to prevent adverse events and promote patient safety. This manual applies to all dental clinics and their staff. It covers all aspects of patient safety, including infection control, medication safety, equipment safety, and emergency preparedness.



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Policy and Procedures:

1. Infection Control:

a. Hand hygiene: All staff must wash their hands or use alcohol-based hand sanitizer before and after treating each patient.

b. Personal protective equipment (PPE): All staff must wear appropriate PPE, including gloves, masks, and protective eyewear, when treating patients.

c. Sterilization and disinfection: All instruments and equipment must be properly sterilized or disinfected between patients.

d. Environmental cleaning: The dental clinic must be cleaned and disinfected regularly to prevent the spread of infections.

2. Medication Safety:

a. Medication storage: All medications must be stored in a secure and locked area to prevent unauthorized access.

b. Medication dispensing: All medications must be dispensed by a licensed healthcare provider or a pharmacist.

c. Medication administration: All medications must be administered in accordance with the manufacturer's instructions and in the appropriate dosage.

3. Equipment Safety:

a. Maintenance and repair: All equipment must be properly maintained and repaired to ensure its safety and effectiveness.

b. Calibration and testing: All equipment must be calibrated and tested regularly to

ensure accuracy and reliability.

c. Electrical safety: All electrical equipment must be inspected regularly to ensure it

is safe to use.

4. Emergency Preparedness:

a. Emergency plan: The dental clinic must have an emergency plan in place that

includes procedures for medical emergencies and natural disasters.

b. Staff training: All staff must be trained in emergency procedures and know their

roles in an emergency.

c. Emergency supplies: The dental clinic must have emergency supplies, including

first aid kits and emergency medications, readily available.

5. Patient Care:

This section should outline the policies and procedures for patient care, including

patient assessment, treatment planning, informed consent, and record keeping. It

should also cover communication with patients and their families.

6. Staff Training and Education:

This section should outline the dental clinic's policies and procedures for staff

training and education. This includes initial training, ongoing education, and

competency assessments.

7. Quality Assurance and Performance Improvement:

This section should outline the dental clinic's quality assurance and performance improvement (QAPI) program. It should include policies for monitoring, reporting, and analyzing adverse events and near misses.

8. Patient Rights and Responsibilities:

This section should outline the rights and responsibilities of patients in the dental clinic. This includes their right to receive safe and effective care, to be informed of their treatment options, and to make decisions about their care.

MEDICATION SAFETY

Implementing these infection control measures in dental offices can help prevent the transmission of infectious diseases and ensure patient safety.

Medication safety is an essential aspect of providing dental care. To ensure the safe use of medications in dental offices, the following guidelines should be implemented:



1. **Prescription accuracy:** Dental professionals should ensure that prescriptions are accurate, legible, and complete. This includes the name of the patient, drug name, dose, and frequency.

2. **Medication storage:** Medications should be stored in a cool, dry place and out of reach of children. Expired medications should be properly disposed of.

3. **Medication administration:** Dental professionals should administer medications according to the manufacturer's instructions and should use the appropriate dosage form, route of administration, and technique.

4. **Medication reconciliation:** Dental professionals should perform medication reconciliation to ensure that patients are not taking medications that can interact with each other. This can be done by reviewing the patient's medication list and discussing any changes with the patient and their healthcare provider.

5. Patient education: Patients should be educated on the proper use and administration of medications, including any potential side effects and drug interactions.

6. **Medication labeling:** Medications should be properly labeled with the patient's name, drug name, dose, and frequency. This helps to prevent medication errors and ensures that medications are given to the correct patient.

7. **Medication documentation:** Dental professionals should document all medications that are administered or prescribed, including the date, time, and dose. This helps to ensure continuity of care and can prevent medication errors.

Prof. Dr. Harvey Tomas MDS Principal Al-Azhar Dental College 8. Adverse event reporting: Dental professionals should report any adverse events related to medications to the appropriate regulatory agency. This helps to identify potential safety issues and can lead to improvements in medication safety.

EQUIPMENT SAFETY

Equipment safety is essential in a dental office to ensure the safety of patients and dental professionals. The following are some guidelines for equipment safety in the dental office:

- 1. Regular maintenance and inspection: All equipment should be regularly inspected, maintained, and serviced according to the manufacturer's instructions. This includes regular calibration and cleaning to prevent malfunctions and ensure proper functioning.
- 2. Proper use and training: Dental professionals should be trained on the proper use of all equipment and should follow the manufacturer's instructions for use. This includes proper positioning, settings, and adjustments.
- 3. Electrical safety: All electrical equipment should be properly grounded and should meet local electrical codes. Electrical cords should be regularly inspected for damage and replaced if necessary.

4. Radiation safety: All X-ray equipment should be properly shielded and maintained to prevent exposure to radiation. Dental professionals should wear appropriate protective equipment, such as lead aprons and thyroid collars, when taking X-rays.

5. Infection control: All equipment that comes into contact with patients should be properly sterilized or disinfected between patients. This includes handpieces, dental chairs, and X-ray sensors.

6. Emergency equipment: All dental offices should have emergency equipment readily available, including automated external defibrillators (AEDs), oxygen tanks, and emergency medications. Dental professionals should be trained on the proper use of this equipment.

7. Storage and transportation: All equipment should be stored properly when not in use to prevent damage. When transporting equipment, it should be properly secured and protected from damage.

8. Reporting of equipment malfunctions: All equipment malfunctions should be reported to the appropriate regulatory agency or manufacturer to prevent future incidents.



EMERGENCIES

Dental offices should be prepared for **emergencies** to ensure the safety of patients and staff. The following are some guidelines for emergency preparedness in the dental office:

- 1. Develop an emergency plan: Dental offices should have a written emergency plan that includes procedures for responding to emergencies. The plan should include the identification of potential emergencies, the roles and responsibilities of staff members, and procedures for contacting emergency services.
- 2. Emergency equipment: Dental offices should have emergency equipment readily available, including automated external defibrillators (AEDs), oxygen tanks, and emergency medications. Staff should be trained on the proper use of this equipment.
- 3. Staff training: All staff should be trained on the emergency plan and procedures. Regular emergency drills should be conducted to ensure that staff members are prepared to respond to emergencies.
- 4. Patient screening: Dental offices should screen patients for medical conditions and allergies that could increase their risk of experiencing an emergency during treatment. Patients should be advised of potential risks and given the opportunity to ask questions.

- 5. Communication: The emergency plan should include procedures for communicating with patients, staff members, and emergency services. This may include the use of public address systems, cell phones, or two-way radios.
- 6. Evacuation procedures: Dental offices should have procedures for evacuating the building in the event of an emergency. All staff members should be trained on evacuation procedures, and regular drills should be conducted.
- 7. Medical emergencies: Dental professionals should be trained on how to respond to medical emergencies, including heart attacks, allergic reactions, and seizures. All staff members should be trained on basic life support techniques, such as cardiopulmonary resuscitation (CPR).
- 8. Fire safety: Dental offices should have procedures for responding to fires, including the use of fire extinguishers and evacuation procedures.



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PATIENT CARE

Dental offices should provide high-quality care to patients while ensuring their safety and comfort. The following are some guidelines for **patient care** in dental offices:

- 1. Patient education: Patients should be educated on the importance of oral health and the procedures that they will undergo. This includes the benefits and risks of procedures, as well as information on post-operative care.
- 2. Informed consent: Dental professionals should obtain informed consent from patients before performing any procedures. This includes providing patients with information on the procedures, the benefits and risks, and the potential alternatives.
- 3. Pain management: Dental professionals should provide pain management techniques to patients to ensure their comfort during procedures. This may include local anesthesia, nitrous oxide, or sedation.
- 4. Infection control: Dental professionals should follow infection control guidelines to prevent the spread of infections. This includes proper hand hygiene, sterilization of instruments, and use of personal protective equipment.



- 5. Patient comfort: Dental offices should ensure that patients are comfortable during procedures. This includes providing appropriate seating, temperature control, and entertainment such as TV or music.
- 6. Timely care: Dental offices should provide timely care to patients. This includes scheduling appointments in a timely manner and minimizing wait times in the office.
- 7. Continuity of care: Dental offices should ensure continuity of care for patients. This includes keeping accurate patient records and communicating with other healthcare providers.
 - 8. Quality assurance: Dental offices should implement quality assurance measures to ensure that they are providing high-quality care to patients. This may include patient satisfaction surveys, monitoring of clinical outcomes, and regular staff training and education



PATIENT RIGHTS

- 1. Respect and dignity: Dental professionals should treat patients with respect and dignity at all times
- 2. This includes being courteous, polite, and non-judgmental.
- 3. Privacy: Patients have the right to privacy during dental procedures. This includes the protection of their personal and medical information and the right to choose who is present during treatment.
- 4. Informed consent: Patients have the right to be fully informed of the benefits, risks, and potential alternatives to dental procedures before giving their consent.
- 5. Access to care: Patients have the right to timely access to high-quality dental care, regardless of their race, gender, age, religion, or sexual orientation.
- 6. Participation in treatment decisions: Patients have the right to participate in treatment decisions and to have their concerns and questions addressed.
- 7. Safety: Patients have the right to receive care that is safe and free from harm.
- 8. Continuity of care: Patients have the right to continuity of care and to be informed of their treatment options.



- 9. Confidentiality: Patients have the right to confidentiality of their medical information and the right to access and request changes to their medical records.
- 10. Complaint resolution: Patients have the right to voice their concerns and complaints about their care and to receive a prompt response.

DENTAL RADIATION SAFETY

Radiation safety is an important consideration in dental clinics, as dental procedures often involve the use of X-rays. Here are some radiation safety protocols that should be followed in dental clinics:

- 1. Protective equipment: Dental staff should wear protective equipment such as lead aprons, thyroid collars, and gloves to minimize exposure to radiation.
- 2. Distance: Dental staff should maintain a safe distance from the X-ray equipment while it is in use.
- 3. Shielding: The X-ray equipment should be shielded with lead-lined walls or barriers to prevent radiation from leaking into other areas.
- 4. Patient positioning: Patients should be properly positioned and immobilized to minimize exposure to radiation.
- 5. Proper technique: Dental staff should use proper technique when taking X-rays, such as using the lowest dose of radiation necessary and avoiding unnecessary retakes.
- 6. Regular equipment maintenance: X-ray equipment should be regularly maintained and calibrated to ensure that it is functioning properly and emitting the correct amount of radiation.

7. Record-keeping: Dental clinics should maintain records of radiation exposure for both staff and patients, and should comply with local and national regulations regarding radiation safety.

POST EXPOSURE PROPHYLAXIS IN CASE OF NEEDLE STICK INJURY

Needle stick injuries can occur in healthcare settings and can expose healthcare workers to bloodborne pathogens such as HIV, hepatitis B, and hepatitis C. Post-exposure prophylaxis (PEP) is a treatment that can help reduce the risk of infection after a needle stick injury. Here are some steps that should be taken in case of a needle stick injury:

- 1. Wash the affected area with soap and water.
- 2. Report the injury immediately to your supervisor or occupational health department.
- 3. Identify the source patient and test them for bloodborne pathogens if their status is unknown.
- 4. Assess the risk of infection based on the type of needle, the depth of the injury, and the potential exposure to blood or bodily fluids.
- 5. If the risk of infection is significant, PEP may be recommended.
- 6. PEP usually involves taking a combination of antiretroviral medications for a period of 28 days.
- 7. PEP should be started as soon as possible after the injury, ideally within 2 hours.



8. Follow-up testing for bloodborne pathogens should be conducted at regular intervals after the injury.

It is important for healthcare workers to receive training on how to prevent needle stick injuries, including safe handling and disposal of needles and other sharps. In addition, healthcare workers should receive education on the signs and symptoms of blood borne pathogen infections and be encouraged to report all needle stick injuries as soon as possible to ensure prompt evaluation and treatment.

MANAGEMENT OF MEDICAL EMERGENCIES IN DENTAL SETTINGS

Medical emergencies can occur in dental settings, and it is important for dental staff to be prepared to manage them quickly and effectively. Here are some steps that should be taken in the event of a medical emergency in a dental setting:

- 1. Call for emergency medical services (EMS) immediately if the situation is life-threatening.
- 2. Stay with the patient and provide reassurance and support.
- 3. Determine the nature and severity of the emergency and provide appropriate treatment.
- 4. Administer basic life support measures, such as cardiopulmonary resuscitation (CPR) if necessary.
- 5. Activate the office's emergency response plan, if available.
- 6. Provide oxygen if necessary.

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- 7. Administer medication if appropriate, such as epinephrine for an allergic reaction or nitroglycerin for chest pain.
- 8. Monitor the patient's vital signs, including pulse, blood pressure, and respiration.
- 9. Keep the patient warm and comfortable.
- 10. Document the incident and all actions taken in the patient's medical record.

It is important for dental staff to receive training in basic life support and emergency response, as well as to have an established emergency response plan in place. Dental clinics should have emergency equipment readily available, such as oxygen, an automated external defibrillator (AED), and emergency medications. Regular emergency drills and training can help ensure that dental staff are prepared to respond effectively to medical emergencies.

