

## **PATIENT SAFETY MANUAL**

Patient safety is of paramount importance in JKKN Dental College and Hospitals. As an academic institution committed to excellence, it is crucial to foster a culture of patient safety, where the well-being of patients is at the core of all activities.

Patient safety in a dental college refers to the implementation of measures and protocols to protect the well-being of patients who seek dental care and treatment from dental students and faculty. It involves creating a safe and conducive environment that minimizes the risk of harm to patients during their interactions with dental professionals.

Ensuring patient safety is a fundamental ethical and professional responsibility in dental education and practice.

### **PURPOSE:**

The primary purpose of the patient safety manual in the dental outpatient department is to establish a comprehensive set of guidelines, protocols, and procedures aimed at ensuring the safety and well-being of patients.

It is a critical resource for all staff members, including dental students, faculty, and healthcare providers, to maintain a safe environment and deliver high-quality patient care. By adhering to the safety protocols, the dental outpatient department can instil confidence in patients and create a culture of excellence in patient safety.

## **INFECTION PROTOCOL**

Infection control is of paramount importance in a dental outpatient setting to ensure the safety of both patients and healthcare providers. By implementing rigorous infection control measures, we can effectively minimize the risk of transmitting infections.

### **Step 1: Hand Hygiene**

Proper hand hygiene is the cornerstone of infection control. All the students and dental staff, including dentists, hygienists, and assistants, must adhere to strict hand washing guidelines.

They should wash their hands with soap and water for at least 20 seconds before and after each patient contact. Alcohol-based hand sanitizers can be used.

### **Step 2: Personal Protective Equipment (PPE)**

1. To protect against cross-contamination, appropriate Personal Protective Equipment (PPE) must be worn during patient care procedures.
2. This includes wearing disposable gloves, masks, protective eyewear, and gowns as necessary.
3. Students and staff should change gloves and other PPE between patients to prevent the transfer of microorganisms.
4. Disposable gloves should be worn for all patient contact, and they should be changed between patients.
5. Masks, such as N95 respirators or surgical masks, are essential for reducing the risk of respiratory droplets containing microorganisms.
6. Protective eyewear, such as face shields or goggles, should be used to shield the eyes from potential splashes or aerosols.
7. Gowns should be worn during procedures that may generate splashes or create potential for contamination.
8. Dental students should be thoroughly trained in the proper donning (putting on) and doffing (taking off) of PPE to prevent accidental contamination.
9. This includes carefully removing gloves without touching the outer surface, discarding used PPE in designated containers, and performing hand hygiene immediately after PPE removal.

### **Step 3: Sterilisation and Disinfection**

1. All dental instruments and equipment that come into direct contact with patients must undergo proper sterilisation and disinfection processes.
2. Strict adherence to validated protocols for cleaning, sterilisation, and disinfection will ensure that instruments are free from pathogens before reuse.
3. Students should submit their instruments in the sterilisation pouch to the department for sterilisation at the end of the procedures.

#### **Step 4: Environmental Cleaning**

1. Regular cleaning and disinfection of the dental treatment areas are essential to maintain a safe environment. Surfaces such as dental chairs, countertops, and equipment should be disinfected with appropriate agents between patients.
2. High-touch surfaces, such as doorknobs, light switches, and reception counters, should receive frequent attention to prevent cross-contamination.
3. Dental students should also be vigilant in cleaning and disinfecting dental chairs and equipment between patients.
4. Avoid touching surfaces and other sterilised equipment with gloved hands.

#### **Step 5: Waste Management**

Proper waste management is crucial to prevent the spread of infections. Regular waste should be segregated and disposed of in colour-coded dustbins kept in the department. Segregation of needles, cotton, and gloves should be done properly for easy disposal.

### **Patient identification and referrals**

#### **Patient Identification:**

- a. Verify the patient's identity using at least two unique identifiers (e.g., name, date of birth) before providing any dental treatment.
2. Ensure that the patient's identification information is accurately recorded in the dental records.
3. Obtain informed consent before initiating any treatment and ensure patients are fully aware of potential risks and benefits.
4. In the case of minor patients, information should be obtained from the patient's guardian.

**Informed Consent:**

1. Obtain written informed consent from the patient or their legally authorised representative before starting any dental procedure.
2. Document the consent in the patient's record. Maintain strict confidentiality of patient information.
3. Limit access to patient records and other sensitive information to authorised personnel only.

**Radiation Safety Protocol**

Radiation safety is a critical aspect of patient care in a dental outpatient setting, particularly when X-ray procedures are involved. Students must understand and implement strict radiation safety protocols to protect both patients and themselves from unnecessary radiation exposure.

Objective: Ensure the safe use of radiographic equipment to minimise radiation exposure.

1. The students should have knowledge of the principles of radiation protection, proper use of X-ray machines, and techniques to minimise radiation exposure.
2. Lead aprons, thyroid collars, and shields should be used during X-ray procedures.
3. Students should have knowledge of how to correctly position these protective devices to shield the patient's body and sensitive organs from radiation.
4. Students and dental faculty, when appropriate, should have to minimise the number of X-ray exposures for patients. This can be achieved by understanding the knowledge of proper techniques of taking radiographs and processing of the radiographs.
5. Informed consent from patients should be obtained before performing any X-ray procedure.
6. Patients should be informed about the benefits and risks associated with X-ray imaging.

## **Medication Management Protocol**

The Medication Management Protocol is a critical component of the patient safety manual in the dental outpatient department. It focuses on ensuring the safe and effective use of medications to promote patient well-being and prevent adverse drug events. Here are the key elements of the Medication Management Protocol:

A standardized prescription format should be followed to enhance clarity and minimize medication errors.

Students and staff should have knowledge regarding Procedures for accurate medication administration, including dosage calculations and routes of administration.

### **Allergies and Drug Interactions:**

1. patient allergy information should be documented in their medical records during case sheet recording procedures. previous history of drug allergy should be elicited.
2. Patients should be educated with clear and understandable information about their prescribed medications.
3. Patients should be educated about the importance of strict medication adherence and potential side effects.
4. Patients should be asked to report the side effects if developed, on taking medications immediately to the college faculties for treatment and change of medication.
5. Patients should be given the helpline number of the institution in case of such emergencies.
6. Protocols for emergency situations where medications may need to be administered promptly should be followed as per the department guidelines.
7. Ensure accessibility and proper storage of emergency medications, such as epinephrine for allergic reactions.
8. Maintain accurate and up-to-date medication records for each patient, including the name, dose, route, and frequency of medications prescribed or administered.

By adhering to the Medication Management Protocol, dental professionals can promote patient safety, reduce medication errors, and enhance the overall quality of care provided in the dental outpatient department.

## **Emergency Response Protocol**

The Emergency Response Protocol is a vital aspect of the patient safety manual in the dental outpatient department. It outlines procedures and guidelines to be followed in the event of medical emergencies that may occur during patient treatment. Prompt and effective emergency response is crucial to ensure the well-being of patients and prevent adverse outcomes.

### **Emergency Equipment and Supplies:**

1. Ensure the availability and functionality of essential emergency medications.
2. Clear communication with the patient should be done to swiftly alert relevant personnel about the occurrence of a medical emergency.
3. Basic Life Support (BLS) Procedures should be known to the students and faculty and proper training should be obtained.
4. Students should have the ability and knowledge to recognize the signs and symptoms of allergic reactions and anaphylaxis.
5. Procedures for administering emergency medications, such as epinephrine, in case of severe allergic reactions should be known to the interns and teaching faculty.
6. Identifying the signs of seizures and syncope and providing appropriate care during these episodes should be known to the students.
7. Any untoward incidents should be reported to the teaching faculty immediately and all the emergency protocol procedures should be done under the supervision of faculties.

## **Patient Education**

1. Educate patients about their oral health, treatment options, and the importance of regular dental check-ups.
2. Address patient concerns and questions, and encourage open communication to ensure that patients are informed and actively engaged in their dental care

## **Aerosol Management**

1. Dental procedures can generate aerosols containing microorganisms, which pose potential risks to both patients and dental students. Aerosol management is a critical aspect of patient safety in dental practice.
2. Minimise aerosol generation during dental procedures using high-volume evacuation systems and rubber dams when appropriate.
3. Ensure proper ventilation in treatment rooms to disperse aerosols. Provide clear instructions on post-operative care, including medication use, diet restrictions, and oral hygiene practices.
4. High-volume evacuation (HVE) systems, also known as dental suction, are powerful tools used to reduce aerosol production during dental procedures.
5. Dental students should be trained on the proper use of HVE to effectively capture and remove aerosols at their source.

## **Training and Competency**

Provide regular training and competency assessments to all dental staff on patient safety protocols, infection control, emergency response, and other relevant topics.

Maintain documentation of staff training and competency assessments, and address any identified gaps through additional training or performance improvement plans.

Foster a culture of accountability and responsibility among dental staff and students.