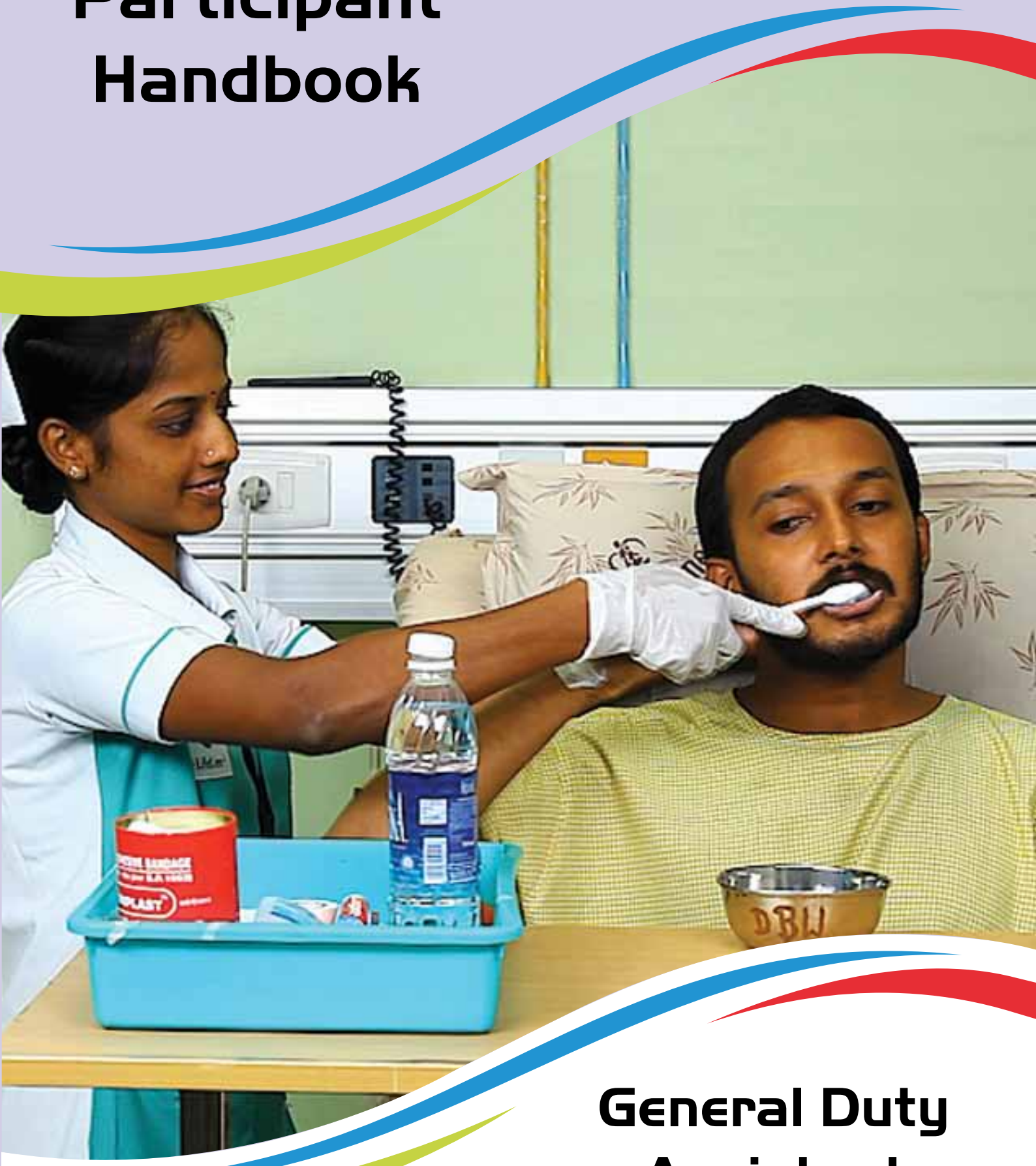
Participant Handbook



General Duty Assistant

Skill India
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GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP

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Hospital Structure and Services

S. No.	Module Name
1	Tour of the Hospital

Course Overview

A hospital has various departments to treat patients with different medical conditions. Which are these departments? What are the services they offer? What are the various things they are equipped with in order to treat the patients? Find answers to all these questions in this course.

Course Objectives

At the end of this course, you will be able to:

- Describe the structure and services available in a hospital

Tour of the Hospital and Visit to the Hospital

At the end of this module, you will be able to:

- Describe the structure and services available in a hospital
- Identify the different sections and departments of a hospital

Session Plan	
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Module Overview

A hospital is an institution that people go to when they are suffering from health problems. A hospital has specialized staff such as doctors, nurses, ward boys, general duty assistants who help in providing treatment to the ailing or sick person. A hospital also has specialized equipments for detecting diseases and also for providing treatment. Hospitals are divided into various departments to deliver better and more efficient healthcare services. For example, a person heavily injured in an accident will be taken to **EMERGENCY** or **CASUALTY** ward as the emergency ward is equipped with staff and equipments to provide quick treatment to the patient, which will help in saving the person's life. Whereas, if the person is taken to OPD **(Out Patient Department)** or general ward, he would have to wait in a long queue to meet the doctor and this could lead to deterioration of his/her health. Therefore, dividing the hospital into different departments leads to better health care service. As a General Duty Assistant, first and foremost you must be familiar with the various departments in a hospital, their names and the various services that they provide. Let us take a tour of the hospital.

Reception Desk

The Reception Desk is the first point of contact as you enter a hospital.

The functions of the reception desk include:

- Establishing a positive initial relationship with the patient
- Providing information on appointments with doctors and help in the process of consultation
- Guiding the patient in the admission process
- Supporting admission process.

Out Patient Department (OPD)

In a non-emergency condition, the patient meets the doctor in the outpatient department or in the OPD. An OPD consists of a patient waiting area with a consultation room where the doctor examines the patient.

The consultation room comprises of:

- Examination stool where the patient sits
- Doctors table for the doctor to note his observations and write instructions and prescriptions
- Attendee's chair for attendants of the patient
- Instruments like stethoscope and other equipment like radiograph viewer to view the x-rays of the patient
- Observation bed for examination of the patient by the doctor.

Once the doctor examines the patient in the consulting room, the doctor advises the patient in getting admitted into the hospital or prescribes medication that can be taken at home. If the patient is advised to be admitted in the hospital, the reception desk helps the patient in the admission process.

Casualty with Observation Bed

A patient who needs immediate medical care is taken to the casualty ward. The casualty ward of the hospital provides immediate medical attention to the patients with emergency needs.

The casualty ward comprises of numerous observation beds that are equipped with the necessary emergency equipment.

In the casualty ward the patient is given immediate first aid needed to stabilize his/her condition. Based on the condition of the patient, the patient is transferred to the inpatient ward for medical care or the pre-operative ward of the operation theatre for surgical care.

Inpatient Ward

Inpatient care refers to medical treatment that is provided in a hospital or other facility, and requires at least an overnight stay. The inpatient wards are equipped with facilities that provide for the treatment, safety and comfort of the patient. There are also nurses and doctors on call who monitor the patients closely. An inpatient ward may have more than two beds with a common bathroom facility or an exclusive room with facilities for each individual.

A typical inpatient room (for single person) would comprise of:

- Hospital bed which is made according to the condition of the patient
- Storage compartment or closet for storage of the patient's medications and belongings
- Attendee bed for the attendant accompanying the patient
- Bathroom with toilet facilities and equipment that is needed as per the treatment being delivered to the patient.

Laboratory and Diagnostic Facilities

When a doctor identifies a medical condition in a patient, it is termed as diagnosis. But in order to make a correct diagnosis , a doctor needs the help of various diagnostic facilities such as x-rays, blood reports. The person himself or the required specimen (blood, urine, saliva) is taken to the laboratory. In the Laboratory department of the hospital, the specimens collected from the patient are tested for any abnormalities. The diagnostic services include diagnostic equipment such as x-Ray, ultrasound, ECG and sometimes specialized equipments such as CT scan and MRI.

Nurse Station

A Nurse station is an area where the nurses are usually available during their duty time. All the necessary documents such as patient records, case sheets, lab reports, doctor notes are kept in the nurse station. These records are then displayed when the doctor is on examination rounds. The nurse station has space for keeping medical equipment that is needed for the day - to - day patient care. It is also serves as a point of communication bewteen the patients, nurses and the doctors. The Nurse station is usually located at an easily accessible location for the nurses for constant monitoring of patients.

Operation Theatre (OT)

The Operation theatre or the OT is a sterile (germ free) area of the hospital where surgical procedures are carried out. In an operation theatre, the inner parts of the body are exposed to the external environment; therefore the room needs to be clean and germ free. Various precautions are taken to keep the room germ free, for example, entry is restricted, special clothes have to be worn before entering the OT, face mask also has to be worn.

The operation theatre comprises of an operating table on which the surgical procedure is carried out. The operating table is illuminated by high powered operating lights that provide focused light for the surgeon. The OT is equipped with the required surgical instruments that are needed during the procedures. These instruments are made germ free by a process known as sterilization.

The OT is also equipped with the anesthesia unit and monitors that display the condition of the patient while the procedure is being carried out.

Intensive Care Unit (ICU)

The Intensive care unit or ICU caters to those patients who are in a critical condition and need continuous medical attention. The intensive care unit is equipped with monitoring devices such as:

- The pulse oxymeter that aids in monitoring the patient's breathing rate.
- An ECG monitor that monitors the heart rate and indicates the functioning of the heart.
- Equipment to measure blood pressure, body temperature, urine output to monitor the vital signs and functions of the body.
- Support equipment like the ventilator if the patient is unable to breathe.

Pharmacy

The hospital pharmacy is the area of the hospital that stocks medicines for the treatment of patients within the hospital. The pharmacy has a medicine counter where the pharmacist serves the patient. The patient needs to provide the prescription provided by the doctor to the pharmacist. According to the prescription the pharmacist will give the required dosage of medicine to the patient. The medicines in a pharmacy are arranged systematically in shelves for easy identification.

Cafeteria

The dietary needs of the patient vary depending on the patient's condition. A diet plan is prepared in consultation with the attending doctor. The hospital cafeteria, caters the food to the patients as per the diet planned. The hospital cafeteria comprises of a kitchen. The cafeteria also has dining facilities for all the people working in the hospital system as well as for visitors. The cafeteria manages a food distribution system. Through this system, food is delivered to the patients or room in the ward. The cafeteria follows strict rules of hygiene and all the personnel working in the cafeteria follow the correct infection control methods to ensure hygienic delivery of food to the patients.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Explain the term "Hospital".

2. List the various departments of a hospital.

3. Explain the function of reception desk.

4. Write a short note on OPD.

5. Write a short note on inpatient ward. What is it equipped with?

6. What types of patients are admitted into the casualty ward? Write a note on the casualty ward.

7. Write a short note on nurse station.

8. Name some equipments that the ICU is equipped with.

9. Write a short note on operation theatre (OT).

Worksheet

1. *Match the following.*

Department	
a.	Inpatient ward
b.	Casualty ward
c.	Intensive care unit
d.	Out patient department

Service	
i.	Patient needing continuous medical attention
ii.	Non - emergency patient
iii.	Patient staying overnight
iv.	Patient needing immediate medical attention

2. *Read the following question. Tick on the correct option.*

In which department of a hospital will you find a CT scan machine?

a. Out patient department
b. Inpatient ward
c. Laboratory and diagnostics facilities
d. Pharmacy

3. *Read the following question. Tick on the correct option.*

I am a nurse. When I am not attending to patients where should I be?

a. Nurse station
b. Laboratory and diagnostics facilities
c. Pharmacy
d. Inpatient ward

4. *Fill in the blanks.*

a. _____ provides information on appointments with doctors and help in the process of consultation.

b. _____ stocks medicine.

c. Equipments such as ECG monitor, pulse oxymeter and ventilator are found in the _____ of a hospital.

d.

5. *Identify the picture.*

Which department of the hospital is this?

Notes

Understanding the Job

S No.	Module Name
1	Roles and Responsibilities
2	Rules to be Followed

Course Overview

This course is, perhaps, one of the most important for you. That is, because in this course, you will learn your roles, responsibilities, the rules that you must follow and most importantly the occupational hazards. Occupational hazard is a risk that is associated with your occupation as a General Duty Assistant. What are those and how you may protect and guard yourself against those and yet carry on your roles and responsibilities efficiently is what you will learn in this course. Welcome!

Course Objectives

After completing this course, you will be able to:

- Discharge your responsibilities as a General Duty Assistant effectively

Roles and Responsibilities

At the end of this module, you will be able to:

- State your roles and responsibilities as a General Duty Assistant

Session Plan	
1	Module Overview
2	Who is a General Duty Assistant
3	Roles and Responsibilities
4	Key Learnings
5	Worksheet

Module Overview

In this module, you will learn about your roles and responsibilities as a General Duty Assistant.

Who is a General Duty Assistant

A General Duty Assistant is one who is responsible for providing support to doctors, nurses and other support staff. A General Duty Assistant is responsible for taking personal care of the patient and is a critical member of the healthcare team.

Roles and Responsibilities

As a General Duty Assistant, you must focus on four main areas of health care:

- Ensuring patient comfort
- Assisting nurses and doctors
- Maintaining clean hospital environment
- Assisting the doctor and the nurse in patient care planning

All four areas are critical in delivering quality healthcare to the patient. Let us learn them in detail.

Ensuring Patient Comfort

One of the fore most responsibilities of a General Duty Assistant is taking care of the patient's comfort. Here are few steps you need to follow in order to make the patient comfortable:

- Help the patient into the hospital and in moving from one ward to the other as needed.
- Aid and support the patient in managing personal hygiene.
- Arrange and accommodate for the activities of the patient including feeding and elimination of wastes.

Assisting Nurses and Doctors

A General Duty Assistant must assist nurses and doctors in the following manner:

- Support while administering drugs and report on status of drug administration.
- Assist in handling and management of hospital equipment.
- Observe gross abnormalities like high body temperature, increased breathing rate in the patient. Report these to the attending nurse or the doctor.
- Assist during emergency situations by arranging for required equipment

Maintaining Healthy Environment

A hospital is a place where many sick people come for treatment. It is place where germs spread. In a hospital there are many patients who get cured and have low immunity. Therefore, it is necessary to keep the environment clean and healthy. As a General Duty Assistant, you should keep the surrounding of the patient clean. You must follow these steps:

- Maintain cleanliness and hygiene in the hospital surroundings to prevent spread of infections.
- Follow the safety standards of waste disposal.
- Communicate effectively with the patients and be compassionate towards their conditions.

Patient Care Planning

As a General Duty Assistant, you must plan your services according to the patient's needs. This is called the patient care plan. You must make a patient care plan by:

- Knowing the patient's needs to facilitate their fast recovery
- Consulting with the attending doctor and nurse about the patients condition
- Maintaining the patient activity schedule during his/her stay in the hospital
- Motivating the patient to maintain a steady emotional state

- Understanding and respecting the patient's rights and maintaining privacy

A General Duty Assistant should be friendly and have good communication skills in order to motivate the patient to keep a steady emotional state.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Explain steps to ensure comfort of the patient.

2. In what ways must you assist doctors and nurses?

3. Explain the steps to maintain cleanliness in the surroundings.

4. What is patient care planning?

Worksheet

1. *Read the following question. Tick on the correct option.*

   Which of the following is NOT a responsibility of the General Duty Assistant?

   a. Prescribe medicine to the patient.

   b. Follow the safety standards of waste disposal.

   c. Maintaining patient's privacy.

   d. Assist in handling hospital's equipments.

2. *Read the following question. Tick on the correct option..*

   Which of the following is NOT a part of Patient Care Planning?

   a. Knowing the patient's needs to facilitate their fast recovery.

   b. Understanding and respecting the patient's rights and maintaining privacy.

   c. Knowing how to handle hospital equipments.

   d. Motivating the patient to maintain a steady emotional state.

3. *Read the following question. Tick on the correct option.*

   Being a General Duty Assistant if you notice abnormal breathing of the patient you are attending to, then what will you do?

   a. Give him medicines, without referring to the doctor.

   b. Report to the attending nurse or doctor.

   c. Take him to the ventilator room.

   d. Shift him to the Intensive Care Unit.

Notes

Rules to be Followed

At the end of this module, you will be able to:

- Follow the rules of patient care

Session Plan	
1	Module Overview
2	Patients' Rights
3	Right to Access to Care
4	Right to Respect
5	Right to Privacy
6	Right to Refusal to Treatment
7	Right to Consent
8	Right to Transfer and Continuity of Care
9	Right to Complain
10	Key Learnings
11	Worksheet

Module Overview

In order to gain the confidence of the patient you must understand the needs and comforts of the patient. However, the patient has the right to disagree on the care you deliver. You should be aware of the patient's rights. As a General Duty Assistant, there are certain rules that you need follow to protect the rights of the patients. This module lists those rules.

Patients' Rights

Patient's rights are the rights that the patient can exercise in case he has any problem with the service provided by the hospital. It varies in different countries and often depends upon the cultural and social norms within the country.

In India the Patients' rights include:

- Right to access to care - each patient has the right to receive proper and appropriate care needed for his quick recovery regardless of age, gender, caste, creed or source of payment.
- Right to respect - each patient has the right to be treated politely.
- Right to privacy - patient's medical details should be kept confidential
- Right to refusal to treatment - patient can refuse to receive treatment.
- Right to consent - patient has the right to approve of the treatment plan.
- Right to transfer and continuity of care - patient has the right to ask for a shift to another hospital.
- Right to complain - patient can raise a complaint on any of the services delivered in the hospital.

Let us now understand the patients' rights in detail and the rules that need to be followed to protect these rights.

Right to Access to Care

If a patient decides to get admitted in a hospital, he or she shall have equal access to treatment regardless of race, creed, gender, religion, national origin or source of payment. Once the patient is admitted in the hospital, you should not discriminate the patient in any way and deliver the appropriate care and treatment.

Right to Respect

The hospital should take the religious and the cultural sentiments of the patients into consideration. All patients admitted in a hospital should be treated with equal respect. The General Duty Assistant should communicate with the patient and their attendants politely regardless of the patient's background, religion, caste and creed.

Right to Privacy

The medical history and the treatment plan that is delivered to a patient are considered to be private details of the patient. The hospital or the General Duty Assistant should not discuss these details with anyone unless approved by the patient. The hospital must keep the medical history and diagnosis of the patient confidential. The General Duty Assistant should ensure that these details are not to be discussed with anyone other than the patient.

Right to Refusal to Treatment

If the patient does not like the diagnosis or the treatment plan he/she is been given, then he/she can choose not to follow it. The hospital cannot force a patient to follow the treatment plan that is not agreed upon by the patient. As a General Duty Assistant, you should respect the patient's decision.

Right to Consent

A patient should be provided with options on the treatment plan, that is, alternate treatment methods should be suggested. The hospital can deliver the treatment plan only after the patient chooses from the options given to the patient. No decision can be taken without the patient's approval. The General Duty Assistant should always be fully informed about the treatment plan and also inform the patient about the service that is being delivered. The General Duty Assistant should proceed only if the patient agrees to the same.

Right to Transfer and Continuity of Care

The patient can discontinue the care that is being delivered at any point and request for a transfer to another hospital. The hospital should facilitate for the shift of the patient to another hospital. The hospital should make arrangement according to the condition of the patient for the transferring process. For example, the hospital can arrange for ambulance with required equipment and doctors for transferring the patient from one place to another. The General Duty Assistant should co-operate with the patient and ensure that the patient is comfortable during the shifting process.

Right to Complain

A patient can raise concerns about the behavior of any individual associated with the various departments in the hospital. The patient has a right to complain about any service that is being delivered by an individual. The hospital must ensure that the complaint of the patient is recorded and the required action is taken to attend to the complaint. If a complaint has been lodged against you as an assistant then you have to offer an explanation and take up the required corrective action to satisfy the patient. You should take every possible measure to avoid any complaint from the patient and keep your services at the top most level.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List and explain the various rights held by a patient.

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   I as a patient, am not satisfied with the treatment provided by the doctor and I refuse to continue with it. Which of my rights am I exercising?

   a. Right to complain
   b. Right to transfer
   c. Right to refusal to treatment
   d. None of the above

2. *Read the following question. Tick on the correct option given below.*

   As a patient, I wish to move to another hospital for my treatment. Which of my rights am I exercising?

   a. Right to complain
   b. Right to transfer
   c. Right to refusal to treatment
   d. All of the above

3. *Read the following question. Tick on the correct option given below.*

If a patient lodges a complaint against you, what would you do?

a. Argue with the patient or the nurse.

b. Offer explanation for your action.

c. Take necessary corrective action that will satisfy the patient.

d. Be cautious in the future to ensure such incidents do not recur.

4. *Match the following.*

Patient's Rights	
a.	Right to complain
b.	Right to consent
c.	Right to access to care
d.	Right to transfer

Definition	
i.	To receive correct treatment
ii.	Shift to another hospital
iii.	To agree with the provided treatment plan
iv.	Raise concern over the behaviour of any individual

Notes

Practice the Code of Conduct While Performing Duties

At the end of this module, you will be able to:

- define code of conduct;
- explain the purpose of the code of conduct;
- list down the code of conduct for healthcare workers;
- explain how this code helps people who use healthcare services and members of the public;
- explain how this code of conduct helps employers.

Session Plan	
1	Module Overview
2	Purpose of the Code of Conduct
3	Code of Conduct for a Health Care Worker
4	How Does the Code Help Healthcare Workers?
5	How Does the Code Help People Who Use Health and Care Services and Members of the Public?
6	How Does the Code Help Employers?
7	The Code of Conduct in Detail
8	Key Learnings
9	Worksheet

Module Overview

The code aims to ensure that patients are treated with dignity, respect and compassion at all times, and makes clear that HCAs have a responsibility to ensure that their conduct does not fall below these standards.

"The code should give the public, and people who use health and social care services confidence that these support workers will provide safe and compassionate care of a high standard."

Purpose of the Code of Conduct

This Code is based on the principle of protecting the public by promoting best practice. It will ensure that you are 'working to standard', providing high quality, **compassionate** healthcare, **care and support.**

The Code describes the standards of conduct, behaviour and attitude that the public and people who use health and care services should expect. You are responsible for, and have a duty to care and to

ensure that your conduct does not fall below the standards detailed in the Code. Nothing that you do, or **omit** to do, should harm the safety and **wellbeing** of people who use health and care services, and the public.

Code of Conduct for a Health Care Worker

As per the code of conduct, as a health care worker you must:

1. Be accountable by making sure you can answer for your actions or omissions.
2. Promote and uphold the privacy, dignity, rights, health and wellbeing of people who use health and care services and their carers at all times.
3. Work in collaboration with your colleagues to ensure the delivery of high quality, safe and compassionate healthcare, care and support.
4. Communicate in an open, and effective way to promote the health, safety and wellbeing of people who use health and care services and their carers.
5. Respect a person's right to confidentiality.
6. Strive to improve the quality of healthcare, care and support through continuing professional development.
7. Uphold and promote equality, diversity and inclusion.

How Does the Code Help Healthcare Workers?

The code provides a set of clear standards, so you:

- Can be sure of the standards you are expected to meet.
- Can know whether you are working towards these standards, or if you need to change the way you are working.
- Can identify areas for continuing professional development.
- Can fulfil the requirements of your role, behave correctly and do the right thing at all times. This is essential to protect people who use health and care services, the public and others from harm.

How Does the Code Help People Who Use Health and Care Services and Members of the Public?

The Code helps the public and those who use health and care services to understand what standards they can expect of Healthcare Support Workers. The Code aims to give people who use health and care services the confidence that they will be treated with **dignity, respect** and **compassion** at all times.

How Does the Code Help Employers?

The Code helps employers to understand what standards they should expect of Healthcare Support Workers. If there are people who do not meet these standards, it will help to identify them and their support and training needs.

The Code of Conduct in Detail

Be accountable by making sure you can answer for your actions or omissions

As a Healthcare Support Worker you must:

1. Be honest with yourself and others about what you can do, recognise your abilities and the limitations of your competence and only carry out or delegate those tasks agreed to in your job description and for which you are competent.
2. Always behave and present yourself in a way that does not call into question your suitability to work in a health and social care environment.
3. Be able to justify and be accountable for your actions or your omissions – what you fail to do.
4. Always ask your supervisor or employer for guidance if you do not feel able or adequately prepared to carry out any aspect of your work, or if you are unsure how to effectively deliver a task.
5. Tell your supervisor or employer about any issues that might affect your ability to do your job competently and safely. If you do not feel competent to carry out an activity, you must report this.
6. Establish and maintain clear and appropriate professional boundaries in your relationships with people who use health and care services, carers and colleagues at all times.
7. Never accept any offers of loans, gifts, benefits or hospitality from anyone you are supporting or anyone close to them which may be seen to compromise your position.
8. Comply with your employers' agreed ways of working.
9. Report any actions or omissions by yourself or colleagues that you feel may compromise the safety or care of people who use health and care services and, if necessary use whistle blowing procedures to report any suspected wrongdoing.

("Whistle blowing", "raising concerns" and "speaking up" are all phrases which describe disclosing information to an employer or where appropriate a regulator, police or the media about malpractice, wrongdoing or a risk to safety.)

Promote and uphold the privacy, dignity, rights, health and wellbeing of people who use health and care services and their carers at all times

As a Healthcare Support Worker you must:

1. Always act in the best interests of people who use health and care services.
2. Always treat people with respect and compassion.
3. Put the needs, goals and aspirations of people who use health and care services first, helping them to be in control and to choose the healthcare, care and support they receive.
4. Promote people's independence and ability to self-care, assisting those who use health and care services to exercise their rights and make informed choices.
5. Always gain valid consent before providing healthcare, care and support. You must also respect a person's right to refuse to receive healthcare, care and support if they are capable of doing so.
6. Always maintain the privacy and dignity of people who use health and care services, their carers and others.

7. Be alert to any changes that could affect a person's needs or progress and report your observations in line with your employer's agreed ways of working.
8. Always make sure that your actions or omissions do not harm an individual's health or wellbeing. You must never abuse, neglect, harm or exploit those who use health and care services, their carers or your colleagues.
9. Challenge and report dangerous, abusive, discriminatory or exploitative behaviour or practice.
10. Always take comments and complaints seriously, respond to them in line with agreed ways of working and inform a senior member of staff.

Work in collaboration with your colleagues to ensure the delivery of high quality, safe and compassionate healthcare, care and support

As a Healthcare Support Worker you must:

1. Understand and value your contribution and the vital part you play in your team.
2. Recognise and respect the roles and expertise of your colleagues both in the team and from other agencies and disciplines, and work in partnership with them.
3. Work openly and co-operatively with colleagues including those from other disciplines and agencies, and treat them with respect.
4. Work openly and co-operatively with people who use health and care services and their families or carers and treat them with respect.
5. Honour your work commitments, agreements and arrangements and be reliable, dependable and trustworthy.
6. Actively encourage the delivery of high quality healthcare, care and support.

Communicate in an open and effective way to promote the health, safety and wellbeing of people who use health and care services and their carers

As a Healthcare Support Worker you must:

1. Communicate respectfully with people who use health and care services and their careers in an open, accurate, effective, straightforward and confidential way.
2. Communicate effectively and consult with your colleagues as appropriate.
3. Always explain and discuss the care, support or procedure you intend to carry out with the person and only continue if they give valid consent.
4. Maintain clear and accurate records of the healthcare, care and support you provide. Immediately report to a senior member of staff any changes or concerns you have about a person's condition.
5. Recognise both the extent and the limits of your role, knowledge and competence when communicating with people who use health and care services, carers and colleagues.

Respect people's right to confidentiality

As a Healthcare Support Worker you must:

1. Treat all information about people who use health and care services and their careers as confidential.
2. Only discuss or disclose information about people who use health and care services and their careers in accordance with legislation and agreed ways of working.
3. Always seek guidance from a senior member of staff regarding any information or issues that you are concerned about.
4. Always discuss issues of disclosure with a senior member of staff.

Strive to improve the quality of healthcare, care and support through continuing professional development

As a Healthcare Support Worker you must:

1. Ensure up-to-date compliance with all statutory and mandatory training, in agreement with your supervisor.
2. Participate in continuing professional development to achieve the competence required for your role.
3. Carry out competence-based training and education in line with your agreed ways of working.
4. Improve the quality and safety of the care you provide with the help of your supervisor (and a mentor if available), and in line with your agreed ways of working.
5. Maintain an up-to-date record of your training and development.
6. Contribute to the learning and development of others as appropriate.

Uphold and promote equality, diversity and inclusion

As a Healthcare Support Worker you must:

1. Respect the individuality and diversity of the people who use health and care services, their carers and your colleagues.
2. Not discriminate or condone discrimination against people who use health and care services, their carers or your colleagues.
3. Promote equal opportunities and inclusion for the people who use health and care services and their carers.
4. Report any concerns regarding equality, diversity and inclusion to a senior member of staff as soon as possible.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is code of conduct?

_____

_____

_____

2. What is the purpose of the code of conduct?

_____

_____

_____

_____

3. List down the code of conduct for a Health Care Assistant.

4. Explain how the code of coduct helps:
   - A health care worker
   - The public
   - An employer

Worksheet

1. Tick the correct answer

a. The Code describes the standards of conduct, that the public and people who use health and care services should expect good:

i. Behaviour and attitude

ii. Knowledge and behaviour

iii. Attitude and knowledge

iv. None of the above

b. The Code helps Healthcare Workers in:

i. The personal growth of the individual

ii. The professional growth of the institution

iii. Continuing professional development

iv. Continuing personal development

c. The Code helps employers to identify and use the findings for:

i. Further training needs of the employee

ii. Fixing his / her salary

iii. Punishment

iv. Evaluation of the employee

d. A phrase which describes disclosing information to an employer or where appropriate a regulator, police or the media about malpractice, wrongdoing or a risk to safety is:

i. Mind blowing

ii. blowing

iii. Accountable

iv. Wellbeing

Notes

Basics of Anatomy and Physiology

S No.	Module Name
1	Understanding the Human Body
2	Human Physiologic Systems
3	Branches of Medicine

Course Overview

As a General Duty Assistant, your most important role is handling the patients. Different patients may arrive at the hospital with different medical conditions. Some may be injured, some paralyzed, others may have just undergone surgery. To be able to handle patients such that they are comfortable, it is important for you to understand the basic structure of the human body. Some body parts are delicate. For example, our stomach and abdomen regions hold several delicate organs. It helps to have a good understanding of the different parts of the body and the functions they perform. This knowledge will create awareness in you and will help you serve your patients better. In this course, you will be introduced to the different parts of the human body, the different life processes and lastly, an insight into the various branches of medicine, the terms and terminologies used.

Course Objectives

After completing this course, you will be able to:

- Use your knowledge of the human body and its functioning in discharging your role as a General Duty Assistant

Understanding the Human Body

At the end of this module, you will be able to:

- Identify the different parts of the human body
- Explain the functions of different parts

Session Plan	
1	Module Overview
2	Basic Shape and Structure of the Human Body
3	Head and Neck
4	Thorax
5	Abdomen
6	Upper and Lower Limbs
7	Back of Human Body
8	Key Learnings
9	Worksheet

Module Overview

Every living creature has a shape and structure that develops from the stage of a baby to an adult. The human body also, has a shape and structure which is designed to perform various functions. In this module, let us understand about the human body and its different parts.

Basic Shape and Structure of the Human Body

The human body is a symmetrical structure with the body organs aligned on both sides of a central axis. If you divide the human body in two equal halves from head to toe, then the two divided parts will be identical. The human body form is of two different types. The male body form and the female body form with distinct physical features for each type.

The human body is broadly divided into three areas:

- Head and Neck
- Thorax and Abdomen
- Upper and Lower Limbs

Head and neck region of the human body is the topmost part of our body. It comprises of organs such as the brain, eyes, ears, mouth with the food pipe (or the esophagus) and nose with trachea (or the windpipe).

The thorax region is the middle part of our body. It comprises of the heart and the lungs. The abdomen region comprises of the stomach, liver, pancreas, intestines, kidneys and the reproductive organs.

The arms and legs form the upper limbs and lower limbs of the human body.

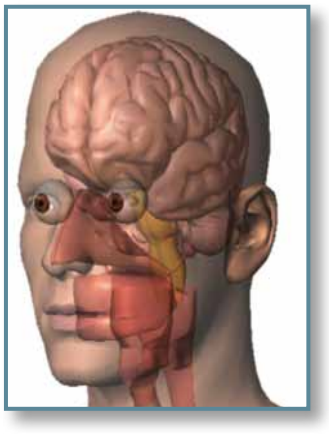
The shape and structure of the body is supported by a framework of specialized tissues called the bones and muscles. The bones and muscles hold the organs in place. The internal organs of the human body are very delicate. To protect them from external shocks and injuries, they are mostly covered with bone structures. For example, the human heart and lungs are covered with the rib cage for protection from external injuries.

The study of the structure and shape of the body is termed as Anatomy. You should be aware of the anatomy of the human body as it helps in managing the patient activities.

Head and Neck

The head of the human body is the topmost part of the body. It usually comprises the brain, eyes, ear, nose and mouth. Each of these organs is designed to perform specific functions of its own.

The head has a hard outer covering. This is a bone called cranium or skull. All the organs in the head region are held by muscles which are attached to the skull. The skull protects the brain from external shocks and injuries.



The human brain controls every function of our body. It controls functions such as breathing, digestion, heartbeat, blood circulation. These functions are broadly classified as sensory, motor and special senses. The sensory functions include touch and pain sensations. The motor functions include movement of organs such as limbs or muscles and special senses include sight, sound, taste and smell. The brain extends as the spinal cord at the back of the body. The brain is connected to the various organs by nerves which transmit signals to the organs.

The head also comprises of our face. The face contains the organs - eyes,

ears, nose and mouth. The eyes allow us to see. The eyes are connected to the brain which controls the sensation of vision and movement of the eye balls through nerves. The human body has one pair of eyes.

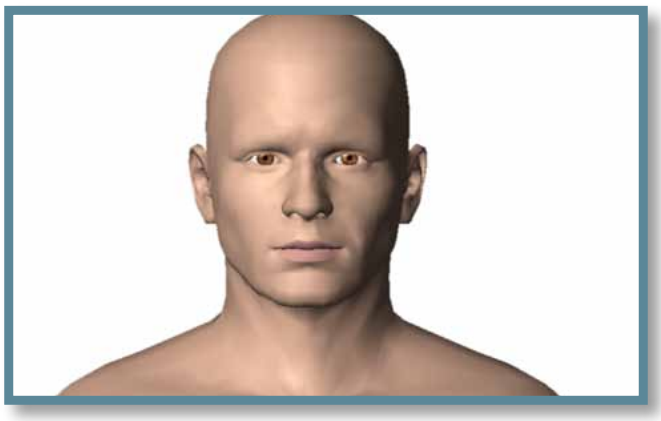
The ears allow us to hear. The ears are located on either side of the head. They comprise of the external, middle and internal ear which are made of the hearing apparatus. The hearing apparatus are set of bones and membranes which allow us to hear.

The nose supports in the sensory function of smell. It also serves in the function of breathing. It has two nostrils on the external side and internally opens into the wind pipe which is connected to the lungs.

The mouth is located below the nose and is the opening of the digestive system. It opens into the food pipe or the esophagus extending into the neck and thorax. The mouth comprises of teeth that help in chewing the food that we eat.

The eyes, ears, nose and mouth along with the underlying muscles and bones make up the face of the human body. The facial region is unique to a person and helps us identify a person.

The neck portion of our body contains the food pipe and the trachea. The neck also comprises the larynx or the voice box. It is prominent in the male human body.



Thorax

The neck region extends into the thorax region which is made up of shoulders and the chest. The chest is made up of a bone framework called the ribs. The ribs encloses a pair of lungs which help in breathing.

The heart is present mostly on the left side of the human body and is located between the two lungs. It is made of muscles and pumps blood to the whole body. The heart supplies the blood to the body through the arterial system. The venous system collects blood from different parts of the human body.

The arterial and venous system comprises of vessels (pipes) called arteries and veins respectively. These vessels are connected to all the organs. The arteries are vessels which carry blood from the heart to the organs and veins carry blood from the organs to the heart.

The thorax also has a large muscle called the diaphragm that aids in breathing and supports the lungs.

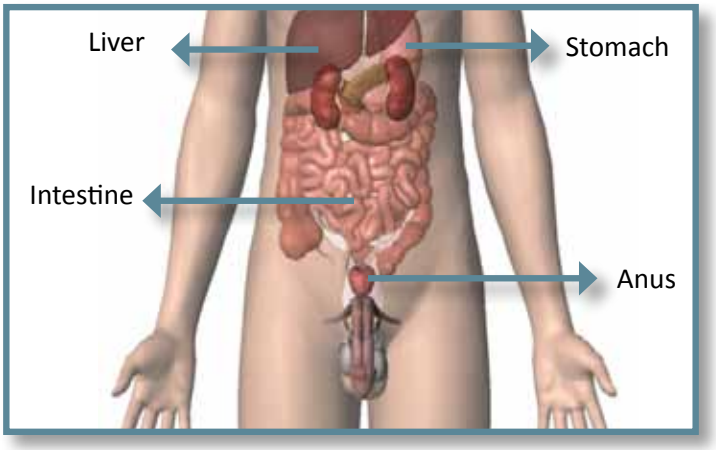
The thorax in the female human body also comprises of the mammary glands also known as breasts. The breasts function is to provide nutrition for the newborn child.

Abdomen

The thorax extends into the abdomen. The abdomen comprises of the stomach which helps to digest the food that we eat. The stomach is supported by other vital organs such as the liver which releases substances called enzymes that help in digestion of the food. The stomach extends into long tube-like structures called intestines. These structures help in digesting and absorption of the nutrients from the food. At last, the undigested food is excreted (thrown out) through an opening called the anus. A pair of kidneys is present in the lower side of the abdomen and is a vital organ that helps in excreting the waste materials produced in the body.

The lower region of the abdomen is made up of a bony framework called the pelvis or the hip. This region also comprises of the reproductive organs or the genitalia which are distinct in males and females. The male reproductive organs are the testicles and the penis and the female reproductive organs comprise of the ovaries, uterus and the vagina.

The upper abdomen part comprising of stomach, liver, is not covered by any bone structure to protect it from external shocks and injuries. Therefore, as a General Duty Assistant, you must take special care while handling the patient to avoid injuries to the upper abdomen.



Upper and Lower Limbs

The upper limbs and lower limbs enable humans to move from one place to another. They also help in eating and carrying out important functions. The arms are connected to the thorax in the shoulder region. The arms are jointed organs comprising of the upper arm and the lower arm. The lower arm extends into the palm that comprises of fingers that aid in gripping.

The lower limbs are jointed organs that are connected to the abdomen at the pelvis region.The upper leg region is made of thighs and the lower leg region comprise of heels and toes that aid in movement.

Back of Human Body

The back region of the human body is made up of the vertebral column that extends from the back of the head to the back of the hip. The spinal cord is the extension of the brain. It is located in the vertebral column. It performs the funcation of movement.

Key Learnings

Summarise your learnings here. Write your answers in the spaces provided.

1. Explain the basic human body shape and structures.

2. List the different organs and their functions present in the head and neck region of the human body.

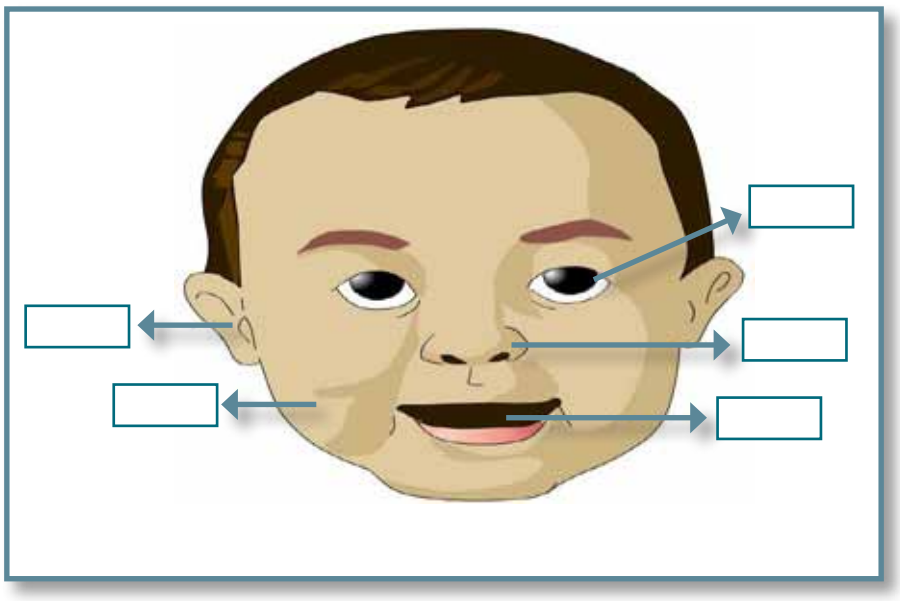
3. List the different organs and their functions present in the thorax region of the human body.

4. List the different organs and their functions present in the abdomen region of the human body.

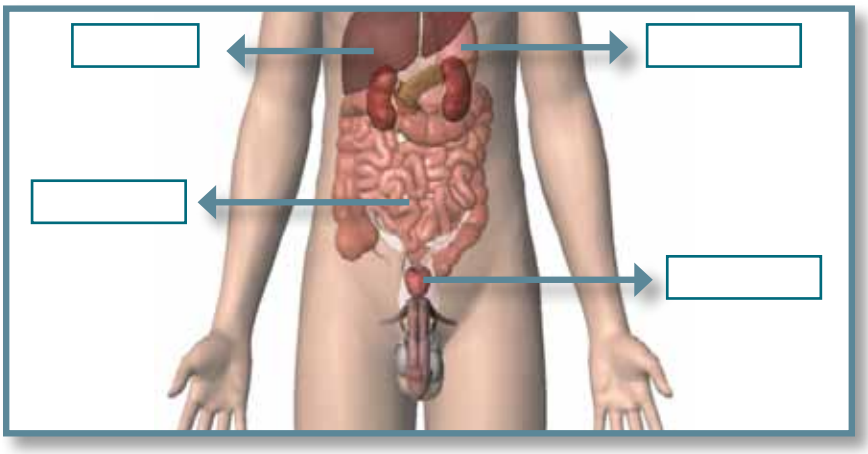
5. Explain the function of the limbs.

Worksheet

1. *Label the different parts of the head.*



2. *Label the different parts of the adomen.*



3. *Match the following.*

Parts of Human Body	
a.	Stomach
b.	Heart
c.	Brain
d.	Eyes
e.	Kidneys

Their Function	
i.	Controls body functioning
ii.	Vision
iii.	Digests food
iv.	Pumps bloods
v.	Help in excretion

4. *Read the following question. Tick on the correct option.*

Which organ transports blood to the different parts of the body?

a. Heart

b. Lungs

c. Brain

d. Limbs

5. *Read the following question. Tick on the correct option.*

The abdomen comprises which of the following?

a. Eyes, ears, nose, mouth

b. Stomach, reproductive organs, kidneys

c. Shoulder, chest, lungs, fore limbs

d. Skull, brain, spinal cord

Notes

Human Physiologic Systems

At the end of this module, you will be able to:

- Explain the different Physiological functions of the human body

Session Plan	
1	Module Overview
2	Human Physiologic Systems
3	Nervous System
4	Muscular and Skeletal System
5	Circulatory System
6	Respiratory System
7	Digestive System
8	Urinary System
9	Reproductive System
10	Supporting Physiologic Systems
11	Key Learnings
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Module Overview

The human body performs various activities like breathing, eating, running. Each part of the body has specific functions which help the body perform these various activities. In this module, let us learn the functions of the different parts of the human body.

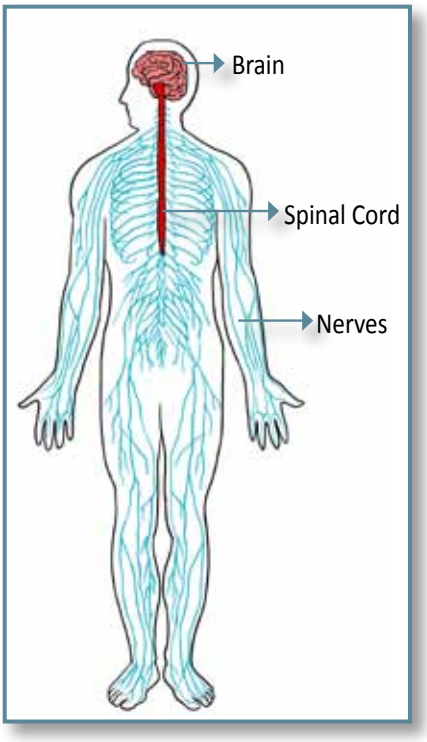
Human Physiologic Systems

Human physiology is the science that deals with the functioning of the human body. The human organs are grouped into systems that perform a specific function. Such systems of organs are termed as human physiologic systems. The basic physiological systems in the human body are:

- **The nervous system** - which comprises the brain, spinal cord and the nerves.
- **The muscular and skeletal system** - which consists of the bones, muscles and the connective tissues.
- **The circulatory system** - comprises of the heart, arteries and veins.
- **The respiratory system** - consists of the upper and lower respiratory tracts. The upper respiratory tract consists of nose, sinuses. The lower respiratory tract comprises of trachea, bronchi and the alveoli.
- **The digestive system** - which comprises the mouth,oesophagus (food tube) stomach, liver and gall bladder, pancreas, large and small intestine extending into the rectium and anal canal.
- **The urinary system** - which comprises the kidneys, ureters and the bladder.
- **The reproductive system** - which comprises the sex organs.
- The basic physiologic systems are supported by the **endocrine system** that secrete the hormones and the **immune system** that helps in protecting the body from infections.

Nervous System

The nervous system of the human body consists of the brain, spinal cord and nerves.



The brain is the organ that controls the working of the other parts of the body. It is responsible for all sensory processing done by the body. Sensory functions such as sight, hearing, taste and smell are termed as special senses. And the organs which help us to see, hear, taste, smell are eyes, ears, mouth and nose respectively. These organs are called sensory organs as they connect us to the outer world. These senses are controlled by the brain.

There is another sensory organ which helps us to connect with the outside environment, that is, the skin. The skin helps us feel. The nerves, spinal chord and brain together control all the other parts of the human body. The mechanism can be explained with an example. If a person senses feeling, the signals are carried by the nerves to the spinal cord and then to the brain. The nerves are the units of the nervous system that connect the various organs to the spinal cord and the brain. The brain then responds with a reaction which is carried back to the organ. The organ then acts as per the instructions received from the brain.

The nervous system is critical as it coordinates the functioning of all the parts of the body.

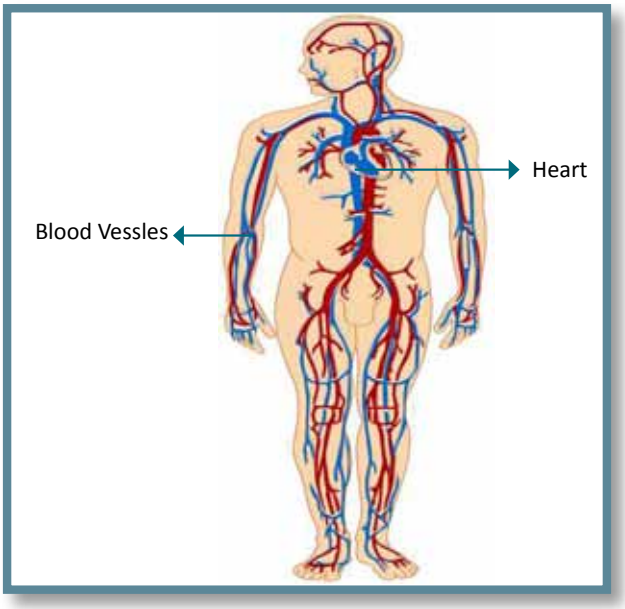
Muscular and Skeletal System

The muscular and skeletal structure of our body consists of the human skeleton, and attached muscles. The human skeleton gives the body a basic shape and structure and is comprised of bones. The bones are the hard structures of the body and form the framework of the body.

In addition to their structural role, the larger bones in the body contain bone marrow where blood cells are produced. But bones are rigid and inflexible. So with just the bones, you will not be able to walk or move your hands and legs. You need muscles for flexibility and they also support the bones in activities like walking and running. The muscles form the bulk of the body organs. The bones and muscles together aid in the movement of the body organs. Muscles are also connecting structures that hold the various organs in place. The bones are attached to the muscles by tissues called Tendons. The muscular and skeletal systems hold the body in place.

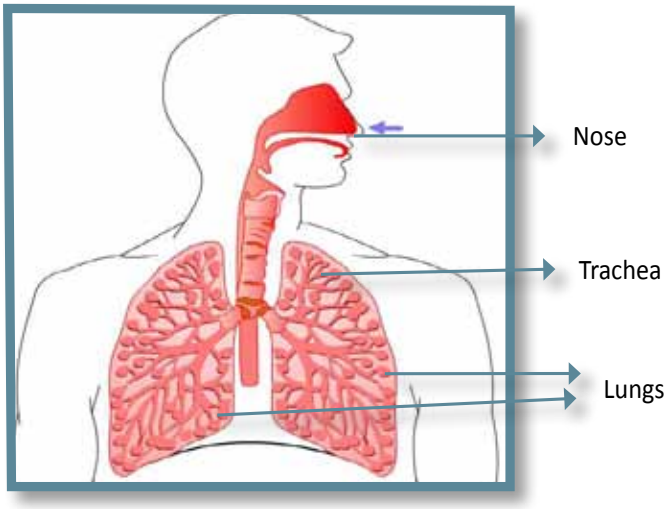
Circulatory System

The circulatory system of the body consists of the heart and blood vessels - arteries, veins and capillaries. The heart pumps the blood and circulates it throughout the body. The blood acts as a transportation system. It carries oxygen and nutrients to the various organs. It does this through blood vessels known as arteries and capillaries. Once the oxygen and nutrients are absorbed by the body, waste products are released. The circulatory system function in collabaration with the respiratory system in the transporting oxygen to different parts of the body and removing carbon dioxide. It does this through a different set of blood vessels known as veins. The circulatory system is, thus, essential in the maintenance of the regular body functions.



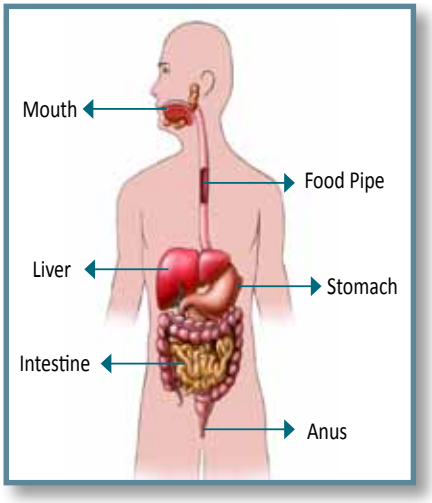
Respiratory System

The respiratory system comprises of the trachea and lungs as the central units. While breathing, the air is taken into the body mostly through the nose and enters the wind pipe, also known as the trachea. From the trachea, the air enters the lungs and oxygen from the air is absorbed in the lungs. The blood carries the oxygen from the lungs to different body organs. Each body organs use the oxygen to release energy. This energy released is used for carrying out the various body functions. While performing various activities, the body organs produce carbon dioxide. The carbon dioxide is carried by the blood back to the lungs and from the lungs the air carrying carbon dioxide is breathed out. This process of breathing in – use of oxygen to release energy – and breathing out of air is collectively called respiration. The organs involved in respiration are grouped together as the respiratory system. Thus, the respiratory system plays a crucial role as it provides oxygen that is critical for body functioning.



Digestive System

The digestive system of our body consists of the mouth, oesophagus, stomach and intestines. These organs are supported by the liver, pancreas, gall bladder and salivary glands. The food that we eat needs to be converted into smaller units for absorption by the body. The digestive system is responsible for breaking down the food and absorption of nutrients from the food. This whole process is known as digestion.

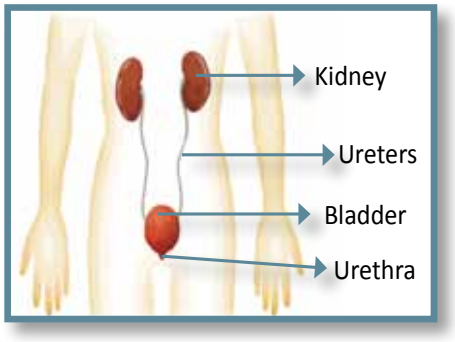


The food enters the body through the mouth and is chewed and swallowed. It passes through the food pipe, also called the oesophagus. From the oesophagus the food enters the stomach and intestines. Here the food is broken into small units with help of substances called enzymes. The enzymes that are needed for the digestion of the food are produced by the salivary glands, liver, pancreas and gall bladder. The blood absorbs the nutrients from the food and transports them to the various organs for producing energy. Once the nutrients are absorbed, the undigested food substances are excreted out of the body. This is done through the large intestine of the digestive system.

The digestive system is critical in providing the essential nutrients for the survival of the body organs.

Urinary System

The urinary system consists of kidneys, urethra,ureters and the urinary bladder. When the body organs utilize the nutrients and oxygen for the production of energy, they produce waste products such as ammonia and urea. These waste products are carried by the blood to the kidney. In the kidneys, the waste products are filtered from the blood and excreted out of the body as urine.



Urine is a liquid with excess water. Urine passes through the ureters and fills the urinary bladder. The urinary bladder when full with urine, releases the urine out of our body. If the kidneys fail to function normally, the waste products in the blood can cause harm to the body organs. So it is very necessary to throw out the waste materials.

The excretory system is hence critical to good health as the harmful wastes are removed from the body by the excretory system.

Reproductive System

The reproductive system comprises the sex organs and is of two different types, male and female reproductive systems. The male reproductive system comprises the testicles and the male sex organ called the penis. The testicles produce seminal fluid which contains fertilization units called sperms. The seminal fluid is passed through the penis.

The female reproductive system is comprises the ovaries, the uterus and the female sex organ called the vagina. When the sperms come in contact with the ovum, fertilization takes places that lead to the development of a foetus. The foetus develops into the uterus of the female human body and is delivered as a human baby.

The reproductive system functions in the development of a new generation of the human body.

Supporting Physiologic Systems

The basic physiologic systems are supported by other physiologic systems such as the endocrine system and the immune system.

The endocrine system is made up of organs called endocrines glands. Some examples of endocrine glands are the thyroid, pituitary, thymus. The endocrine system produces chemical substances called hormones. Hormones help in the body processes such as growth, reproduction and digestion.

The immune system comprises the lymph nodes and the lymphocytes. The lymphocytes identify the harmful microorganisms and fight them. It protects the body from harmful germs and keeps the body healthy. The immune system is critical in preventing infections and protects the body from diseases.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List the organs of the nervous system.

2. Write the working mechanism of the nervous system.

3. Write a short note on muscular and skeletal systems.

4. List the different organs forming the circulatory system.

5. Write the working mechanism of the circulatory system.

6. List the different organs forming the respiratory system.

7. What is respiration?

8. Explain the process of digestion.

9. Write the working mechanism of the urinary system.

10. Write a short note on reproductive system of the male and female human body.

11. What is the function of the endocrine glands?

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   Which physiologic system is responsible for nutrient absorption from food?

   a. Immune system
   b. Digestive system
   c. Circulatory system
   d. Respiratory system

2. *Read the following question. Tick on the correct option given below.*

   Which of these systems functions to provide oxygen for the body?

   a. Circulatory system
   b. Respiratory system
   c. Digestive system
   d. Nervous system

3. *Read the following question. Tick on the correct option given below.*

   Which system removes waste products such as ammonia and urea from the body?

   a. Immune system
   b. Digestive system
   c. Excretory system
   d. Respiratory system

4. *Read the following question. Tick on the correct option given below.*

   Which physiologic system is responsible for production of hormones in the body?

   a. Immune system
   b. Endocrine system
   c. Urinary system
   d. Excretory system

5. *Read the following question. Tick on the correct option given below.*

   Which physiologic system controls and coordinates the functioning of the body?

   a. Circulatory system
   b. Respiratory system
   c. Digestive system
   d. Nervous system

6. *Match the columns.*

Organ	
a.	Lungs
b.	Heart
c.	Stomach
d.	Kidneys
e.	Bones and muscles
f.	Sensory organs

Function	
i.	Digestion
ii.	Excretion
iii.	Breathing
iv.	Pumping blood
v.	Sensory feelings
vi.	Movement

7. *Match the columns.*

Physiologic System	
a.	Respiratory system
b.	Digestive system
c.	Reproductive system
d.	Excretory system
e.	Nervous system

Comprising Organs	
i.	Kidneys, ureters, urinary bladder
ii.	Brain, spinal cord, nerves
iii.	Nose, trachea, lungs
iv.	Vagina, penis
v.	Mouth, oesophagus, stomach, intestines

Notes

Branches of Medicine

At the end of this module, you will be able to:

- List the different branches of medicine
- Explain the function of each branch

Session Plan	
1	Module Overview
2	Medicine
3	Basic and Clinical Branches of Medicine
4	Branches of Internal Medicine
5	Branches of General Surgery
6	Supporting Branches of Medicine
7	Key Learnings
8	Worksheet

Module Overview

Medical care in a hospital is provided by a health care professional referred to as a “Doctor”. It is important for a General Duty Assistant to gain knowledge on the branches of medicine that a doctor practices, to effectively assist during the procedures. This module helps you identify the different branches of medicine.

Medicine

Medicine is the science and art of healing from a state of bad health to good health. It encompasses a variety of health care practices that help you in maintaining good health and prevent you from falling sick. A hospital functions to deliver the various medical care services that aid in the speedy healing of a patient. As a General Duty Assistant, one of your duties will be to assist the doctor. Therefore, it is very important for a General Duty Assistant to have the knowledge on the branches of medicine that a doctor practices, to effectively assist during the procedures.

The practices in a hospital are in two categories :

- Medical Care
- Surgical Care

A doctor who practices in medical care specialties is called a physician. A doctor who performs the operative procedures is called a surgeon.

Let us now understand the different branches of medicine and the types of practices followed in a hospital.

Basic and Clinical Branches of Clinical Medicine

A physician or a surgeon is primarily educated in the basic medical branches. The basic medical sciences are as follows:

- Human Anatomy and Physiology deal with the study human body and its functions.
- Pathology and Pharmacology deal with the study of diseases and the medicines that are used to cure diseases.
- In addition to the above basic sciences the doctors are also educated in various other branches such as histology, microbiology, immunology, genetics.
- The doctor then is educated in the practices of medicine called Internal Medicine and General Surgery.
- The medical and surgical procedures are practiced in a hospital and are also termed as the branches of clinical medicines.

Branches of Internal Medicine

Internal medicine comprises medical procedures that focus on the diagnosis and non-surgical treatment of disease. The commonly practiced branches of internal medicine are as follows:

- **Cardiology** - the branch of medicine that deals with the treatment of the human heart conditions.
- **Critical care medicine** - deals with management of life threatening conditions with consistent monitoring.
- **Endocrinology** - a branch of medicine that deals with various hormonal problems like diabetes.
- **Gastroenterology** - the branch of medicine that deals with the management of conditions related to the digestive system.

- **Nephrology -** deals with kidney related conditions.
- **Oncology** - is the branch of specialized medicine that provides treatment to patients suffering from cancer.
- **Pediatrics** - is the branch of medicine that deals with child health conditions and treatment.
- **Pulmonology** - deals with the medical care for conditions related to the lungs.
- **Ophthalmology** - deals with medical care for conditions related to the eye.
- **Obstetrics and gynecology** - deals with pregnancy and reproductive health of women.
- **Dermatology** - deals with medical care related to skin and related organs.

Other than these branches of medicine, there are various sub branches and specializations that are offered in the hospital set up. The physician practicing in any of the internal medicine specialties identifies the medical condition that a patient is suffering from. This is called diagnosis. Once the physician makes a diagnosis he suggests the medication needed to treat the condition. This called a prescription. If the condition diagnosed by a physician needs surgical care the physician would then direct the patient to the needed surgical care.

Branches of General Surgery

Surgical specialties employ operative treatment. A surgeon is educated in the basic medical sciences and then specializes in the field of surgery. The surgeon first understands the medical condition of the patient and then if needed, decides when an operation or a surgical treatment needs to be provided to the patient.

The various branches of surgical care include:

- **Cardiovascular surgery** - deals with surgery done to treat conditions related to the heart and blood supply.
- **Gastroenteric surgical procedures** - deals with the digestive system conditions and also include specialties like endoscopy and colorectal surgery.
- **Neurosurgery** - treats conditions related to the brain and the nervous system.
- **Transplant surgery -** involves surgical procedures carried to transplant organs from one person to another.
- **Trauma surgery** - deals with surgery for patients injured in accidents and need immediate medical attention.
- **Vascular surgery** - deals with surgical procedures to treat abnormalities in blood vessels.

In addition to these surgical specialties the surgeon also provides surgical care in all medical specialties that are provided to the patients. Surgeons perform the operative procedures by blocking the pain sensation of the patient. This is called anesthesia. The doctor who works in close association with a surgeon and anesthesia of the patient is called an anesthesiologist.

Supporting Branches of Medicine

The medical and the surgical care services that are provided in hospital branches are supported by specialists in other branches of medicine. These branches are:

- **Clinical pathology** - a branch of medicine that deals with the identification and study of diseases and their causes.
- **Radiology** - a branch of medicine that supports both medical and surgical care specialists by providing medical imaging services such as x-rays, CT scans, MRI.
- **Pharmacology** - deals with the study of drugs and the mediccations that are used to treat medical conditions.
- **Community and Preventive medicine** - deals with prevention and cure of diseases like malaria, TB, HIV that spread in the community.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List the different clinical branches of medicine and their functions.

Branch of Medicine	Function

2. List the different branches of internal medicine and their functions.

Branch of Internal Medicine	Function

3. List the different branches of general surgery and their functions.

Branch of General Surgery	Function

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   What is the doctor who performs operative procedures called?

   a. Surgeon

   b. Anesthesiologist

   c. Pharmacologist

   d. Physician

2. *Read the following question. Tick on the correct option given below.*

   What does Cardiology deal with?

   a. The heart

   b. The lungs

   c. Drugs and other harmful materials

   d. The kidneys

3. *Read the following question. Tick on the correct option given below.*

   Which of the following branches of medicine deals with identification of the disease and its causes?

   a. Pathology

   b. Surgery

   c. Toxicology

   d. Radiology

4. *Read the following question. Tick on the correct option given below.*

What is the term given to the medication that is suggested by a physician?

a. Diagnosis

b. Physician

c. Prescription

d. Surgeon

5. *Read the following question. Tick on the correct option given below.*

When a person meets with an accident, what is the type of surgical care provided?

a. Cosmetic surgery

b. Cardiovascular surgery

c. Thoracic surgery

d. Trauma surgery

6. *Match the following.*

Branch of Medicine	
a.	Gastroenterology
b.	Oncology
c.	Nephrology
d.	Ophthalmology
e.	Dermatology
f.	Radiology
g.	Pediatrics
h.	Pulmonology

Function	
i.	Deals with nerves related medical problems
ii.	Deals with child's health conditions
iii.	Deals with eye related medical problems
iv.	Deals with respiratory problems
v.	Deals with digestive system related medical problems
vi.	Deals with skin related problems
vii.	Deals with treating cancer patients
viii.	Provides medical imaging services such as x-rays

Notes

Common Infectious and Tropical Diseases

S No.	Module Name
1	Malaria, TB and other Endemic Diseases
2	Hepatitis and other Viral Diseases
3	HIV and AIDS

Course Overview

Welcome to this course on "Common Infectious Diseases". India is a tropical country. In hot and humid climate, microorganisms thrive and multiply very fast. And that includes disease causing micro organisms such as bacteria and viruses too. So which are the common infections and diseases that spread through harmful disease causing microorganisms? What are the preventive measures that we may take to protect ourselves from these? All this and more in this course.

Course Objectives

After completing this course, you will be able to:

- Assist the health care professional in the treatment of malaria, TB and other endemic diseases

Malaria, TB and other Infectious Diseases

At the end of this module, you will be able to:

- Assist the healthcare professional in the treatment of Malaria, TB and other endemic diseases
- Follow safety measures that would prevent the spread of the diseases

Session Plan	
1	Module Overview
2	Mechanism of Spread of Diseases
3	Common Diseases that Affect the Human Body
4	Role of General Duty Assistant
5	Key Learnings
6	Worksheet

Module Overview

A disease is a condition that weakens our body functions. In a diseased condition you will be unable to perform your normal body functions. In this module, you will learn how a disease spreads and how to assist the health care professional in the treatment of malaria, TB and other infectious diseases.

Mechanism for Spread of Diseases

A disease is caused by both internal and external factors. If the disease is caused by external factors such as through microorganisms, it is called infection. Microorganisms are very small living organisms which are not visible to the naked eye. They enter our body and release toxic materials that can lead to diseases. The different types of microorganisms include bacteria, virus, fungi and small organisms called protozoa. They enter our body through different routes. The most common routes of infection are through food, water and air. Some diseases are caused when the microorganisms enter our body through other organisms such as mosquitoes, flies.

Our surroundings should be kept clean and you must take an active role in eliminating these disease causing microorganisms and protect yourself and others from getting infected by diseases.

Common Diseases that Affect the Human Body

A disease that commonly occurs in a specific location is called an endemic disease. Some diseases occur only in certain areas; as those areas are favourable to the growth of the microorganisms.

Some of the common diseases are as follows:

Malaria

Malaria is an infectious disease caused by a parasite that is spread by the bites of a mosquito. A person infected by malaria suffers from fever, weakness, shaking chills, headache, muscle aches, and tiredness. Vomiting and diarrhea may also occur. The patient shows such diseased conditions 10 to 15 days after the mosquito bite. If not treated, malaria can become life threatening. The condition of malaria can be treated by using proper drugs and eating a balanced diet. Malaria can be prevented by keeping our surroundings clean and preventing the growth of mosquitoes.

Tuberculosis

Tuberculosis (TB) is an infection caused by bacteria primarily in the lungs. It spreads usually from person to person by breathing infected air during close contact. A patient infected by the TB bacteria suffers from fatigue, fever, chills, loss of appetite, weight loss, coughing and night sweats. A TB patient has to take medicines for a minimum period of six months continuously. The drugs may continue up to one year in some cases. These drugs must be monitored by the doctor. The disease of TB spreads whenever patients cough or sneeze. A person suffering from this condition should be advised to cover their faces while coughing or sneezing. TB can be prevented by maintaining proper hygiene levels in our surrounding areas.

Typhoid

Typhoid fever is a serious infectious disease that is caused by bacteria present in stale food or water. A person infected with typhoid bacteria has high fever, skin rashes on stomach and chest areas and severe fatigue. Abdominal pain, bloody nose is also possible. Typhoid spreads when a person consumes food or drink that has been handled by an already infected person. The treatment of typhoid includes the use of appropriate drugs and a healthy diet.

Role of General Duty Assistant

In your job as a General Duty Assistant, you will have to manage patients with various infections and in diseased conditions.

Firstly you must protect yourself from getting infected and prevent the spread of infections to other patients. When a patient is admitted in hospital and is diagnosed with an infection, you must ensure the following aspects are taken care of:

- Monitor the drug intake of the patient. Make sure he/she is getting the medicines on time.
- Check the patient occasionally for symptoms of other diseases and act accordingly.
- Check the diet of the patient. Avoid food that may be harmful.
- In addition to the above measures of patient care, you must ensure that the hygiene levels in the hospital surroundings are maintained properly.
- For your own protection wear a mask over your mouth.
- After handling the patient, remember to wash your hand with soap and water.

Key Learnings

Sumamrise your understanding of the module. Write your answers in the spaces provided.

1. What is an infection?

2. List the few common diseases and their symptoms.

3. List a few action points you must take while assisting patients with infection.

Worksheet

1. *Read the following question. Tick on the correct option.*

   Which of the following is a water borne disease?

   a. Tuberculosis

   b. Typhoid

   c. Malaria

   d. None of the above

2. *Read the following question. Tick on the correct option.*

   What is the term given for diseases occurring in a specific location?

   a. Pandemic

   b. Epidemic

   c. Endemic

   d. None of the above

3. *Match the columns.*

	Disease
a.	Typhoid
b.	Tuberculosis
c.	Malaria

	Spreads Through
i.	When infected person coughs or sneezes
ii.	Mosquito bite from infected person
iii.	Contaminated food

Notes

Hepatitis and other Viral Diseases

At the end of this module, you will be able to:

- Assist the healthcare professional in the treatment of viral diseases such as Hepatitis
- Follow safety measures that would prevent the spread of viral infections

Session Plan	
1	Module Overview
2	Viral Infections
3	Viral Diseases
4	Role of a General Duty Assistant
5	Key Learnings
6	Worksheet

Module Overview

A virus is a very small microorganism that infects a person leading to life threatening conditions. Viral infections spread very rapidly and weaken the body's strength to fight diseases leading to contraction of various other diseases. Thus, making the patient weak.

As a General Duty Assistant, it is your duty to ensure proper care of viral infected patients for their quick recovery. Also, as you will be exposed to the germs while managing the patients, you also need to protect yourself from contracting any viral infection. In this module, you will learn about the about the various viral diseases managing a viral infected patient and precautionary measures to be taken.

Viral Infections

A virus is a very small microorganism that can spread from one person to another through multiple routes such as air, water or through other organisms such as mosquitoes or dogs. Once the virus enters the human body, it attacks the immune system of the human thereby weakening the body to fight any form of other infections. A viral infection can prove to be life threatening as it can spread to various organs in the body and affect the function of some of the vital organs such as the kidneys, lungs or the liver. When a person is infected with a virus, he or she complains of pains, severe weakness and high fever. There is no treatment for viral infections although some drugs might be given to give the patient some relief from the symptoms caused by the infections. Therefore, it becomes very important to protect yourself from viral infections.

Viral Diseases

Here are few virus causing diseases:

Viral Hepatitis

Hepatitis is a viral infection that affects the liver and leads to a variety of complications leading to death in cases of patients affected severely. There are 5 different types of hepatitis, they are termed as hepatitis A, B, C, D, E respectively. Hepatitis A and E enter the human body through contaminated food substances whereas hepatitis B, C and D enter the body through blood and other body fluids of infected persons.

A person affected by hepatitis complains of low grade fever, tiredness, loss of appetite and jaundice. Jaundice is a condition in which the skin shows a yellowish discoloration.

Once a person shows the symptoms of jaundice, he or she should be admitted into the hospital for immediate medical attention.

Dengue Fever

Dengue fever is a viral disease passed on by specific mosquitoes. It can lead to severe weakness in patients affected by this condition.

Sudden onset of fever, intense headache, muscle and joint pain, unpleasant metallic taste in mouth, loss of appetite, vomiting, diarrhoea and abdominal pain are the common symptoms of the infection. People infected with the virus are commonly prescribed painkillers and advised to rest and drink plenty of fluids. Dengue spreads through mosquito bites, ensure that you use mosquito repellents and keep the surroundings free of mosquitoes by maintaining proper hygiene.

Chikungunya

It is a viral infection that is characterised by severe joint pains resembling arthritis. This viral infection spreads through a mosquito bite. The patient suffers from fever, joint pain, swelling of joints, stiffness of joints, muscular pain, headache and weakness. There is no antiviral drug or medicine specifically for this condition. Treatment usually includes taking sufficient rest, taking more fluid food and medicines to relieve pain.

As most of the viral infections have no cure, it is very essential to protect yourself from any viral disease. Most of the medicines given during viral fever are to lower the symptoms or pain.

Role of a General Duty Assistant

In your job as a General Duty Assistant, you will be encountering people with various viral infections.

- While managing the patient with a viral infection, remember that the patient needs to be given sufficient rest and has to be given fluids regularly.
- Check with the doctor or the nurse about the type of the viral infection and the treatment that is being provided to the patient.
- Viral infections weaken the capacity of the body to fight infections, so ensure that the patient is not exposed to any other infection.
- Always wash your hand thoroughly after managing a patient with hepatitis infection.
- Always cook the food above 85 degrees so as to kill the virus.
- Check with the dietician before serving food to the patient and while managing a patient suffering from hepatitis, always ensure that the patient is given the appropriate diet and fluid.
- Always provide the patient with ample amount of fluids that are prescribed by the dietician.
- You must protect yourself from viral infections, use gloves and other disinfectants regularly to remove virus. Consult a doctor to get the appropriate preventive vaccinations.

Key Learnings

Sumamrise your understanding of the module. Write your answers in the spaces provided.

1. Explain viral infection.

2. Write a short note on viral hepatitis.

3. Write a short note on dengue.

4. Write a short note on chikungunya.

5. What are the steps you must take while managing a patient suffering from viral infection?

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   Which is of the following is not a viral disease?

   a. Hepatitis B

   b. Hepatitis C

   c. Malaria

   d. Dengue

2. *Read the following question. Tick on the correct option given below.*

   I have joint pain, swollen joints, fever and headache. I am suffering from:

   a. Chikungunia

   b. Hepatitis B

   c. Hepatitis C

   d. Dengue

3. *Read the following question. Tick on the correct option given below.*

   What are the steps you must ensure while assisting a patient with virus infection?

   a. Give the patient a diet prescribed by the dietician.

   b. Provide the patient with ample amount of fluids.

   c. Take vaccination for prevention of hepatitis.

   d. All of the above

Notes

HIV and AIDS

At the end of this module, you will be able to:

- Assist the healthcare professional in the treatment of HIV infected patients
- Follow safety measures that would prevent the spread of HIV infections

Session Plan	
1	Module Overview
2	HIV and AIDS
3	Transmission of HIV
4	Symptoms of HIV Infection
5	Diagnosis and Treatment of HIV Infection
6	Prevention of HIV Infection
7	Role of a General Duty Assistant in Prevention of HIV
8	Key Learnings
9	Worksheet

Module Overview

The immune system of our body fights against infections caused by microorganisms. This immune system of our body is attacked by a virus called HIV. It leads to a medical condition called AIDS. AIDS is one of the deadliest diseases which is still incurable. It is very important to control the spread of this disease in order to save many lives. In this module, let us understand the steps to be followed necessary to prevent HIV infection and maintain safety standards to prevent HIV spread in the hospital.

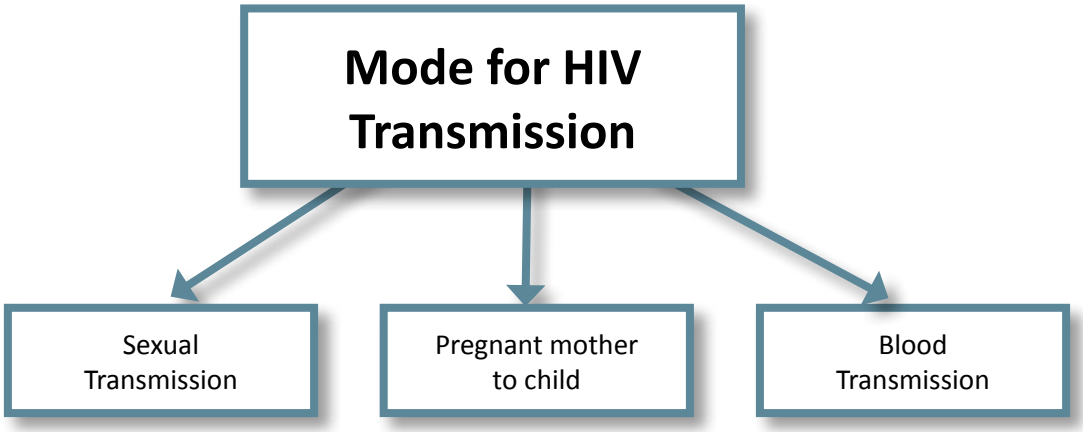
HIV and AIDS

HIV stands for Human Immunodeficiency Virus. The HIV virus attacks the immune system of the body. It leads to a reduction in the capacity of our body to fight against infections. Due to this our body becomes susceptible to various other diseases. The infection of HIV leads to a set of medical complications that are collectively termed as Acquired Immuno Deficiency Syndrome or AIDS. AIDS is a very advanced stage in a person having HIV infection. All HIV virus infected patients need not have AIDS. The HIV virus keeps on attacking our immune system over a prolonged time. At a very later stage when the complication increases and when our body starts getting infected from other diseases due to low immunity, then this advance stage is called AIDS. The virus spreads from one person to another through transmission of bodily fluids like blood, semen and other secretions. It can also spread from mother to child during pregnancy.

The virus and disease are often referred to together as HIV/AIDS. The disease is a major health problem in many parts of the world. As there is no known cure or vaccination for the disease, preventing infection is the only way of controlling AIDS.

Transmission of HIV

The HIV can transmitted in three ways:



- **Sexual transmission** - When a person infected transmits the virus through semen or vaginal fluids during sex.
- **Through blood** - When the blood infected with the virus is transfused or comes in contact with the blood of a normal person.
  - During blood transfusion, if blood from an infected person is transferred to a healthy person, then this will lead to transmission of the disease.
  - Using injection needle used by an infected person can also lead to spread of the disease as the virus from the blood of the infected person contaminates the needle. When this contaminated needle is used by a healthy person, the virus from the needle goes into the bloodstream of the healthy person.

- Using same shaving blades, knives, nail cutters also leads to transmission of the disease. Blades and knives contain residue blood received from any cuts while shaving. If this blood is from an HIV infected person then the blade or knife is contaminated with HIV. If a healthy person uses the contaminated blade or knife and receives a cut while using it, then there is a chance that the virus will enter the healthy person leading to spread of HIV.

- **From an infected mother to a child during the delivery of the child** - During pregnancy, labour, delivery, or breast feeding the child can contract this disease from the mother.

HIV does not spread by:

- Mosquito bite
- By touching an HIV infected person
- Staying together with an HIV infected person

Symptoms of HIV Infection

Knowing the symptoms of AIDS is very important, as it will allow the infected patient to seek quick and effective treatment.

There are various symptoms of an HIV infection. An infected person shows:

- Rapid weight loss
- Dry cough
- Recurring fever or profuse night sweats
- Unexplained fatigue
- Difficult or painful swallowing
- Persistent skin rashes or flaky skin

If a person shows any of the above symptoms, then it has to be reported to a doctor immediately. The doctor would suggest a blood test to check the presence of the virus.

Diagnosis and Treatment of HIV Infection

Three tests are done to confirm the diagnosis of an HIV infection. Once the diagnosis is confirmed , then the doctor plans for the treatment of the infection. Till date, there has been no cure discovered for AIDS; that is, there is no cure for HIV infection, but a variety of drugs can be used in combination to control the complications of the disease.

The HIV infection leads to a set of health complications called AIDS. The fever and other symptoms that are observed in AIDS can be treated with some drugs and it is ensured the quality of life is improved. HIV infected patients are given a combination of three drugs. These drugs are provided at various health centres and social organizations spreading awareness about this deadly disease. It is important to take precautions to avoid the infections that can attack a patient suffering from AIDS.

Prevention of HIV Infection

As AIDS is an incurable disease, the only way of controlling it is to prevent it.

Given below are a few steps to prevent transmission of HIV:

- HIV infection through sexual transmission can be prevented if safe sex is practiced with a single partner.
- Blood transmission of the virus can be prevented by screening the blood before transfusion.
- Blood transmission can also be prevented by not using used blades, injection needles, knives.
- The mother to child transmission of HIV can be prevented by educating and counseling the mother. The mother must be convinced to take antiretroviral treatment to prevent spreading of disease from mother to child.

Role of a General Duty Assistant in Prevention of HIV

It is difficult to recognize an HIV patient by the physical appearance. The symptoms shown by a HIV patient are similar to any other viral infection. As a General Duty Assistant, you need to take safety measures to protect yourself from the infection and prevent the spread of HIV in the hospital.

These are few steps you must follow to prevent spread of HIV:

- Self protective measures include wearing gloves while handling blood stained medical instruments and preventing contact with body fluids.
- It is important to follow universal work precautions in the disposal of needles and glass tubes that are used to carry blood specimens.
- Ensure that you follow standards for disposing needles or any other equipments.
- As a responsible person, you should maintain a healthy lifestyle and follow all the preventive measures against this deadly infection.
- You should spread awareness among people who do not know the facts about HIV/AIDS. This will help in preventing spread of HIV.
- You must also stop any wrong method that is being practiced in order to prevent AIDS.
- Being aware yourself of HIV and AIDS, you should not discriminate between an HIV positive and non infected person.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is AIDS?

2. List the ways in which HIV is transmitted.

3. List some symptoms of HIV infection.

4. List the steps to prevent HIV infection.

5. Write the steps you will follow as a General Duty Assistant to prevent the spread of HIV.

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   What is the full form of HIV?

   a. Human Interfering Virus

   b. Haemo Immuno Virus

   c. Human Immuno Virus

   d. Human Immunodeficiency Virus

2. *Read the following question. Tick on the correct option given below.*

   HIV affects which of the body systems?

   a. Digestive system

   b. Immune system

   c. Respiratory system

   d. Nervous system

3. *Read the following question. Tick on the correct option given below.*

   Through which of the following ways is HIV NOT transmitted?

   a. Blood transfusion

   b. Sexual transmission

   c. By using infected needles

   d. Through touch

4. *Read the following question. Tick on the correct option given below.*

   What is the test to determine AIDS called?

   a. Elica

   b. Eliziah

   c. Elisa

   d. None of the above

5. *Answer True or False.*

   a. AIDS is the virus causing HIV disease. _____

   b. Breastfeeding by an infected mother can lead to AIDS. _____

   c. HIV diagnosis is done through a urine test. _____

   d. Having multiple partners can lead to the spread of HIV._____

   e. Using infected blades, razors can lead to the spread of HIV._____

Notes

Infection and the Control of Infection

At the end of this module, you will be able to:

- List some of the reasons why residents and patients are at risk for getting infections.
- Discuss the cycle of infection and ways that you can break the cycle.
- Detail the components of standard precautions and transmission precautions.
- Describe specific ways to prevent the spread of infection, including handwashing, the proper use and disposal of gowns, gloves, masks, eye protection, handling hazardous waste and sharps, patient care supplies and equipment handling and environmental controls.

Session Plan	
1	Module Overview
2	What is Infection Control
3	Why are Infections a Big Problem in Hospitals and Nursing Homes
4	The Cycle of Infection: How Infections Spread
5	Standard Precautions
6	Hand Washing
7	Key Learnings
8	Worksheet

Module Overview

This session covers the definition of infection and the measures to control them.

What is Infection Control

Infection control helps hospitals, nursing homes, assisted living homes and other places where healthcare is provided. It stops the spread of infection, or germs, to patients, residents, staff and visitors.

We can all help control infections by doing special things in these areas:

- *The environment:* We can all help to keep the patients' rooms clean and sanitary. Clean rooms and a clean hospital or nursing home spread fewer germs.
- *Equipment and supplies:* We must use sterile dressings on open skin surfaces to prevent infection. We must also keep patient equipment and supplies clean in order to prevent the spread of germs.

- *Our work practices:* All healthcare workers must make infection control a part of everything we do. We must use standard precautions. We must wash our hands and we must do several other things while we work in order to stop the spread of germs from one person to another. We must make infection control a part of everything we do.
- *Our own state of health:* Healthcare workers who come to work with a cold or flu can spread it to their patients. We must get enough rest, have a good diet and take the hepatitis B shot so that we can stay well and work without harming the ones we care for. We should also stay home when we have a bad cold, flu or another illness that our patients can catch from us.
- *Our patients' and residents' state of health:* Many older people and those with a history of breathing problems should get pneumonia and flu vaccines to protect them against these common illnesses.

Why are Infections a Big Problem in Hospitals and Nursing Homes

Infections are a big problem in hospitals and nursing homes for many reasons. They are a problem because:

- We do not know when we are spreading germs. We cannot see them. Germs are very, very, very tiny and cannot be seen.
- People in hospitals and nursing homes are at great risk of getting an infection. Also, infections can spread very quickly in hospitals and nursing homes.
- They cause deaths, longer lengths of stay and they cost a lot of money.

Germs are very tiny. We cannot see them with our eyes as we work.

Germs are all over the world. They are found all over and in our own bodies. Some germs are good for us. These good germs keep us healthy. For example, we have good germs in our intestines that help us digest food and prevent other infections.

Many other germs can cause great harm and illnesses. Harmful germs that can make people ill are called pathogens. They cause infections and diseases. They can cause wound infections, colds, pneumonia, AIDS/HIV and other diseases. Many of these diseases can cause serious harm and even death. These illnesses can be passed from one person to another without the person knowing that they are spreading it because these germs are very tiny and small. We cannot see them.

Invisible germs from our hands will grow and multiply in a couple of days if we rub our hand with a cotton swab and then wipe it on a special dish with food to grow. After a couple of days, we can put some of these grown germs under the microscope to see exactly what they are.

Germs will grow and multiply when they are fed and given a good place to live and grow. Nursing assistants and other healthcare workers can stop the growth of germs by taking away the things that feed germs and help them to grow. Germs like moisture and darkness. They grow very well when they are wet and kept in the dark.

Germs also like the food we eat. Leftover food on a patient's tray is more than enough food to grow germs. We can help in our battle against germs by keeping patients and their environment clean, dry and bright with light.

We can see dirt on our hands, but we cannot see germs on our hands. Hand washing is the best way to rid our hands of germs that we cannot see. Infection control must be a part of EVERYTHING we do.

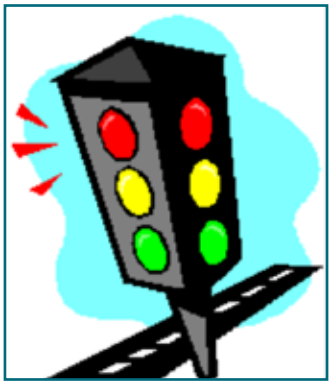
People in hospitals and nursing homes are at great risk of getting an infection

Infections spread very quickly in hospitals and other healthcare places for a couple of reasons. They spread quickly because people in hospitals are ill and very often weak. People that are ill and weak get infections because they are not able to fight infections off as well as they could if they were healthy and well.

People in hospitals and nursing homes are also at risk for getting infections because they all live together in one area, rather than their own homes. Germs and disease can spread very quickly from one sick patient or resident to another when people live in a large group.

Our patients are also at risk for infection because they may have a weak and poor immune system. This makes them less able to fight off an infection. A disease, like AIDS/HIV, the common cold or the flu, some medications, old age and being an infant, can cause this weakness.

It is necessary that nursing assistants and other healthcare workers follow special infection control measures and restrict traffic in areas where there are infants, older people and very ill people. Some of these areas are the:



- labor and delivery room
- infant nursery
- new mothers' area
- special care units, like the ICU
- kidney areas where people are more prone to infection
- surgical care areas and
- operating rooms where skin surfaces are broken with surgery

Infections Cause Deaths, Longer Lengths of Stay and a Lot of Money

According to the U.S. Centers for Disease Control (CDC):

- More than 2 million infections start every year in a hospital, nursing home or another healthcare setting
- 70,000 people die every year as the result of getting an infection in a hospital, nursing home or another healthcare setting
- Every infection that is caught in a hospital, nursing home or other healthcare setting costs over $ 30, 000
- The United States spends more than $ 45 billion every year for the extra care and treatment that is needed when infections start in a hospital, nursing home or another healthcare setting

The CDC states that the leading cause of death among residents in nursing homes is infection. Infection is also the most frequent reason for a person to be moved from the nursing home to a hospital for care.

1.5 new infections start every year in nursing homes. This number means that every person in a nursing home gets an average of one infection every year (Centers for Disease Control, 2010).

Infections lower a person's quality of life and they cause pain and suffering to the patient and their family members. Again, infection control and the prevention of infections must be a regular part of everything we do. Infections are a big and costly problem in healthcare.

The Cycle of Infection: How Infections Spread

Infections can spread from person to person when germs:

- are able to leave the body
- have a means of transportation and
- can enter another body

Germs are everywhere. They are in the air, on our body, in our body, on our clothes, on and in food, in liquids, in human waste, on table tops, bed sheets, flowers and everywhere else.

Nursing assistants can do many things to prevent the spread of germs. We must keep foods safe. We must make sure that patients' rooms are clean and without dust. Dust carries germs through the air.

Nursing assistants cannot prevent germs from leaving someone's body. Germs will leave a person's body when they cough, sneeze, move their bowels and when they have a draining wound. We have no control over a sneeze and a cough, but we do have control over the tissues that someone is using when they sneeze or cough. Tissues are a way for germs to move from one person to another. Tissues and our hands are vehicles for germs, just like a car is a vehicle for us to move from one place to another. We cannot get to a faraway store, work or church unless we have a car or another mode of transportation to get us from our house to where we want to go.

Germs cannot move from one place to another unless they too, have a means of transportation. If we take this away from them, they cannot move from one person to another. Tissues, hands and all other items that have, or may have, body fluids can move germs from one person to another. We can stop the spread of infection when we take the germs' transportation away.

We can break the cycle of infection and stop infections from moving from one person to another when we:

- wash our hands properly before and after EVERY patient contact.
- wash our hands properly before and after EACH task we do.

- handle all items that have, or may have, germs in the proper way.
- do other simple things like keep dirty bed sheets away from our clothing.

EVERYONE must control infection.

How Can Infections Be Stopped?

Infections can be prevented and stopped when we:

- follow infection control and standard precautions procedures.
- handle hazardous waste properly.
- handle sharps properly.
- keep ourselves healthy.
- keep our patients healthy.
- wash our hands properly.

Standard Precautions

All healthcare workers must use standard precautions when they handle and throw out items that may have blood or other body fluids. All body fluids are able to transport invisible infections so we must use standard precautions whenever we handle any substance that may have an infection.

Some examples of body fluids are:

- Blood
- Faeces
- Wound drainage
- Secretions from the nose
- Saliva
- Sputum
- Tears
- Urine
- Vomit
- Breast milk
- Fluids taken from lungs, the abdomen, the spinal area, etc.

USE STANDARD PRECAUTIONS FOR ALL PATIENTS and ALL BODY SUBSTANCES

We treat all patients as if they had an infection even when we are pretty sure that they do not. We must use standard precautions during all of our patient care.

Standard Precautions Practices

Hand Washing Procedure

You MUST:

- Wash your hands before and after every patient contact.

- Wash your hands before and after every task even if you have worn gloves. Gloves are NOT a substitute for hand washing. Learn more about hand washing below.

Gloves

You MUST:

- Wear gloves whenever you may touch any body fluid, including when you empty a urine bag, urinal or bed pan.
- Remove your gloves and throw them away after each use in the proper manner. Most hospitals and nursing homes use red bags to throw away gloves and all other things that are not sharp.
- NEVER use gloves more than once. They must be thrown out after every use. They CANNOT be re-used.

Wash your hands immediately after taking off your gloves.

NEVER walk around the hall with gloves that have touched a patient or a body fluid.

Masks, Eye Protection and Face Shields

You MUST:

- Use personal protective equipment like a mask, eye protection and face shields if you are near a patient care activity that may involve a splash or spray of body fluids.
- Use a special mask or an Ambu-bag when you are doing CPR or rescue breathing.
- Dispose of all single use personal protective equipment immediately after use.

Gowns

You MUST:

- Wear a gown when you are doing something that may soil your clothes with body fluids. You should wear a plastic gown when the body secretion is wet. A plastic gown does not let wet body fluids go through the gown to your clothes or uniform.
- Take the gown off and throw it away.
- Wash your hands immediately after taking the gown off.

Patient Care Equipment and Supplies

You MUST:

- Carefully handle all dirty patient care equipment so that it does not touch your clothing or another patient,
- Use single-use patient supplies with one patient. Do NOT share these items with other patients.
- Throw away all single-use patient care equipment and supplies in the proper manner.
- Write the patient's name and room number on all patient care supplies, like urinals and bedpans.

Environmental Control

You MUST:

- Routinely clean all visibly dirty items such as bedside tables and night stands,
- make sure that all wheelchairs, beds, rails and walkers are routinely kept clean by the housekeeper or another person at your hospital or nursing home.
- Keep your own food and drinks out of patient care areas and only in the staff refrigerator. These items cannot be put in the medication refrigerator or the patient refrigerator.

Linen

You MUST:

- Keep the linen cart covered.
- Keep all linen off the floor.
- Keep dirty linen and all other objects away from your body and clothing.
- Place dirty linen in the proper bag.

Patients' Beds and Chairs

You MUST:

- NOT sit on patients' beds or chairs. Sitting on patient beds and chairs can spread infections to patients and residents from our uniform.

Transmission Precautions

At times a person may have an infection that is very hard to control. We use special transmission precautions, in addition to standard precautions, when a person has an infection that is hard to control. For example, special transmission precautions are necessary when a person has TB, a severe virus infection, the mumps or another disease that others can catch very quickly.

People with these special precautions are usually kept in a private room. There are three kinds of precautions:

1. Airborne
2. Droplet
3. Contact or touching

A person with TB is put on airborne precautions. When a person has TB they are put in a special room and a sign is put outside the person's door. This sign tells you what you must do before you enter the room, what you must do while you are in the room and what you must do when you are leaving the room. All people going into this room must wear a special mask, called a HEPA mask.

A person with a bad respiratory infection, like the mumps or the flu, is put on airborne isolation. Nursing assistants and other health care providers have to wear a regular mask when they enter this person's room.

People are put on contact precautions for serious wound or skin infections and for bad infections that affect the gastrointestinal tract. It is necessary to wear a gown and gloves when entering the room of a person that is on contact isolation. You must also use a special soap when washing your hands.

Special Waste Handling

Everyone must also throw away all body fluids and trash or waste as if it were infected with germs in order to prevent infections from spreading.

We must throw away all gowns, gloves, masks, bandages and other items, other than sharp items, in a special red bag. This red trash bag contains hazardous waste. These special red bags are moved and handled by people who have been trained to do this safely.

Safe Handling of Sharps

Infections can be prevented when we handle and throw away sharp objects and items, such as needles, in the proper way. Because needles and sharp objects may break through the red trash bags, they must be put into hard puncture proof containers. Many of these hard red containers are found on the walls of patient rooms and on the nurses' medication cart. These sharp items are also treated as hazardous waste.

Keeping Yourself Healthy

There are many things that you can do to stay healthy. When you keep yourself healthy you can easily fight off many infections. Your patients cannot get an illness or infection from you when you are healthy. To keep healthy:

- Eat a good diet
- Get plenty of rest
- Exercise
- Manage your stress
- Get a hepatitis B shot if you have not already had one
- Get a flu shot every year
- Get a pneumonia shot if your doctor thinks that it is a good idea for you to get one
- Stay away from other sick people in your home, as much as possible

You should not go to work if you have been exposed to an illness like measles and if you have a cold with a fever or heavy mucous, the flu or another infection.

If other members of your household or family are affected with an infectious disease such as tuberculosis, pneumonia, chickenpox or the measles, you should also call your supervisor.

Keeping Your Patients and Residents Healthy

Nursing assistants and other healthcare providers can work together to keep their patients and residents as healthy as possible.

We can help them to:

- Get a good diet
- Get plenty of fluids
- Get enough sleep and rest
- Manage their stress
- Get their flu, pneumonia or hepatitis B shots
- Stay away from infections and other sick people, as much as possible

Hand Washing

Simple hand washing is the single most effective thing that we can do to prevent the spread of germs and infection in hospitals, nursing homes and other healthcare places. The success of hand washing has been proven over and over again. Yes, hand washing is the MOST important thing that you can do to prevent the spread of infection from one person to another.

Healthcare workers' hands carry the most infections. It is our hands that carry germs from one person to another. We must wash our hands, keep our nails short and clean and avoid wearing rings, other than a small and clean wedding band. Germs like to hide under moist and dark nails and rings. Rings and nails transport germs.

You should use soap, water, lots of rubbing and a little time to wash your hands. Never hurry through the process. Do not ever skip a step. Do not forget to wash your hands. Remember, infections from your hands can kill your patients.

REMEMBER- WASH YOUR HANDS BEFORE AND AFTER EVERY PATIENT CONTACT OR VISIT

Proper Hand Washing

The correct hand washing procedure is simple and takes less than 20 seconds to complete.

These are the steps that you must follow when you are washing your hands:

1. Turn on the water.
2. Wet your hands up to your wrists.
3. Apply a good amount of soap to your hands and wrists while the water remains running.
4. Rub your hands together to work up the suds.
5. Rub the front and back of your hands, rub between your fingers, rub around the edges of your nails, clean under your nails, rub your wrist up to about 8 inches above your hand. THIS RUBBING SHOULD CONTINUE FOR AT LEAST 15 SECONDS. Hold your hands down lower than your elbows, but do NOT touch any part of the sink. Put a little more water on your hands if the soap dries out while you are rubbing.

6. Rinse your hands well under the running water without touching the sink and while keeping your fingers LOWER than your wrist.
7. Take a paper towel and dry your hands.
8. Turn the water off with the paper towel, NOT your clean hands.
9. Throw the paper towel away.

If you forget a step, start all over again from step 1. If you make a mistake and touch the sink, start all over again from step 1.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is infection control?

_____

_____

_____

_____

_____

2. List down the areas which are to be maintained infection free in hospitals.

3. Define standard precaution.

4. Describe the six steps of hand washing.

Worksheet

1. *Tick the correct answer.*

a. Which of the following patients would be at risk of infection?

i. A patient with a surgical wound

ii. A patient with severe and extensive burns

iii. A patient with hepatitis B

iv. A cardiac patient

b. Which of the following statements is false?
Standard precautions:

i. Are the first line of approach to infection control

ii. Were introduced to prevent transfer of blood borne pathogens

iii. Include aseptic techniques

iv. Are used for respiratory patients

c. Standard precautions are followed in hospitals because:

i. Most patients in hospitals are not a source of disease

ii. Hospitals are extremely clean and thus special precautions are not required

iii. Antibiotics cure most infections and so they are readily treated

iv. Infectious patients do not always have obvious signs and symptoms

Notes

General Surgical and Medical Instruments

S No.	Module Name
1	Common Hospital Equipment

Course Overview

Doctors use different kinds of equipments for different purposes. There are medical equipments as well as those needed for surgery. As a General Duty Assistant, you need to identify and understand the form and function of some hospital equipments in order to assist the doctor or the nurse efficiently. This course gives you an insight into the various hospital equipments that you must be familiar with.

Course Objectives

After completing this course, you will be able to:

- Identify the common medical and surgical equipment used in the hospital

Common Hospital Equipment

At the end of this module, you will be able to:

- List the common medical equipment used in the hospital
- Assist the healthcare professionals in the use of the required medical equipment

Session Plan	
1	Module Overview
2	Common Equipment Used in the Hospital
3	Common Medical Equipment
4	Common Surgical Equipment
5	Key Learnings
6	Worksheet

Module Overview

Medical procedures are carried out using devices and equipment that are designed according to their usage. This module lists the different equipments used in a hospital.

Common Equipment Used in the Hospital

You should be aware of the common equipment that is used by the doctors and the nurses during various medical procedures. The equipment used in the hospital is broadly classified as:

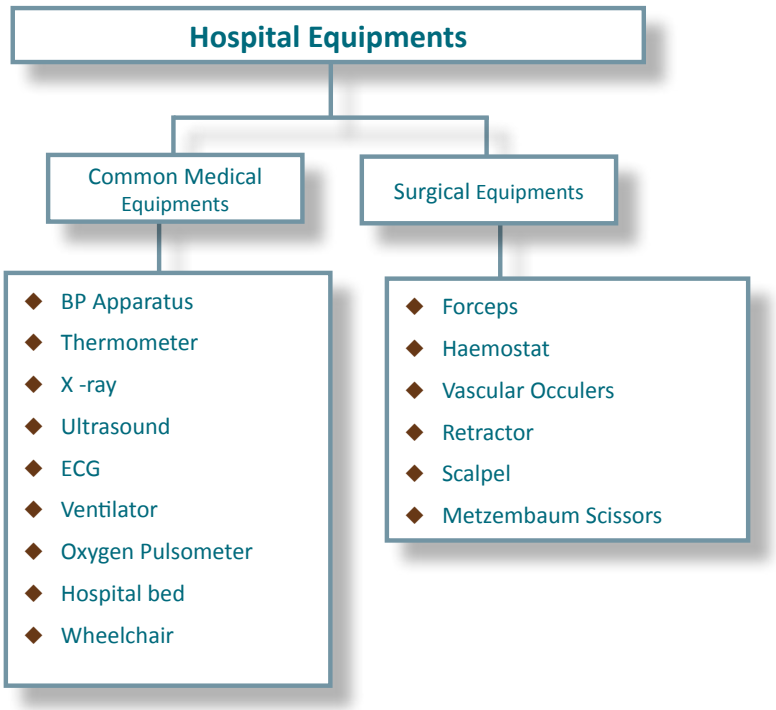
- Common Medical Equipment
- Common Surgical Equipment

In addition to the medical and surgical equipments used in the hospital you should be aware of the equipments that are used to manage patient activities. The common medical equipments used in the hospital includes:

- Diagnostic equipments that includes stethoscope, blood pressure apparatus, thermometer
- Imaging equipments such as x-ray, ultrasound, CT scan, MRI
- Specialized equipment such as ECG, ventilator, oxygen pulsometer, dialysis machine
- Other equipment used for patient management such as hospital bed, wheelchair and stretchers

Some of the common surgical equipment include instruments such as:

- Forceps
- Haemostat
- Vascular Occluders
- Retractor
- Scalpel
- Metzenbaum Scissors



Common Medical Equipment

You need to identify and understand the form and function of some hospital equipments in order to assist the doctor or the nurse efficiently. Let us now look at the common medical equipment used in the hospitals.

Stethoscope

A stethoscope is used for listening to the sounds generated inside the body. The drum of the stethoscope is placed on a body part of the patient such the heart or the lung. The stethoscope has two earpieces that are placed by the doctor in their ears to listen to the sounds of heart beat or breathing.

Blood Pressure Apparatus

The blood pressure meter or the BP apparatus is also called the sphygmomanometer. It is used to measure the blood flow rate in the body. The BP apparatus comprises a pressure cuff and hand bulb that are connected to a gauge filled with mercury. You must ensure that BP apparatus is kept within the reach of the doctor or the nurse whenever they measure the BP apparatus.

Patient Monitor

One of the most essential tools in patient care is the patient monitor. It is a large device that records and interprets the vital signs of a patient during medical care or treatment. The heart rate, breathing rate and the ECG of the patient are displayed on the LCD monitor. The patient monitor will be attached by the nurses. The recordings of the patient monitor are noted and reported to the doctor from time to time.

X-ray Machine

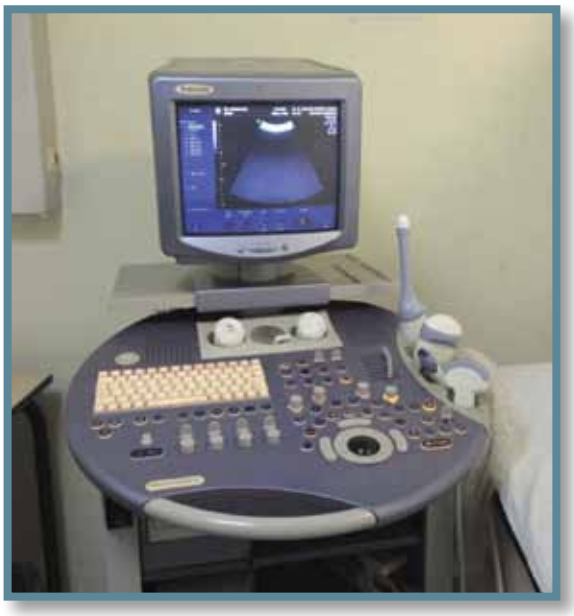
X-ray machine help doctors diagnose illnesses, detect fractured bones, cavities and foreign objects inside the body.

ECG Machine

An ECG machine detects any abnormalities in heart functions. It is found in the heart disease section in the hospital.

Ultrasound Machine

Ultrasound machine map the body's interior and produce a visual image of them. One of the uses of the ultrasound is to check pregnant mothers and report the development of the baby.



Medical Ventilator

A medical ventilator is a machine designed to mechanically move air into and out of the lungs.

Dialysis

A dialysis machine helps a patient who cannot breathe on his/her own. It is used for removing waste and excess water from the blood. It is used as an artificial replacement for a kidney that has failed.

In addition to the medical equipment, there are specialized equipment such as saline bottles, catheters and equipment used in the feeding and medication of the patient.

Common Surgical Equipment

The instruments that are used in the operating rooms must be free of infections. So it is important for you to identify the equipment that is used in the operative procedures.

Forceps

Forceps are a hinged instrument resembling either a small pair of scissors or a pair of tweezers. Forceps are used for holding tissue.

Haemostat

Haemostat is a type of forceps that is used for controlling the bleeding during a surgery.

Scalpel

Scalpel is a small thin blade resembling a knife. It is used to make cuts during a surgery.

Metzenbaum Scissors

Metzenbaum scissors is a small pair of scissors, with blunted tips. It is used for cutting delicate tissue.

Syringes

A syringe is a needle instrument. It is used to deliver medicine directly into the blood. It is also used to draw blood and other body fluids for examination. There are different types of syringes based on the size of the needle.

Ligature Needles

Ligature needle is a curved needle which can be attached to a thread. This needle is used to make sutures (stitches). There are different types of ligature needles based on the thickness of the sutures that need to be made.

Dermatome

Dermatome is an electrical or air-powered device used to slice off thin layers of skin, which can then be grafted onto a damaged area.

Endoscope

Endoscope is a fiber-optic device used to see small body cavities inside the body. They are used in procedures that do not involve large cuts in the body.

You have seen some of the common surgical and medical equipments. In addition to these, there will be a lot of other instruments and tools that are used according to the needs of the patients. As a General Duty Assistant, it is your responsibility to identify and ensure that the equipment is cleaned and ready for use by the doctor or the nurse as and when needed by them.

Key Learnings

Summarise your learnings here. Write your answers in the spaces provided.

Image of the Equipment	Name of the Equipment	Function of the Equipment
		
		
		

Worksheet

1. *Identify the different equipments. Write their names.*

Equipment	Name of the Equipment
	_____
	_____
	_____
	_____
	_____

2. *Match the following.*

Equipments	
a.	Dermatome
b.	Endoscope
c.	Syringe
d.	Metzenbaum scissors
e.	Medical Ventilator
f.	ECG
g.	Dialysis
h.	Forceps
i.	X-ray sachine

Function	
i.	To cut delicate tissues
ii.	To mechanically move air in to and out of the lungs
iii.	To detect abnormal heart functions
iv.	To hold tissues
v.	To slice thin layer of skin
vi.	To remove waste and excess water from the blood
vii.	To see internal body cavities
viii.	To detect fractured bones
ix.	To inject medicine directly into the blood stream

Notes

Universal Precautions

S No.	Module Name
1	Personal Protective Measures
2	Personal Protective Equipment
3	Waste Management

Course Overview

A hospital is a place where patients come for treatment and cure. But remember it is also a place that is highly susceptible to infections and spread of infections from patients to the healthy persons around. As a General Duty Assistant, you must be aware of the different kinds of common infections, how they are spread and what you must do to prevent the spread of infections. Besides, you must also protect yourself from infections. For this, you must use the necessary personal protective equipment. You must observe strict principle of waste disposal and management and safety measure while transporting specimen and samples of patients. This course will introduce you to the universal precautions you must take at all times while discharging your duties.

Course Objectives

After completing this course, you will be able to:

- Follow safety measures while discharging your duties

Personal Protective Measures

At the end of this module, you will be able to:

- Take safety precaution to protect yourself against infectious conditions
- State the need for vaccination

Session Plan	
1	Module Overview
2	Infection and its Causes
3	Measures to Prevent Infection
4	Effects and Treatment of Infections
5	Vaccination
6	Key Learnings
7	Worksheet

Module Overview

In your job as a General Duty Assistant you are likely to be exposed to a variety of infectious bacteria and virus. These bacteria and virus can cause a wide range of health complications which can sometimes be very dangerous. How do you protect yourself from these complications? Are there any protective measures that can be taken by you? In this module, let us learn about the safety precautions you must take in order to protect yourself against infectious diseases.

Infection and its Causes

An infection is a condition where an organism enters our body and causes a disease. Such organisms that enter our body cannot be seen by the eye and are termed as microorganisms. They are also called germs. There are different types of microorganisms that enter our body. The most common infection-causing microorganisms are bacteria and virus. The microorganisms enter our body through various routes. They depend on our body for their food and nutrition. They, then, release poisonous materials within our body that lead to complications such as fever, vomiting, shivers. Any human body system like the digestive system, respiratory system or the urinary system can be infected by microorganisms. Disease causing microorganisms can spread from one person to another causing the disease to spread.

Now that you know what causes an infection, you must also know how to prevent it. Let us learn the measures to prevent infection.

Measures to Prevent Infection

There are some common measures you can follow to prevent infections, not just at the hospital but anywhere around you.

- Always wash your hands thoroughly after you use the toilet.
- If you make physical contact with a person suffering from an infection, avoid touching your nose or eyes.
- Some organisms are killed as the food is cooked. So, cook food properly and do not eat half cooked food.

- Microorganisms grow on food which is stale. Cooked food should be cooled and consumed as quickly as possible.
- Vegetables and meat must be preferably stored in a refrigerator. Meat should preferably be served well cooked.
- Most infected substances smell badly. If food smells bad, it means it is infected. Do not consume or use any foul smelling substance.
- Children are more prone to infections than adults. So keep children away from an infected person.
- Certain microorganisms develop and cause infections only in the hospital. You should use necessary protection such as gloves, mouth masks while managing patients with infections.

- You should eat a healthy balanced food to keep your immune system strong.
- You must always wash your hands after attending to any patient or handling the used equipments of the hospital.

Effects and Treatment of Infections

The symptoms of an infection are high fever, vomiting or diarrhea. In such a case, consult the doctor immediately. Bacterial infections can be cured by medicines termed as 'antibiotics'. The doctor would suggest some tests to identify the infection. The patient would then be given suitable antibiotics.

Remember that, the antibiotic has to be prescribed by the doctor. Do not suggest any antibiotic or use an antibiotic without consulting the doctor.

Viral infections typically cause fever with body pains and general weakness. There is no cure for viral infections. Viral infections lower the immunity of the body and can lead to further bacterial infections. So you should take extreme care when you are suffering from a viral infection. In case of a viral infection, ensure that you take plenty of water and eat healthy food that is easy to digest. Bacterial and viral infections can be prevented by strengthening our immune system. Our immune system can be strengthened by a process called vaccination. Since you are exposed to a wide variety of infections in the hospital, it is important for you to get vaccinated. But what is vaccination? Let us look at it in detail.

Vaccination

Our immune system has the capacity to identify and fight infectious microorganisms. When any microorganism enters our body, it releases antigens, which kills the microorganism and protects us from disease. The body releases a particular antigen for any particular germ or microorganism. Our body has the ability to identify any microorganism. If a microorganism enters our body again, then our body releases the same antigen it released earlier, to kill the microorganism. This principle is used in vaccination.

Vaccination is a process in which dead or latent (sleeping) bacteria are injected into our body. Our body registers the bacteria and produces antigen. Then if the same bacteria in its fully active form enters our body, the body immediately recognizes it. The body, then, releases antigen to kill the bacteria. This quick reaction of our body prevents the bacteria from multiplying and spreading, thus, controlling the disease.

Vaccination is usually done within 2-3 years of birth. However, with the number of different infections appearing, vaccines are developed accordingly. The government and private healthcare systems conduct vaccination camps for different conditions such as polio, TB, hepatitis. Some deadly infections like small pox have been completely removed with the help of vaccination. The major life threatening infections that can be prevented with vaccination is TB. TB is prevented using BCG vaccine. DPT is a vaccine that is given to prevent bacterial infections such as whooping cough, diphtheria and tetanus. Polio vaccine is a viral vaccine used to prevent a disability causing condition poliomyletis (polio-my-le-tis) in children. Hepatitis B vaccination is a vaccination that is important for you, as a General Duty Assistant, as hepatitis is transmitted through blood and other body fluids. Once you are vaccinated, you are protected from a disease for a long time. However, some vaccinations need to be given in small doses after some years. This is called a booster dose.

Key Learnings

Sumamrise your understanding of the module. Write your answers in the spaces provided.

1. What is an infection? Name two infection causing microorganisms.

2. What are the protective measures you will take to prevent spread of infections?

3. Why is vaccination necessary?

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   Which of the following disease cannot be prevented using vaccination?

   a. AIDS

   b. Hepatitis

   c. Polio

   d. TB

2. *Read the following question. Tick on the correct option given below.*

   Which is vaccination that needs to be given in small doses after some years?

   a. Booster pack

   b. BCG vaccine

   c. Booster dose

   d. PTP vaccine

3. *Read the following question. Tick on the correct option given below.*

   DTP vaccine prevents us from which of these diseases?

   a. Diphtheria, whooping cough, TB

   b. Diarrhea, TB, polio

   c. Diarrhea, tetanus, polio

   d. Diphtheria, whooping cough, tetanus

4. *Fill in the blanks.*

   a. A bacterial infection is treated with _____.

   b. Our body produces _____ to kill germs.

   c. A viral infection lowers _____ of the body.

   d. An _____ is a condition where an organism enters our body and causes a disease.

   e. Hepatitis is transmitted through _____ and _____.

5. *State True or False*

   a. Human body produces different antigens for different micro organism. _____

   b. Children are more prone to infections than adults. _____

   c. Polio is a bacterial disease. _____

   d. You should eat a lot of junk food. _____

Notes

Personal Protective Equipment

At the end of this module, you will be able to:

- Use personal protective equipment appropriately

Session Plan	
1	Module Overview
2	Universal Precautions
3	Personal Protective Equipment
4	Precations to be Taken While Using Protective Equipment
5	Key Learnings
6	Worksheet

Module Overview

In your job as a General Duty Assistant, you are exposed to a variety of patients suffering from infections. You must protect yourself from being infected. You must wear or use special equipment to cover your body from being directly exposed to any infection. In this module, you will learn the various equipments you can use to protect yourself from infections.

Universal Precautions

The hospital environment is filled with infectious organisms that are carried by patients suffering from various conditions. Most infections spread through air, contact, food and improper disposal of wastes excreted by the infected patients. As a General Duty Assistant you must use special equipment that serve as a protection from the spread of disease through air, contact or food. Few points you must keep in mind to protect yourself from infections are:

- Wash hands before and after carrying out a patient care task.
- Wear gloves whenever there is a possibility of coming in contact with blood or other potentially infectious materials.
- Wear full-body gowns whenever there is a possibility of blood splashing on you.
- Wear face masks and eye protection whenever there is a possibility of blood splashing the face.
- Dispose all contaminated sharp objects in an appropriate puncture-proof container.
- Dispose all contaminated personal protective equipment in an appropriate container.

Personal Protective Equipment

Some of the common protective equipment that can be used by you to protect yourself are:

- **Gloves**

Gloves are used to protect your hands from spread of infection. Gloves are made of vinyl or nitrile rubber and these are to be used only once. Gloves should be worn anytime there is a danger of touching infectious material or bodily fluids. Gloves should not be worn unnecessarily because prolonged and indiscriminate use may cause adverse reactions and skin sensitivity.

- **Gowns**

Gowns are worn over the uniform when there is a danger that the medical professional may come into contact with excessive bodily fluids or if the patient is in isolation to prevent infection. They are usually made of a thin, waterproof fabric, and are most often used only once. Full-body gowns are not used very often outside of the hospital.

- **Masks and Goggles**

Protection for the face comes in two forms - goggles worn over the eyes, and masks worn over the nose and mouth. The eyes, mouth and nose are the most common pathways for infectious agents to attack our body. This equipment protects you from many types of diseases. Use a face mask whenever blood or other body fluids may become airborne. Masks protect nose and mouth. It should fully cover nose and mouth, and prevent fluid penetration.

Goggles protect eyes so it should fit snuggly over and around the eyes.

- **Other Equipment**

Face shields are used during patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions. Respirators are used to protect you from inhalation of infectious particles that are released into the air by infected patients.

Using Personal Protective Equipment

When you use the personal protective equipment, the equipment that is used should be worn in the following sequence

Step 1

Wear the gown first

- While wearing a gown, ensure that you select the gown of the proper size and fit. Tie and secure the position of the gown at the neck first.

Step 2

Wear mask after wearing the gown

- After wearing the gown, place the mask over you nose, mouth and chin. Fit flexible nose piece over nose bridge. Secure on head with ties or elastic and finally adjust to fit.

Step 3

Next, wear the goggles or face shields

- In case you need to use a respirator or goggles wear them after putting on the mask.

Step 4

Finally, wear the gloves

- Wear gloves at the end by following the steps below:
  - Select correct type and size
  - Insert hands into gloves
  - Extend gloves over isolation gown cuffs.

While removing the personal protective equipment you should follow the following sequence:

a. Remove the gloves

b. Followed by face shield or goggles

c. Then the gown is removed

d. Finally, remove the mask or respirator

Precautions to be Taken While Using Protective Equipment

- Wash your hands immediately after taking off your gloves and never walk around the hall with gloves that have touched a patient or a body fluid.
- Dispose off all single use personal protective equipment immediately after use.
- Do not touch your face or adjust the equipment with contaminated gloves.
- Do not touch environmental surfaces except when necessary during patient care.
- You must wear a gown when you are doing something that may soil your clothes with body fluids.
- You should wear a plastic gown when the body secretion is wet.
- A plastic gown does not let wet body fluids go through the gown to your clothes or uniform.
- After the examination take the gown off and dispose it carefully wash your hands immediately after taking the gown off.
- Once the personal equipment is removed it should be immediately discarded and should not be used again.
- Safe use and removal of personal protective equipment will ensure that you are safe from exposure to the infections that can be life threatening.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List few precautions you must take to protect yourself from infection.

   _____

   _____

   _____

2. Write few personal protective equipment and their functions.

   _____

   _____

3. Write the steps to use personal protective equipments.

   _____

   _____

Worksheet

1. *Match the following.*

Personal Safety Equipment	
a.	Gloves
b.	Respirators
c.	Goggles
d.	Body gown
e.	Masks

Uses	
i.	Prevents the caregiver's body from germs
ii.	Protects mouth and nose from germs attack
iii.	Prevents the hands from getting infected
iv.	Prevents inhalation of contaminated air
v.	Prevents the eye from getting infected

2. *Read the following questions. Tick on the correct option given below.*

What type of must you wear when the body secretion is wet?

a. Cloth gown

b. Semi permeable gown

c. Plastic gown

d. None of the above

3. *Read the following questions. Tick on the correct option given below.*

A hand glove is made of which material?

a. Vinyl rubber

b. Nitrile rubber

c. Both a and b

d. None of the above

4. *State True and False.*

a. In a hospital, hand gloves should be worn always. _____

b. Ideally, the face mask should be worn before the gown. _____

c. Wearing mask protects us from air borne diseases. _____

d. Wearing gloves for prolonged time can lead to skin irritation._____

e. A hemostat should be disposed in a puncture proof container._____

Notes

Waste Management

At the end of this module, you will be able to:

- Dispose the waste that is collected in a safe manner

Session Plan	
1	Module Overview
2	Waste Management
3	Types of Wastes and Methods of Segregation
4	Collection of Wastes
5	Procedures of Waste Disposal
6	Key Learnings
7	Worksheet

Module Overview

The wastes that are disposed from the hospital can be a source of many infections such as HIV, hepatitis B and very dangerous bacterial infections. You must take extreme care while disposing the wastes such as needles, syringes and gloves in order to prevent infections to yourself and others. In this module, the basic rules that need to be followed to dispose wastes safely are listed.

Waste Management

The various treatments and procedures that are carried out in the hospital generate wastes of different kinds. In addition, the wastes that are excreted by the patient should also be managed, because improper management of wastes within the hospital system can lead to high risk situations that can lead to infections. Therefore, it is important for you to understand the risks of improper waste management. Improper management of discarded needles and other materials can pose a health risk to the public and waste workers. For example, discarded needles may expose waste workers to potential needle stick injuries. It could also cause infection when containers break open inside garbage trucks. Also sometimes needles could be mistakenly sent to recycling facilities. Cleaners and housekeepers also risk injury if loose "sharps" poke through plastic garbage bags. Sharp wastes make up most of the volume of medical wastes.

The bodily fluids such as blood samples, urine and stool specimens that are collected for lab testing and instruments stained with blood can lead to life threatening infections such as HIV and hepatitis. The chemicals that are used as disinfectants or for medical procedures can cause irritation to the people using them.

The diagnostic procedures such as MRI or CT scans use radioactive materials and the wastes generated from such procedures can be radioactive in nature leading to conditions such as cancer.

Thus, it becomes very important for you to manage the different kinds of wastes that are generated in an efficient manner and maintain a safe environment in the hospital. In order to follow a standard method of waste management you must know about the different types of the waste that are generated in the hospital system.

Types of Wastes and Methods of Segregation

The different types of wastes that are generated in the hospital are categorized as:

Infectious Wastes

Infectious wastes are wastes that may cause infections to humans. They can include human tissues (blood or other body parts), blood soaked bandages, discarded surgical gloves, cultures, stocks, or swabs used to inoculate cultures.

Hazardous Wastes

Hazardous wastes are wastes that can affect humans in non-infectious ways. This type of waste includes sharps, which are generally defined as objects that can puncture or lacerate the skin, but can include needles and syringes, discarded surgical instruments such as scalpels and lancets, culture dishes and other glassware. Hazardous waste can also include chemicals, both medical and industrial.

Radioactive Wastes

Radioactive wastes are wastes resulting from nuclear medicine treatments, cancer therapies and medical equipment that use radioactive material. Pathological waste that is contaminated with radioactive material is treated as radioactive waste rather than infectious waste.

General Wastes

General waste makes up at least 85% of all waste generated at medical facilities. General waste is no different from general household or office waste, and includes paper, plastics, liquids and any other materials that do not fit into the previous three categories. While the wastes are collected from the different areas of the hospital they should be classified and collected according to the type of wastes. This is called segregation of wastes. The waste is then collected and disposed according to the method of segregation.

Collection of Wastes

These are a few steps that you, as a General Duty Assistant, should keep in mind while collection of wastes.

- Medical waste must be collected and stored prior to treatment in a way that eliminates the possibility of interaction with humans or the environment.
- The method of collection and storage depends on the specific type of waste.
- Medical waste containers are generally red, contain the word “biohazard” and are imprinted with the universal three-sided biohazard symbol. This standardization immediately identifies these containers as medical waste.
- Contaminated reusable sharps must be placed in containers that are puncture resistant, closeable, leak proof on sides and bottoms and labeled or colour coded in yellow. Specimens of blood or other potentially infectious material are required to be placed in a container that is labeled and colour coded and closed prior to being stored.
- Regulated wastes (liquid or semi-liquid) must be placed in containers that are constructed to contain all contents and prevent leakage of fluids.
- Once the wastes are collected then they must be disposed following a set of standard procedures.

Procedures of Waste Disposal

- Different coloured waste bags are allotted to dispose different types of waste. Each waste must be disposed into its correct disposal bag.
- Waste which has body fluids on it must be disposed off as clinical waste in the particular coloured waste bag allotted to that kind of waste. Usually different colours are used for such waste are:
  - Yellow clinical waste bags for clinical waste
  - Asbestos in red asbestos bags
  - Needles and sharps in the yellow sharps boxes

- Sharps boxes must not be allowed to be filled to the top as there is a risk of staff being pricked by the needles
- In healthcare centres sharps boxes should be kept in secure areas away from patients.
- When the medical waste box is filled, seal the bag liner and box and notify cleaner for pick-up.
- All the containers for waste disposal should be properly labeled.
- Sterilize or disinfect waste materials associated with viral, bacterial or other agents infectious to humans.

- Remove the bags after they are two - third filled with bio medical waste.
- Use only non-chlorinated plastic collection bags. This ensures that the items are not being recycled or reused by rag pickers.
- Waste collected daily is transported to the designated storage site / deep burial pits.
- A storage location for hospital waste collection is designated inside the establishment. Within the hospital, waste routes are designated and time for transfer of wastes decided, to avoid the passage of waste through crowded and patient care areas.
- Dedicated wheeled containers, trolleys/carts are in use to transport the plastic bags to the site of storage / deep burial.

Key Learnings

Summarise your learnings here. Write your answers in the spaces provided

1. Explain the importance of waste management.

_____

_____

_____

2. What are the different kinds of wastes?

_____

_____

_____

3. List few points you must keep in mind while waste disposal.

_____

_____

_____

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   The waste from MRI scan will be classified as:

   a. Infectious wastes

   b. General wastes

   c. Radioactive wastes

   d. Hazardous wastes

2. *Read the following question. Tick on the correct option given below.*

   What is the term given to waste that can affect humans in non-infectious ways?

   a. Infectious wastes

   b. General wastes

   c. Radioactive wastes

   d. Hazardous wastes

3. *Classify the following wastes according to their type.*

Waste	
a.	Blood stained cotton
b.	Used scalpel
c.	Urine specimen
d.	Waste from cancer treatment
e.	Paper

Waste Type	
i.	
ii.	
iii.	
iv.	
v.	

Notes

Bio-Medical Waste Management

At the end of this module, you will be able to:

- define bio-medical waste management;
- differentiate between different categories of bio-medical waste management;
- list down the objectives and need for bio-medical waste management;
- discuss the techniques of bio-medical waste management;
- explain the bio-medical waste management legislation in India.

Session Plan	
1	Session Overview
2	Definition of Bio-Medical Waste
3	Categories of Bio-Medical Waste
4	Objectives of Bio-Medical Waste Management
5	Need for Bio-Medical Waste Management
6	Techniques (Elements) of Bio-Medical Waste Management
7	Bio-Medical Waste Management in India
8	Environmental Legislation
9	Conclusion
10	Key Learnings
11	Worksheet

Session Overview

Bio-Medical Waste, (BMW), consists of solids, liquids, sharps, and laboratory waste that are potentially infectious or dangerous and are considered biowaste. It must be properly managed to protect the general public, specifically healthcare and sanitation workers who are regularly exposed to biomedical waste as an occupational hazard. In hospitals, medical waste, otherwise known as clinical waste, normally refers to waste products that cannot be considered general waste, and are produced from healthcare premises, such as hospitals, clinics, doctors' offices, veterinary hospitals and labs.

Bio-medical waste differs from other types of hazardous waste, such as industrial waste, in that it comes from biological sources or is used in the diagnosis, prevention, or treatment of diseases. Common producers of bio-medical waste include hospitals, health clinics, nursing homes, medical research laboratories, offices of physicians, dentists, and veterinarians, home health care, and funeral homes.

Definition of Bio-Medical Waste

It is the waste generated in the diagnosis, treatment or immunisation of human beings or animals, in research or in the production and testing of biological products including all categories of infected and toxic waste that is potentially dangerous to human beings and the environment.

Proper hospital waste management is one of the mainstays of prevention of hospital acquired infections. All hospitals practice bio-medical waste disposal as per the guidelines of Bio-Medical Waste (Management and Handling) Rules 1998 as notified under the Environment Protection Act by the Ministry of Environment and Forests (Govt. of India)

Categories of Bio-Medical Waste

The different categories of bio-medical waste are as follows:

- Category – 1 Human Anatomical Waste
- Category – 2 Animal Waste
- Category – 3 Microbiology and Biotechnology Waste
- Category – 4 Sharps
- Category – 5 Discarded Medicines and Cytotoxic Waste
- Category – 6 Solid Waste (Plaster castes and bandages soiled with blood and body secretions)
- Category – 7 Plastics and Disposables
- Category – 8 Liquid Waste
- Category – 9 Incinerator Ash
- Category – 10 Chemical Waste

Objectives of Bio-Medical Waste Management

The objectives of Bio-Medical Waste Management are to:

- Reduce the transmission of infection. Only 15 - 25% of waste is infectious, for which care is needed.
- Prevent illegal recycling.

Need for Bio-Medical Waste Management

Bio-Medical Waste Management helps prevent:

- Nosocomial infections in patients from poor infection control practices and poor waste management.
- Drugs which have been disposed of, being repacked and sold off to unsuspecting buyers.

- Risk of air, water and soil pollution directly due to waste, or due to defective incineration emissions and ash.
- Risk of infection outside hospitals for waste handlers and scavengers, and other people.

Techniques (Elements) of Bio-Medical Waste Management

Bio-Medical Waste Management can be carried out through:

- Segregation
- Transportation
- Pre-treatment
- Treatment
- Final disposal

Segregation:

To segregate the waste.

- It is the heart, kidney, liver, and lungs of Bio-Medical Waste Management.
- It is the separation of various categories of wastes in colour-coded bins / bags at source by the generators of the waste.
- It is now accepted all over the world that the responsibility of segregation is on the generator of the Bio-Medical Waste – WHO.
    - Yellow: Categories 1, 2, 3 and 6
    - Black: Categories 5, 8, 9 and 10
    - Blue: Categories 4 and 7
- Improper segregation can cause sharps injury.

Colour Coding	Type of Container
Yellow	Plastic bag
Red	Disinfected container/ Plastic bag
Blue/ White Translucent	Plastic bag / Punch proof containers
Black	Plastic bag

Transportation:

Transportation of BMW can be divided into internal and external transportation.

- Internal: It is for yellow, red, blue and white bags.
- External: It is for general waste collected in black coloured plastic bags.

Treatment and Disposal:

Procedure	Main Function
Incineration	Burn trash and other types of waste until they are reduced to ash.
Autoclaving and Shredding	It uses a combination of heat, steam and pressure.
Chemical Treatment	It uses sodium hypochlorite solution, bleaching powder, savlon and is then discharged into drains / sewers.
Irradiation Technique	Involves exposure to UV radiation and ionizing radiation.

Bio-Medical Waste Management in India

The Bio-Medical Waste (Management and Handling) Rules, 1998, prescribed by The Ministry of Environment and Forests, Govt. of India, came into force on 20th July 1998. This rule applies to those who generate, collect, receive, store, dispose of, treat or handle bio-medical waste in any manner.

Bio-medical waste should be segregated into containers / bags at the point of generation of waste. Thus colour coding and using specific types of containers for disposal of waste came into existence.

Environmental Legislation

Take a look at some of the environmental legislations in existence:

- The Environment (Protection) Act, 1986
- The Bio-Medical Waste (Management and Handling) Rules, 1998
- The Municipal Solid Waste (Management and Handling) Rules, 2000
- The Hazardous Waste (Management and Handling) Rules, 1989
- The National Environmental Tribunal Act, 1995
- The Air (Prevention and Control of Pollution) Act, 1981

Conclusion

The following should be kept in mind with regards to bio-medical waste management:

- The safe and effective management of waste is not only a legal necessity but also a social responsibility.
- Carry out proper collection and segregation of biomedical waste.
- Try to reduce the waste generation.
- Increase individual awareness and participation.
- Use recycled products.
- Label with agent, concentration and hazard warnings.
- Communicate workplace hazards.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Define bio-medical waste management.

2. List down the categories of bio-medical waste management.

3. Explain the need for bio-medical waste management.

4. List down the elements of bio-medical waste management.

Worksheet

1. *Fill in the blank.*

   a. What goes where? In which colour coded bucket is the following waste segregated?

      i. Surgical gloves .....

      ii. Blood stained cotton .....

      iii. Expired drugs .....

      iv. Suture needle .....

      v. Empty IV bottle .....

      vi. Gauze used in dressing wounds .....

      vii. Broken glass piece .....

2. *Tick the correct answer.*

   a. Infectious waste generated in hospitals should be collected in:

      i. Yellow, blue and red bags

      ii. Black and blue bags

      iii. Yellow and black bags

      iv. Black, blue and yellow bags

   b. The broken ampoules of injections should be thrown into:

      i. Black bags

      ii. Yellow bags

      iii. Puncture proof bags

      iv. Red bags

Notes

Following Sterilization Procedures

S No.	Module Name
1	Common Sterilization Tasks

Course Overview

Often you may have seen the nurse sterilizing the hospital equipment. What is sterilization and why is it done? As a General Duty Assistant, what is your role in sterilization and how must you discharge your duties in this regard? All this and more, in this course.

Course Objectives

After completing this course, you will be able to:

- Explain the need for sterilization
- Assist in the packing of instruments for sterilization

Common Sterilization Tasks

At the end of this module, you will be able to:

- Assist in the packing of instruments for sterilization

Session Plan	
1	Module Overview
2	Sterilization
3	Methods of Sterilization
4	Heat Sterilization
5	Process of Packing Instruments for Sterilizations
6	Key Learnings
7	Worksheet

Module Overview

A hospital serves patients with different diseases and problems. These patients are infected with various disease causing germs which they can spread to others. It is important to prevent the spread of these microorganisms to ensure the safety of the people working in the hospital. The preventive safety measures taken to control infections are collectively termed as “sterilization”. In this module, you will learn the steps to clean the instruments and assist in packaging of instruments for sterilization.

Sterilization

In a hospital disease causing organisms or germs are present everywhere. They are present on any surface, medical equipments, patient's body, food, medication or samples developed during various tests. So it is very important to follow safety measures in order to control the spread of diseases. One of the many important processes used to control the spread of disease is sterilization. Sterilization is defined as the process by which all infection causing microorganisms, including bacteria are killed. Sterilization can be achieved by physical, chemical means such as heat, chemicals, radiation, high pressure, and filtration.

All the equipment that is used in the hospital must be sterilized before they are used for any procedure. Even if the equipment is cleaned with a detergent it is important to sterilize the equipment before it is used on a patient. The oldest and the most common method of sterilization that is followed in a hospital is by heating. Sterilization is done by using moist heat and dry heat.

Let us, look at the process of the moist heath sterilization in detail.

Methods of Sterilization

There are various methods used for sterilization. They are:

- Heat sterilization
- Chemical sterilization
- Radiation sterilization
- Sterile filtration

Heat Sterilization

In heat sterilization heat is used to kill germs or micro-organisms. The most easy example that you can take to understand heat sterilization is cooking of vegetables. The high heat received by the food during cooking burns or kills the germs present in the vegetables. Therefore, it is always said, cook your food well before eating. This provides us with the main principle of heat sterilization, that is, to give high amount of heat to any object so that the heat burns the germs present on it.

Moist sterilization is widely used to sterilize equipment in hospitals, labs. It involves the heating of equipment using steam under pressure. The steam produced kills the toughest of micro-organisms. This is called the moist heat sterilization technology. Moist heat sterilization technology is the most widely used method of sterilization in the hospital system. It is done by using an instrument called the "Autoclave".

An autoclave is an instrument used to sterilize equipment. It is a heavy stainless steel walled instrument comprising of a heating vessel. Packed hospital equipments are placed in this heating vessel. The vessel is partially filled with water through the water supply connections. The instruments are placed in the vessel without any contact to the water. Heat to convert the water into steam is generated by an electric coil that is connected to the power supply. The vessel is covered with a lid and is tightly sealed with help of valves. A pressure gauge is also attached to the autoclave to note the pressure that is generated within the vessel.

Equipment that needs to be sterilized is packed and placed into the vessel. It takes about 15-20 minutes for an equipment to be sterilized using the autoclave.

Chemical Sterilization

Chemicals are also used for sterilization. Although heating provides the most reliable way to rid objects of all transmissible agents, it is not always appropriate, because it will damage heat-sensitive materials such as biological materials, fiber optics, electronics and many plastics. Therefore, in chemical sterilization we use different chemical agents like hydrogen peroxide, ethylene oxide, etc.

Radiation Sterilization

In radiation sterilization, radiations like x-rays, Gamma rays, electron beam are used to sterilize. It is majorly used to sterilize specialized hospital equipment.

While using radiations for sterilization, the operator needs bulky shielding from the radiations, as prolonged exposure to radiation can lead to health complications.

Sterile Filtration

Sterile filtration is used for specimens or culture on which heat or radiation cannot be used as it will change the property of the sample, for example, sensitive pharmaceutical solution or protein mixture. Then these solutions are filtered using a very thin membrane with very minute pores (even smaller than the size of a virus). As the pores of the membrane are even smaller than the size of a virus, the harmful germs get trapped on one side of the membrane while the solution passes through the thin membrane to the other side, thus, separating the germs and the solution.

Process of Packing Instruments for Sterilizations

Before sterilization, the instruments need to be cleaned and then packed using cloth. This process is called packing. As a General Duty Assistant, your role is to assist in the packing of instruments for sterilization. These are the steps, you must follow to pack instruments for sterilization:

Step 1

Wash your hands well with warm water and soap before you begin the process.

Step 2

Place the cloth that is used to pack the instruments on a clean table. The cloth used has four strings at the corners.

Step 3

Clean the instruments to be sterilized with a detergent.

Step 4

Place the instruments on the cloth and arrange them on the cloth. Ensure that they do not penetrate out of the cloth.

Step 5

Now pack the cloth tightly and tie the strings of the cloth around the pack.

Step 6

Hand over the pack to the nurse who would then place the instruments in the autoclave for sterilization.

Step 7

Once the instruments are placed in the autoclave by the nurse ensure that the valves on the lid are tightly closed.

Step 8

Keep a watch on the pressure and observe the time.

Step 9

The instruments should not be autoclaved for more than 20 minutes.

As a General Duty Assistant, you must keep in minds these steps.

- Use clean water and good quality antiseptic soap for washing hands.
- Maintain personal hygiene.
- Proper sanitary levels should be maintained in the working area.
- Utmost care should be taken while sterilizing. Do not hurry.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is sterilization?

2. List different methods of sterilization.

3. Explain heat sterilization.

4. What is an autoclave used for?

5. Explain chemical sterilization.

6. Explain radiation sterilization.

7. Explain sterile filtration.

8. What is you role in sterilization?

Worksheet

1. *Read the question. Tick on the correct answer.*

   What is sterilization?

   a. Cleaning hospital equipments

   b. Killing micro organism

   c. Killing germs

   d. Both b and c

2. *Read the question. Tick on the correct answer.*

   Which of the following is NOT a method of sterilization?

   a. Radiation

   b. Chemical

   c. Sterile filtration

   d. None of the above

3. *Read the question. Tick on the correct answer.*

   An autoclave is used in which method of sterilization for killing germs?

   a. Chemical sterilization

   b. Radiation sterilization

   c. Dry sterilization

   d. Moist sterilization

4. *Fill in the blanks.*

   a. Before sterilization the equipments are cleaned with _____.

   b. _____ method of sterilization uses a thin membrane.

   c. Instruments must not be in the autoclave for more than _____minutes.

   d. In chemical sterilization, _____ are used for sterilization.

Notes

_____

_____

_____

Clean Medical Equipment Under Supervision

At the end of this module, you will be able to:

- clean equipment under supervision.

Session Plan	
1	Session Overview
2	Medical Device Reprocessing-Decontamination Process
3	Basic Components of Cleaning Solutions
4	Common Types of Cleaning Solutions
5	Factors for the Effective Use of Cleaning Solutions
6	Care of Hospital Articles
7	Key Learnings
8	Worksheet

Session Overview

Following a procedure, a medical device is contaminated with both visible and hidden bioburden. Any soil left on a device following cleaning can pose a risk to the patient. Therefore, it is imperative that appropriate steps be taken to ensure a thorough cleaning process. Significant risks have been associated with inadequate or improper cleaning. These risks include healthcare-associated infections (HAIs) due to the presence of residual soil and / or improper disinfection or sterilisation, and damage to the medical device.

Medical Device Reprocessing-Decontamination Process

Decontamination is the physical or chemical process that renders an inanimate object that may be contaminated with harmful microbial life safe for further handling. The objective of decontamination is to protect the preparation and package workers who come in contact with medical devices after the decontamination process, from contracting diseases caused by microorganisms on those devices.

Proper cleaning is essential to reducing the risks associated with improper or inadequate medical device reprocessing.

Damage to medical devices

A medical device may become damaged by cleaning solutions or medical soils that are not removed properly after the cleaning process. Using cleaning solutions that are not compatible with a device may cause damage as well. Types of damage the device may sustain include staining, pitting or corrosion, clouding or etching of optics and improper function due to accumulation of debris.

In order to reduce the risks associated with improper or ineffective cleaning of reusable medical devices, the basic components and types of cleaning solutions, as well as the factors for the effective use of cleaning solutions, must be understood.

Basic Components of Cleaning Solutions

It is essential that an appropriate cleaning solution be chosen, and that it be used correctly to assure optimal cleaning of medical devices. To do this, an understanding of the basic components of cleaning solutions is required. Only those cleaning solutions that are specifically formulated and labelled for use on medical devices should be used in reprocessing.

Water is the most common solvent on earth and provides the base for most cleaning solutions.

Detergent helps to loosen debris from surfaces. The detergent then holds the debris in suspension, preventing it from re-depositing on the device and allowing it to be easily rinsed away.

Surfactants increase cleaning efficacy by reducing surface tension, thus allowing for better penetration of the soil.

Buffers provide better compatibility with materials and inhibit corrosion.

Chelating agents assist with reducing the potential negative effects of hard water that may be used when diluting the solution. They also bind with hard water minerals to prevent them from depositing on the device or adversely reacting with the cleaning solution. It is important to note that hard water may cause spotting or may leave deposits on the device.

Enzymes increase cleaning efficacy, speed the cleaning process and help to minimise the need for manual brushing and scrubbing.

Common Types of Cleaning Solutions

The most common formulation categories of cleaning solutions are enzymatic and non-enzymatic. Typically, medical device cleaning solutions will be simply referred

to as ‘detergents’. Enzymatic detergents are most commonly used for manual cleaning and include single, dual and multi-enzyme formulations. Single-enzyme detergents will most often contain a protease enzyme while dual- and multi-enzyme detergents will also contain some combination of amylase, lipase and / or cellulase. These solutions are often designed to be used at room temperature

or slightly warmer and provide rapid action at a neutral pH. Due to the selectivity of each enzyme, the enzymatic detergent chosen should correspond with the type of medical soil(s) present. Non-enzymatic detergents are most commonly utilised in automated washers. They can be of either a neutral or alkaline pH and provide effective cleaning at elevated temperatures.

Common Types of Cleaning Solutions

The common types of cleaning solutions are:

- Water
- Detergent
- Surfactant
- Buffer
- Chelating Agents
- Amylase Enzyme
- Cellulase Enzyme
- Lipase Enzyme
- Protease Enzyme

Factors for the Effective Use of Cleaning Solutions

For a cleaning solution to be effective, a number of factors must be addressed including:

1. Personnel training
2. Appropriate use of personal protective equipment (PPE)
3. Proper device preparation
4. Quality of the water used
5. Adherence to guidelines and manufacturer's directions for use

Care of Hospital Articles

Purposes

1. To remove dirt, dust and to get a clean polished surface
2. To remove micro-organisms and to get the breeding place destroyed
3. To prolong the life of articles and use clean stored articles at any time

Cleaning of Rubber Goods

1. Air cushion

- Clean the outer surface of the air cushion with soap and water.
- Dry the outer surface and dust it with dusting powder (French chalk).
- Inflate the air cushions slightly to prevent the inner surfaces from sticking together.

2. Rubber mackintosh

- Spread the mackintosh on a table or a flat surface and wet it with cold water.
- Rub the upper surface with soap and water using a clean cloth or towel.
- Turn the other side and repeat the process as above.
- Wash both surfaces under running water.
- Remove stains using an appropriate method.
- Use 5% savlon for disinfection.
- Hang it on a horizontal cylindrical pole in the shade to dry. Spread it without wrinkles.
- Powder both surfaces when absolutely dry, with French chalk powder.
- Store it either flat or rolled and never folded, taking care to see that the two mackintosh surfaces do not stick together but are separated by old linen or paper. Store it in a dark cool place.

3. Hot water bottle, Ice-collar, Ice cap

- Empty them immediately after use.
- Wash and dry like other rubber goods.
- Hang the bags upside down to drain the water.
- Powder the outer surface when absolutely dry with French chalk powder.
- Inflate them with air before storing.

4. Rubber gloves

- Wash them on the hands just before they are removed, to prevent adherence of blood and other organic materials.
- Wash with soap and cold water, first on the outside, then invert and clean the inner surface.
- Rinse well with water both inside and outside as described above.
- Fill the gloves with air and submerge them in water to detect holes. If there are holes the bubbles will pass up through the water. Discard torn gloves.
- Hang them to dry. When the outside is dried, turn inside out and dry.
- Powder them both inside and outside when dry.
- Pack in pairs of the same size, right and left gloves in a glove wrapper. A small lump of French chalk wrapped in a gauze piece is kept in the cuff of the gloves / packet of the bag. It is for powdering the hands.
- Send for autoclaving in a drum or packet.

5. Rubber tube / Catheter, Rectal tube, Flatus tube, Ryles tube

- Wash them under running water after use, holding the eye upwards and allowing the water to run through.
- Use a swab stick to remove organic matter which may be lodged at the eye end.
- Clean them with soap and warm water to remove the dirt and grease.
- Wash them again under running water.
- Autoclave them before use.

6. Enamel Ware

a. Bedpan

- Clean it with soap and water and scrub with a brush.
- Disinfect the bed pan by soaking it in 1% polar solution.
- Let it dry on the bed pan rack for its next use.

b. Urinal

- To be cleaned in the same way as the bed pan.

c. Sputum mug

- Same as the other enamel wares.

d. Other enamel wares like tray, jug, kidney tray etc.

- All the enamel ware is to be cleaned with vim or soap and water and dried.

Disinfect, dry well before storing.

7. Glassware

- Rinse under running cold water to remove any organic matter.
- Wash the piston and barrel separately.
- Soak it in a disinfectant (Polar 1%) for a 1/2 hour.
- Wash under running water and dry it.
- Send it to the CSSD after adequately padding to prevent breakage.

8. Sharp instruments

- Handle sharp instruments carefully to avoid self injury and blunting of sharp edges and avoid exposing them to high temperatures and moisture.
- Wash them with soap and under running water. Dry with a clean cloth.
- Sterilise sharp instruments by immersing in gluteraldehyde solution 2% or autoclaving (instruments should be absolutely dry before immersing in gluteraldehyde as presence of water can cause rusting of instruments and dilution of the disinfectant).

9. Stainless Steel goods

- Wash with soap and water, dry them with a clean cloth and store.

10. Linen

- Use a laundry bag. Do not place the used linen on the floor. sentence incomplete.
- Do not mix the linen of an infected patient with another's linen. It must be disinfected first by soaking it in disinfectant lotions i.e. carbolic lotion (1: 60), polar solution 1% for 30 minutes and then sent to the laundry.
- Clean linen received from laundry should be kept in order in the cupboard.
- Stock should be checked periodically. In case of loss it should be reported immediately.
- Prevent linen from being taken home by patients on discharge.
- Prevent staining of linen during procedures, by using appropriate protective agents (tincture benzion, Mercurochrome, Iodine etc).

- Do not use torn linen, it should be sent for mending.
- Put the hospital identification mark on new linen.

Blankets

- Get the used blankets dry cleaned / sun dried.
- Protect blankets from moth infestation by using naphthalene balls while storing.

Mattress and Pillows

- Protect the mattress and pillows from being spoiled, wet and stained by using proper protective devices.
- Sun-dry used mattress and pillows before using them for the next patient.

11. Furniture

- Dust wooden furniture with a damp duster.
- Clean it with soap and water if necessary.
- Keep it dry.
- Wooden furniture requires polishing periodically.
- Clean steel furniture with a dry duster.
- Keep it dry to prevent rusting.
- Treat against white ants with pesticides.
- When broken, it should be replaced / repaired.

Conclusion

Inadequate or improper cleaning of reusable medical devices puts patients at risk for healthcare-associated infections. HAIs are a major concern in healthcare today and it is imperative that all medical professionals do their part to reduce these preventable infections. One step toward this goal is to ensure adequate and proper cleaning of reusable medical devices. Cleaning essentials for these devices include a thorough understanding of the risks associated with improper cleaning, the basic components of cleaning solutions and the factors necessary for the effective use of cleaning solutions. With this knowledge, medical professionals will be better equipped to promote optimal patient outcomes.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List down the basic components of cleaning solutions.

2. Explain the medical device reprocessing-decontamination process.

3. List down the purpose of cleaning hospital articles.

4. Explain how to clean rubber goods in the ward.

Worksheet

1. *Tick the correct answer*

a. Improper or inadequate cleaning of hospital instruments will cause:

i. Health care associated infections

ii. Communicable diseases

iii. Tuberculosis

iv. Chest infections

b. _____ is the most common solvent on earth and provides the base for most cleaning solutions.

i. Detergent

ii. Enzymes

iii. Chelating agents

iv. Water

c. _____ increase cleaning efficacy, speed the cleaning process and help to minimise the need for manual brushing and scrubbing.

i. Surfactants

ii. Enzymes

iii. Detergents

iv. Water

d. How can we prevent the inner surfaces of an air cushion from sticking together?

i. By inflating the cushion slightly

ii. By always keeping the air cushion fully inflated

iii. By removing all the air and not inflating the air cushion

iv. By doing nothing - No care needed

e. Sharp instruments can be sterilised by immersing them in:

i. Savlon solution

ii. Carbolic acid

iii. Gluteraldehyde solution

iv. Detergent solution

Notes

Making a Bed

S No.	Module Name
1	Classification of Beds
2	Bed Making Procedure

Course Overview

Many different kinds of patients get admitted into a hospital with varied medical conditions. A hospital is equipped with different kinds of beds to provide for the comfort of the patients depending on their condition. What are the different kinds of beds? Which are the various features that a bed is equipped with? What are the general guidelines in bed making? And finally, as a General Duty Assistant, being able to make a bed as per the procedure. All this and more covered in this course.

Course Objectives

After completing this course, you will be able to:

- Identify the different types of beds suitable for different patient conditions
- Make a bed

Classification of Beds

At the end of this module, you will be able to:

- Identify the different types of beds suitable for different patient conditions

Session Plan	
1	Module Overview
2	Hospital Beds
3	Types of Hospital Beds
4	Simple Beds
5	Specialized Beds
6	General Principle for Bed Making
7	Key Learnings
8	Worksheet

Module Overview

A hospital bed is an important component of the inpatient care delivery. In addition to the treatment delivered, most patients are confined to the bed for their daily activities during their stay in the hospital. Therefore, the hospital bed must be designed keeping the needs and comfort of the patients in mind. Being a General Duty Assistant, you will be expected to identify and make beds for patients with various medical complications. In this module, let us learn the different types of beds suitable for different patient conditions.

Hospital Beds

A hospital bed is a bed specially designed for hospitalized patients or others in need of some form of health care. These beds have special features both for the comfort and well-being of the patient and for the convenience of health care workers. Common features of a bed include adjustable height for the entire bed, the head end and the foot end, adjustable side rails and electronic buttons to operate both the bed and other nearby electronic devices.

Features of Hospital Beds

Wheels

Wheels enable easy movement of the bed, either within the parts of the facility they are located in or within the room. Sometimes, movement of the bed a few inches to a few feet may be necessary in patient care. For patients who are unable to move from their beds, a movable bed with wheels is needed in order to take the patient to a different department such as the lab for any test.

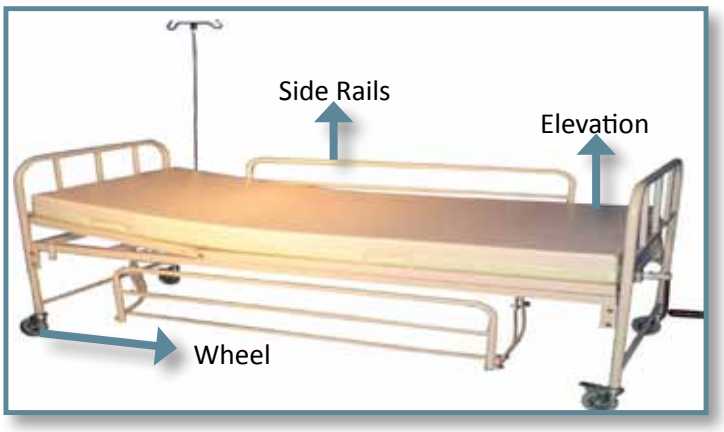
Wheels are lockable. For safety, wheels can be locked when transferring the patient in or out of the bed. This is to ensure that the bed does not move while placing the patient in the bed.

Elevation

Beds can be raised and lowered at the head end and the foot end. Raising the head, known as **Fowler's Position**, can provide some benefits to the patient, the staff, or both. The fowler's position is used for sitting the patient upright for feeding or certain other activities. In some patients, it can ease breathing, or may be beneficial to the patient for other reasons. Raising the feet can help ease movement of the patient toward the headboard. The head side of the bed can be raised or reclined using a pulley-like structure that can be rotated. Raising and lowering the height of the bed can help bring the bed to a comfortable level for the patient to get in and out of bed, or for caregivers to work with the patient.

Side rails

Beds have side rails that can be raised or lowered. The primary function of the side rails is to prevent the patient falling off the bed. In case of patients suffering from convulsions or these rails aid in confining the patient to the bed. There are a variety of side rails to serve different purposes. Side rails, if not built properly, can be of risk for patient entrapment.



You have seen that a hospital bed is a specialized equipment and is designed for delivery of treatment. The hospital bed also has a few **bed attachments** which help in providing proper care to the patient.

They are:

- Rods with hooks on which medication is placed are attached to the bed and can be removed when they are not used.
- Feeding trays which are designed in such a way that they can be placed and adjusted according to the convenience of the patient while feeding.
- The mattress of the bed which is placed in such a way that it can be removed from time to time for cleaning.
- The mattress is covered with multiple layers of bed sheets and pillows. The linen is arranged according to the type of bed in use.

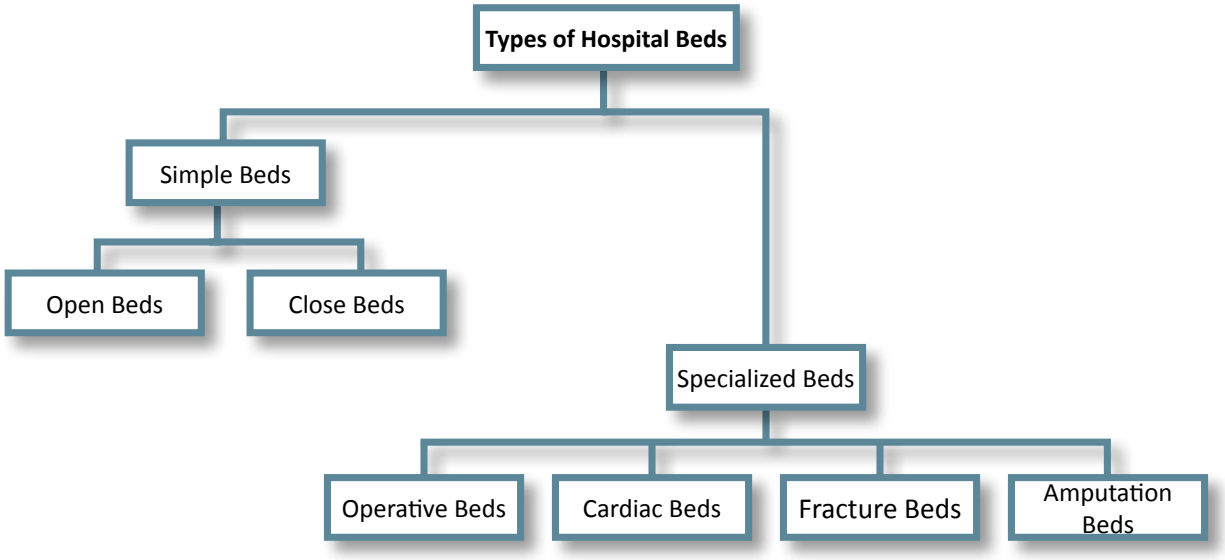
Depending upon the need of the patient you must prepare a bed before the patient is admitted into the hospital. You must ensure that the required bed attachments are in place when the treatment starts.

Types of Hospital Beds

Hospital beds are classified based on the purpose for which they are made. Generally, two types of beds are used in a hospital.

These are:

- Simple beds
  - Open beds
  - Closed beds
- Specialized beds
  - Operative beds
  - Cardiac beds
  - Fracture beds
  - Amputation beds



Simple beds are further classified as open beds and closed beds. Specialized beds are beds that are designed according to the patient conditions. Different types of beds include the operative bed, cardiac bed, fracture bed and amputation bed.

A bed has to be prepared before and after a patient starts using it. The bed making procedure is one of the most important tasks of the General Duty Assistant. You should be aware of the different types of beds and methods of preparing these beds for delivery of quality patient care.

Simple Beds

Simple beds are classified as:

- Open Beds
- Closed Beds

An open bed is also called an occupied bed, which means that the bed is in use by the patient. Open bed is usually made with one corner of the linen folded back to let the patient in. The top linen is folded to the foot end of the bed or to one side of the bed.

A closed bed is an empty bed, or an unoccupied bed which means that the bed is not in use by a patient. The top covers are arranged in a way that all linen beneath the spread is fully protected from dust and dirt before the patient starts to use the bed. That is the top linen covers the full surface of the bed.

Simple beds are the most common beds that you must manage as a General Duty Assistant. You must ensure that these beds are made to provide comfort to the patient.

Specialized Beds

A specialized bed is designed specifically to attend to the patients in various medical conditions. These beds are placed in the specialty wards. They are provided with attachments that cater to the specific needs of a patient. Different types of specialized beds include:

Post Operative Bed

A post operative bed is prepared to receive patients who have undergone surgical procedure. It is prepared for those recovering from the effects of anesthesia following a surgical operation.

Cardiac Bed

A cardiac bed is used for patients with heart diseases and have difficulty in breathing. The bed is designed to provide easy breathing, with minimum strain for the patient.

Fracture Bed

A fracture bed is used for patients with fracture or a break in the bones. These beds use a firm mattress that provides firm support to damaged body parts.

Amputation Bed

An Amputation or stump bed is used for patients whose leg is amputated. These beds are used for patients after amputation of the lower limb, where it is necessary to keep the healing part of the body visible.

General Principles of Bed Making

You must follow certain principles while preparing a hospital bed. These principles will ensure that the patient is comfortable and treatment is delivered efficiently.

- Make the bed firm, smooth and unwrinkled as wrinkled bedsheets can lead to undue pressure points on the patients leading to bed sores.
- Inspect the mattress and pillows daily for vermins. Destroy them if found on the bed.
- Make adaptations according to climatic differences, individual needs, customs and habits of the patients.
- Turn the mattress, air it and make it free from lumps and creases.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What are the common features of a hospital bed?

2. What are simple beds?

3. List and explain the different types of specialized beds.

4. List the different bed attachments.

5. List the general bed making principles.

Worksheet

1. *Read the question. Tick on the correct answer.*

   What is an open bed?

   a. A bed that is open

   b. A bed that can be opened

   c. A bed with a patient

   d. A bed with full linen cover

2. *Read the question. Tick on the correct answer.*

   Which of the following is NOT a feature of a hospital bed?

   a. Side rail

   b. Wheels

   c. Rod for medication

   d. Elevation

3. *Match the columns.*

	Hospital Bed
a.	Stump bed
b.	Fracture bed
c.	Post Operative bed
d.	Cardiac bed
e.	Rods with hooks
f.	Side rails

	Use
i.	Breathing problem
ii.	For keeping medication
iii.	Amputated leg
iv.	Patient under anesthesia
v.	Broken bones
vi,	Prevents patient from falling

Notes

Bed Making Procedure

At the end of this module, you will be able to:

- Make a bed

Session Plan	
1	Module Overview
2	Bed Making Accessories
3	Steps for Bed Making
4	Key Learnings
5	Worksheet

Module Overview

A bed is the most frequently used piece of equipment in a hospital. A bed must be made such that it gives the patient comfort, safety and rest. As a General Duty Assistant, you have to make a bed for the patient you are attending. So, how to make a bed? This module on “Bed Making” lists the steps of bed making.

Bed Making Accessories

Before we learn to make a bed, let us look at the accessories needed along with the bed.

The bed must have:

- A mattress for support and comfort
- A bottom sheet to cover the mattress and prevent direct contact of the patient's body with the mattress
- A draw mackintosh rubber sheet to prevent moistening of the bed
- A top sheet to cover the draw sheet
- A pillow for head and upper back support
- A pillow case to cover the pillow
- A pillow cover sheet
- Linen to cover the patient like a blanket

Steps for Bed Making

Let us learn the steps in bed making.

Step 1

With clean hands approach the bed at a comfortable working height. Lower the side rails, if present.

Step 2

Place the mattress on the bed.

- Position the mattress evenly on the bed.
- Ensure that there are no threads, creases or fold on the mattress.

Step 3

Place the bottom sheet.

- Position the bottom sheet evenly on the bed.
- Stretch and tie the ends of the sheet together beneath the mattress.

Step 4

Place a draw rubber sheet on the centre of the bed.

- Stretch the draw sheet across the centre of the bed.
- If the rubber sheet has strings at the corners, tie those as knots around the bed frame on all four corners.
- If there are no strings tuck the free ends under the mattress.

Step 5

Place the top sheet on the draw sheet.

- Position the draw sheet evenly on the bed tucking all four corners.

Step 6

Place the top linen at the foot of the bed and tuck it under the mattress.

- Fanfold the top layer of the linen for the patient to draw it with ease.

Step 7

Place the pillow into a clean pillow case. Then place a pillow cover sheet over the pillow. Place the pillow at the head of the bed. Ensure that the bed is neat and wrinkle free. The bed is now ready to receive a patient.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List the different bed accessories.

2. Write the steps to make a bed.

Worksheet

1. *Match the columns.*

Bed Accessory	
a.	Pillow
b.	Mattress
c.	Mackintosh rubber sheet
d.	Top sheet
e.	Bottom sheet

Use	
i.	To prevent direct contact of the patient's body with the mattress
ii.	To cover the draw sheet
iii.	To rest the patient's head
iv.	To give support and comfort to the patient
v.	To prevent the bed from moistening

Notes

Transporting the Patient

S No.	Module Name
1	Transporting Patients from Ambulance to Hospital Ward
2	Transporting Patients from Stretcher to Bed
3	Transporting Patients from Wheelchair to Bed and Vice Versa
4	Precautions While Transportation

Course Overview

Not all patients who arrive at the hospital may be in a position to walk. Such patients need to be transported, right from the ambulance to the hospital ward, from the stretcher to the bed, from wheel chair to bed and vice versa in each case. While transporting patients, you must exercise extreme care. Remember the patient is unwell. You must keep the comfort of the patient foremost in your mind and adopt the correct procedure while transportation.

Course Objectives

After completing this course, you will be able to:

- Transport patients within the hospital as per the need

Transporting Patients from Ambulance to Hospital Ward

At the end of this module, you will be able to:

- Transport the patient from the ambulance to the hospital ward

Session Plan	
1	Module Overview
2	Admission of a Patient by Ambulance
3	Arrangements for Patient Transfer from the Ambulance
4	Techniques of Transferring a Patient Using a Stretcher
5	Techniques of Transferring a Patient Using a Wheelchair
6	Key Learnings
7	Worksheet

Module Overview

When a patient is admitted into the hospital, you need to assist the patient while moving from one point to another right from the time of entry. In case of emergency situations, the patient is brought to the hospital by an ambulance. You must be aware of the techniques to transfer a patient from the ambulance into the hospital. What is the protocol that needs to be followed while transporting a patient? What are the techniques used to transfer a patient from the ambulance? In this module, you will learn the correct procedure to transport the patient from the ambulance to the hospital ward.

Admission of a Patient by Ambulance

In emergency medical conditions such as road accidents or a heart attack, the patient needs immediate medical attention and has to be carefully transferred to the hospital. An ambulance is a specialized vehicle that transfers the affected person to the hospital. The ambulance is attached to a hospital system. When a person is needed to be transferred to the hospital, the hospital is called and asked to send its ambulance to the needed spot. Once the call is received the ambulance reaches the patient location to bring him/her to the hospital.

The ambulance is equipped with emergency equipment that is needed to maintain safe condition of the patient during the travel from a location to the hospital. The vehicle is specially designed and has trained professionals who take care of the patient during the travel. Once the ambulance arrives at the hospital, it is your duty to work as a team with the ambulance personnel and other General Duty Assistants to arrange for the safe transfer of the patient into the concerned wards.

Depending on the condition of the patient you must transfer the patient using a stretcher if the patient is unable to move. If the patient is able to move, use a wheelchairand transfer the patient to the respective ward.

Arrangements for Patient Transfer from the Ambulance

There are a few steps that you must follow for easy and hassle-free transfer of the patient to the hospital wards.

- Before the ambulance arrives, learn from the nurse in charge, the method of transfer and get the necessary vehicle - wheel chair, stretcher or bed - ready.
- Confirm which unit or ward the patient has to be transferred to. Check if it is ready.
- Check if any equipment such as medication, oxygen supply has to be transferred with the patient.

- Ensure that at least 2 other General Duty Assistants are ready to assist you, if the transfer needs to be done on a stretcher.
- Once the ambulance arrives, coordinate with the ambulance team and gather all the equipment needed for the transfer.
- Make a plan of transfer with the other General Duty Assistants.
- Arrange for a stretcher or a wheelchair based on the condition of the patient.
- Carry all the medical charts and reports along with the patient into the ward and hand them over to the nurse.
- Depending on the condition of the patient there are different techniques that you need to apply to transfer a patient.

Techniques of Transferring a Patient Using a Stretcher

The stretcher is used for patients who are often too sick to transfer themselves in and out of the ambulance to the ward bed.

The patient in the ambulance is transferred in a lying down position on the ambulance stretcher bed.

The steps involved in the transfer of a patient using a stretcher are as follows:

Step 1

- Adjust the height of the stretcher to your waist level, so that you are not bending while transferring the patient.

Step 2

- Align the stretcher with the ambulance bed. With the help of the ambulance team and General Duty Assistants, move the patient to the side of the bed by rolling him or her towards you.

Step 3

- Support the patient at the shoulders and buttocks area, to transfer from the ambulance bed to a stretcher.

Step 4

- Transfer the patient on the stretcher that has wheels and carefully guide the stretcher towards the appointed ward.

Step 5

- Ensure that the attachments to the ambulance bed are also smoothly transferred along with the patient.

Step 6

- Hand over the belongings and the patient medical charts, if any, to the nurse once you enter the ward.

Techniques of Transferring a Patient Using a Wheelchair

If the patient is able to move on his or her own, then you can use a wheelchair for transferring the patient into the ward. Before the ambulance arrives, keep the wheelchair ready for use.

The steps involved in the transfer of a patient using a wheelchair are as follows:

Step 1

- With the help of the ambulance team, align the wheelchair with the ambulance bed.

Step 2

- Assist the patient in moving from the ambulance bed and stepping out of the ambulance.

Step 3

- Carefully transfer the patient to the wheelchair. Ensure that the patient is comfortably seated in the wheelchair.

Step 4

- Collect the belongings of the patient and place them on the patient.

Step 5

- In case the patient has been attached with a medication drip, ensure that the drip is also moved with the patient during the transfer.

Step 6

- While transferring the patient on the wheelchair, lock the wheels of the chair.

Step 7

- Transfer the patient smoothly without any jerks while moving the wheelchair. Do not rush the patient into the ward.

Transferring a patient from the ambulance to the ward is team effort. You should be ready with a plan of transfer for each patient. You should be prepared to plan and coordinate for the smooth transfer of the patient from the ambulance to the ward.

Key Learnings

Sumamrise your understanding of the module. Write your answers in the spaces provided.

1. List the arrangements you should make before transferring the patient.

_____

_____

_____

2. List the steps to transfer a patient to the ward using a wheelchair.

_____

_____

_____

3. List the steps to transfer a patient to the ward using a stretcher.

_____

_____

_____

Worksheet

1. *Arrange the steps in sequence.*

   a. Carefully transfer the patient to the wheelchair. Ensure that the patient is comfortably seated in the wheelchair.

   b. With the help of the ambulance team, align the wheelchair with the ambulance bed.

   c. Transfer the patient smoothly without any jerks while moving the wheelchair. Do not rush the patient into the ward.

   d. Assist the patient in moving from the ambulance bed.

   e. While transferring the patient on the wheelchair, lock the wheels of the chair.

   f. Transfer the drip attached to the patient during the transfer.

2. *Arrange the steps in sequence.*

   a. Ensure that the attachments to the ambulance bed are also smoothly transferred along with the patient from the ambulance to the ward.

   b. Carefully guide the stretcher towards the appointed ward.

   c. Align the stretcher with the ambulance bed with the help of the ambulance team and General Duty Assistants.

   d. Support the patient at the shoulders and buttocks area, to transfer from the ambulance bed to a stretcher.

   e. Hand over the belongings and the patient medical charts, if any, to the nurse once you enter the ward.

   f. Move the patient to the side of the bed by rolling him or her towards you.

Notes

Transporting Patients from Stretcher to Bed

At the end of this module, you will be able to:

- Transport patients from stretcher to bed and vice versa

Session Plan	
1	Module Overview
2	Stretcher and its Parts
3	Techniques of Transferring a Patient from the Stretcher to the Bed
4	Techniques of Transferring a Patient from the Bed to the Stretcher
5	Role of General Duty Assistant
6	Key Learnings
7	Worksheet

Module Overview

A patient can be suffering from various medical conditions. In some cases, the patient may not be able to move. But sometimes patients needs to be moved, for example, taking them to the lab, operation theatre, etc. So, to move the patient a stretcher is used. As a General Duty Assistant you must assist the medical team to transfer the patient from bed to the stretcher as and when needed. In this module, you will learn the procedure to transport a patient from stretcher to bed and vice versa.

Stretcher and its Parts

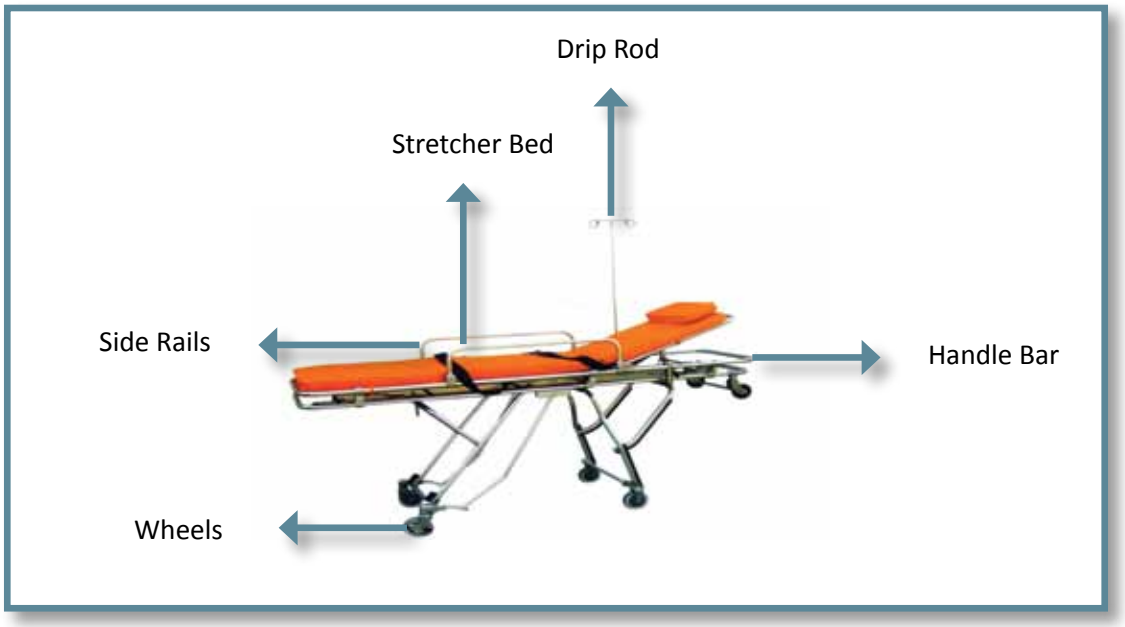
A stretcher is a medical device used to carry patients who have difficulty in movement from one place to another. The stretcher is a critical component of the hospital system. It also serves as a hospital bed that can be moved from one ward to another. A stretcher is usually moved by two people, one at the head and the other at the feet. The casualty (patient) is placed on the stretcher and then is carried or wheeled away. Stretchers are used if a person is unable to walk by themselves, or if other requirements mean a “stair chair” (wheelchair), or similar device can not be used. Most modern civilian stretchers include straps to avoid further injury to the patient.

The stretcher has different parts:

- **Stretcher bed** - The stretcher bed is a flat area with a thin mattress on which the patient is placed.
- **Handle bars** -The handle bar is located on one side of the stretcher and is used by the assistant to hold and push the stretcher.
- **Side rails** - The side rails of the stretcher prevent the patient from falling off the side and ensure the safety of the patient.

- **Wheels** - The stretchers are provided with wheels with rubber covering for smooth movement.
- **Wheel locks** - Wheel locks prevent the movement of the stretcher while the patient is transferred.
- **Attachments** - The stretcher also has provisions for attachment of medication drips and carrying the support systems needed by the patient.

The components of the stretcher vary from place to place. But you must be aware of the form and function of the stretcher that you would be using in your hospital.



Steps to Transferring a Patient from the Stretcher to the Bed

When a person is brought in the ward, the patient is often carried in a stretcher. The patient is needed to be carefully and safely transferred from the stretcher into the bed. This process is very important because while transferring, the patient should not suffer any injury or pain. Also, the medical condition of the patient must also be kept in mind while doing it.

There are certain steps you must follow to safely transfer the patient from the stretcher to the bed.

Step 1

Before transferring a patient from the stretcher to the bed, report to the nurse about the transfer of the patient into the ward.

Step 2

Ensure that there are at least two other General Duty Assistants to help you when the patient is transferred to the bed.

Step 3

Place the stretcher close to the side of the bed. Ensure that both the bed and the stretcher are stabilized or locked before moving the patient. You can use the lock of the stretcher and the hospital bed in order to prevent the stretcher or bed from moving.

Lock the wheels of both the stretcher and the bed while transferring the patient as the bed may move and cause a jerk. The jerk can hurt the patient or result in uncomfortable positioning of the patient.

Step 4

Lower any side rails present.

Step 5

Roll the patient gently to a side and place a sheet on the stretcher. Roll back the patient onto the sheet.

Step 6

Ask the other assistants to hold the sheet from the remaining sides.

Step 7

Gently lift the patient with the sheet and shift the patient onto the bed.

Step 8

Place the patient comfortably on the bed. Raise the side rails to prevent the patient from falling off the bed.

Steps to Transferring a Patient From the Bed to the Stretcher

During the stay in the hospital a patient may have to be moved from one ward to the other for various procedures.

There are certain steps you must follow to transfer the patient from bed to stretcher. For example, before you transfer the patient, you must plan the procedure by collecting information about the patient's condition from the nurse.

The steps involved in the transfer of a patient from the bed to the stretcher are as follows:

Step 1

Ensure that there are at least two other General Duty Assistants to help you when the patient is transferred from the bed to the stretcher.

Step 2

Place the stretcher close to the side of the bed. As the assistant in charge, ensure that both the bed and the stretchers are stabilized or locked before moving the patient.

Step 3

Lower side rails, if present.

Step 4

Roll the patient gently to a side and place a sheet on the bed. Roll back the patient onto the sheet.

Step 5

Get on to the patient's bed and hold the sheet from one side. Ask the other assistants to hold the sheet from the sides.

Step 6

Gently lift the patient with the sheet and shift the patient onto the stretcher. Get down from the bed.

Step 7

Place the patient comfortably on the stretcher.

Step 8

Move the equipment attached to the patient along with the patient.

Step 9

Remove the wheel locks of the stretcher and move the stretcher gently.

Step 10

Place the medical records along with the patient while moving the stretcher.

Role of General Duty Assistant

- When you use a stretcher, you must understand the condition of the patient before planning the process of transfer.
- Ask the nurse of the patient about the need for transfer of the patient. Learn about the condition of the patient to plan a safe technique of transfer.
- In many cases, some parts of the patient's body are damaged or very weak. You should know about those areas and ensure that those areas are not affected when the transfer is carried out.
- The patient might be provided with medication and support for breathing. In such cases the support equipment must also be carefully moved along with the patient.
- Experienced staff should accompany the patient during the transfer and appropriate documentation and equipment should be available.
- The receiving ward should also be prepared for the patient. Ensure that you organize the facilities that are required for the transfer.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is a stretcher? List the parts of a stretcher.

2. Write the techniques of transferring a patient from the stretcher to the bed.

3. Write the techniques of transferring a patient from the bed to the stretcher.

4. List the few points you must keep in mind while transferring the patient from stretcher to the bed and vice versa.

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   Which part of the stretcher prevents the patient from falling?

   a. Handle bar

   b. Side rails

   c. Wheels

   d. Wheel locks

2. *Arrange the following in sequence.*

   a. Ensure that both the bed and the stretchers are stabilized or locked before moving the patient.

   b. Lower side rails, if present.

   c. Ensure that there are at least two other General Duty Assistants to help you when the patient is transferred from the bed to the stretcher.

   d. Roll the patient gently to a side and place a sheet on the bed. Roll back the patient onto the sheet.

   e. Place the stretcher close to the side of the bed.

   f. Gently lift the patient with the sheet and shift the patient onto the stretcher. Get down from the bed.

   g. Place the patient comfortably on the stretcher.

   h. Get onto the patient's bed and hold the sheet from one side. Ask the other assistants to hold the sheet from the other sides.

3. *Fill in the blanks.*

a. _____ is a medical device used to carry patients who have difficulty in movement from one place to another.

b. _____ is used to assist and push the stretcher.

c. _____ prevent the movement of the stretcher while the patient is transferred.

d. The _____ is a flat area with a thin mattress on which the patient is placed.

4. *State True or False.*

a. The level of bed and the stretcher should be same while transferring the patient. _____

b. The medical attachments with the patient must be left behind after transferring him to the stretcher and moving him out of the ward. _____

c. You must make plans for the transfer on the stop. _____

d. You must transfer the patient after consulting the doctor or nurse. _____

e. Before transferring the patient, you must ensure you have two General Duty Assistants with you. _____

Notes

Transporting Patients from Wheelchair to Bed

At the end of this module, you will be able to:

- Transport patients from a wheelchair to a bed and vice versa

Session Plan	
1	Module Overview
2	Wheelchair and its Parts
3	Steps to Transfer a Patient Between the Wheelchair and Bed
4	Steps to Transfer a Patient from the Bed to the Wheelchair
5	Role of General Duty Assistant
6	Key Learnings
7	Worksheet

Module Overview

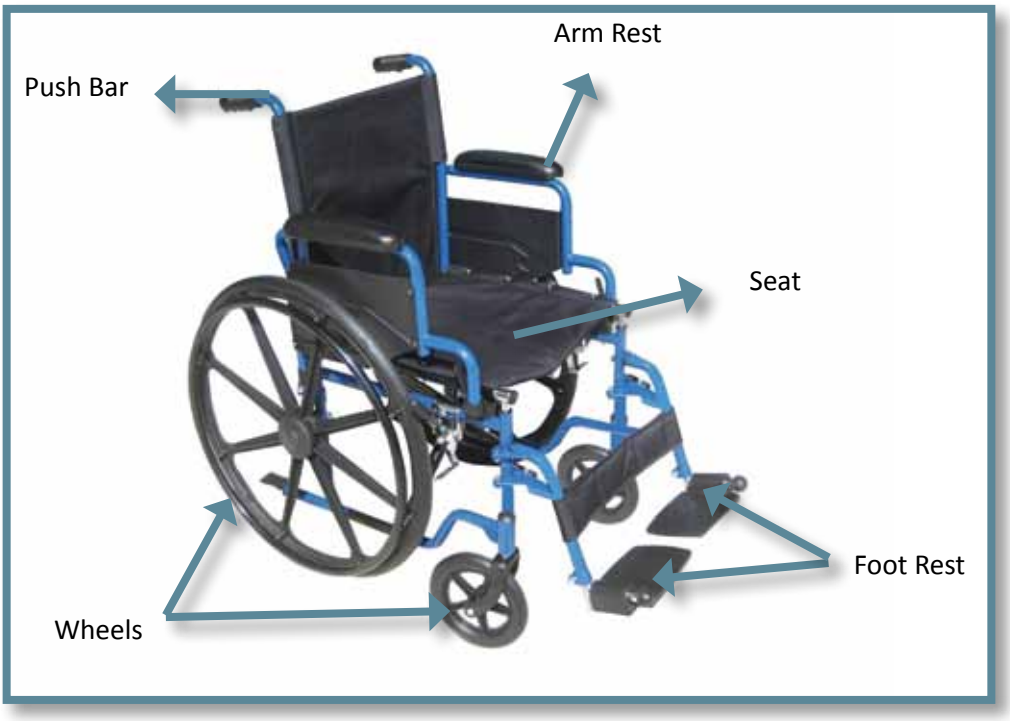
In a hospital, patients with different medical conditions arrive. Some of the patients are very weak and need support. Patients with such medical conditions are transported from one place to another using a wheelchair. A wheelchair is common support equipment that is used by people who are disabled. For a General Duty Assistant, a wheelchair is the most commonly used equipment for transporting people. So, you must be well aware of the parts and the functioning of a wheelchair. In this module, you will learn the different parts of a wheelchair, how to transfer a patient into a wheelchair safely and other steps you must follow while using a wheelchair.

Wheelchair and its Parts

You must have often observed that patients with disability or those who are too weak to move are carried in a chair with wheels. This chair with wheels is called a wheelchair. The device comes in various designs. In some wheelchairs, it is propelled by motors or by the seated occupant turning the rear wheels by hand. Often there are handles behind the seat for someone else to move the chair. Wheelchairs are used by people for whom walking is difficult or impossible due to illness (physiological or physical), injury, or disability. People with both sitting and walking disabilities often need to use a wheelchair.

Parts of a Wheelchair

The wheelchairis designed for the mobility of patients who are too weak to walk on their own. The different components of the wheelchair are designed to facilitate easy and comfortable movement of the patients. The components of the wheelchair are



Seat - It is the basic component on which the patient rests during movement from one point to another. It is made of metal or vinyl plastic.

Foot rest - It is a small platform-like component which is attached to the seat of the wheelchair. The patient can rest his legs on the foot rest.

Arm rests - The seat is attached with two arm rests which the patient can hold for support. Sometimes the arm rest is covered with padding so that the patient can rest his/her arms on it.

Wheels - There are two pairs of wheels. The front wheels are small in size and are located under the foot rest. The rear wheels are large wheels that are attached to the seat at the back. The wheels enable the wheelchair to move.

Metal skirts - The metal skirts are present on the rear wheels and are used by the patient for changing the direction of movement.

In addition to these core components, there are other components such as:

- **Wheel locks** to prevent movement of the wheelchair, especially while transferring the patient into the wheelchair.
- **Brakes** to control and bring the motion to a stop.
- **Push bars** are present on the back rest of the seat, used to move the wheel chair. An assistant must hold the push bars and push the wheelchair forward to make it move. An assistant can also pull the push bars backward in order to make the wheelchair go backwards.

Steps to Transfer a Patient Between the Wheelchair and Bed

There are different techniques to transfer a patient between the wheelchair and the bed. You must follow the most common method that is safe for the patient.

Step 1

Place a belt around the patient's waist to provide something for you to hold onto.

Step 2

Instruct the patient to move forward towards the edge of the seat on the wheelchair. Ask the patient to place him/ her feet-flat on the floor.

Step 3

Place the hands of the patient on the armrests of the chair.

Step 4

Hold the patient from the waist.

Step 5

Rock the patient back and forth three times. Then on the count of three, instruct the patient to push up with arms as you pull the patient close.

Step 6

Move the patient into a standing position while holding the patient with the belt. Gently move the patient to the bed.

Step 7

Seat the patient on the bed and then raise the legs of the patient onto the bed.

Step 8

Make sure the patient is comfortable on the bed.

Steps to Transfer a Patient from the Bed to the Wheelchair

There are many way of transferring the patient to the wheelchair from the bed. But you have to use the safe and most comfortable way for the patient. Before you start the procedure, collect information about the patient's condition from the nurse.

Step 1

Ensure that patient is comfortably seated on the bed. Roll the patient to one side and place a belt around the patient.

Step 2

Hold the patient from the waist and move the patient close to your body.

Remember to remove all the drips attached to the patient before moving him/her. If it is not possible to remove the drip, then carefully move the patient keeping in mind not to disturb the intravenous setup on the patient's hand or any other part of the body as it may hurt the patient.

Step 3

Now get into a standing position with the patient and gently move the patient close to you.

Step 4

Place the patient on the edge of the seat on the wheelchair and rock the patient into the chair. Ensure that wheels are locked to prevent movement of the wheelchair.

Step 5

Instruct the patient to use the arm rests for support.

Step 6

Place the feet of the patient on the foot rest of the wheelchair.

Step 7

Remove the wheel locks of the wheelchair and move the wheelchair gently to the ward that the patient has to be moved into.

Step 8

Place the medical records on the patient while moving the wheelchair.

Role of General Duty Assistant

The wheelchair will be one of the most commonly used equipment by you. Before using the wheelchair for moving the patient, keep the following points in mind:

- Discuss the transfer arrangements with the nursing staff in charge.
- Contact the department where the patient is to be transferred with relevant information in order to ensure appropriate transfer.
- Ensure the patient is prepared appropriately and that the patient's condition is as stable as possible.
- Always transfer the equipment required for the patient or the medical facilities along with the patient.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List the parts of a wheelchair.

2. Write the steps for transferring a patient between the wheelchair and the bed.

3. Write the steps for transferring a patient from the bed to the wheelchair.

4. List the points you must keep in mind while transferring the patient from the wheelchair to the bed and vice versa.

Worksheet

1. *Arrange the following in sequence.*

   a. Place the patient on the edge of the seat on the wheelchair.

   b. Hold the patient with the help of the belt and move the patient close to your body.

   c. Place the feet of the patient on the foot rest of the wheelchair.

   d. Consult the doctor about the transfer procedure.

   e. Remove the wheel locks of the wheelchair and move the wheelchair gently to the ward that the patient has to be moved to.

   f. Roll the patient to one side and place a belt around the patient.

   g. Place the medical records on the patient while moving the wheelchair.

   h. Now get into a standing position with the patient and gently move the patient close to you.

2. *Read the question. Tick on the correct answer.*

   Which part of the wheelchair helps in changing the direction of the wheelchair?

   a. Wheels

   b. Metal skirt

   c. Wheel lock

   d. Arm rest

3. *Match the columns.*

	Component of Wheelchair
a.	Wheel
b.	Push bar
c.	Seat
d.	Wheel lock
e.	Arm rest
f.	Brakes
g.	Foot rest

	Function
i.	To rest your hands
ii.	Enables the wheelchair to move
iii.	Prevents movement of the wheelchair
iv.	Assist in directing the wheelchair
v.	To stop the motion of the wheelchair
vi.	For the patient to rest his/her feet
vii.	For the patient to sit

Notes

Precautions While Transportation

At the end of this module, you will be able to:

- Follow the precautions while transporting a patient

Session Plan	
1	Pre-requisite Knowledge
2	Module Overview
3	General Precautions to be Taken While Transferring a Patient
4	Safety Measures in Handling Equipment
5	Safety Measures While Handling the Patient
6	Key Learnings
7	Worksheet

Pre-requisite Knowledge

- Transporting the patient from stretcher to bed
- Transporting patients from wheelchair to bed
- Proper handling of stretcher and wheelchair

Module Overview

Patients in different conditions of health are treated in the hospital and they are required to move from one point to another in the hospital. One of your primary duties as a General Duty Assistant is to facilitate the movement of the patients. You have to be cautious of the patient's condition and should take full care while moving the patient. The patient should not be in any uncomfortable position or in a position that may hurt him/her. For this, you must know the precautions that you must take while transferring a patient. This module on "Precautions While Transportation", lists the important steps to be taken for the safety and comfort of the patient.

General Precautions to be Taken While Transferring a Patient

Patients with varying medical conditions are admitted into a hospital. Some patients walk into the hospital by themselves while others are brought in an ambulance. As a General Duty Assistant, you must be prepared for facilitating these movements of the patient by consistently coordinating with the workforce in the hospital.

There are few steps you must keep in mind while transporting the patient:

- While shifting a patient from the ambulance to the ward, you must understand the condition of the patient and coordinate the process of transfer with other General Duty Assistants.
- You should collect all details of the patient from the nurse before planning the transfer.
- The transport procedures involve the use of varied equipment such as wheelchairs and stretchers.
- You should be aware of the usage of these equipments and take necessary precautions while handling them.
- You should take certain precautions with respect to the physical condition of the patient and also take some protective measures to prevent any undue physical strain on yourself.

Safety Measures in Handling Equipment

The basic equipments used in the transport of the patient are the stretcher and the wheelchair. While using these equipments, you must keep a few points in mind:

- While using a stretcher or a wheelchair ensure that the wheels of the equipment are locked. This will prevent any undue movement while the patient is being transferred.
- If the stretcher is provided with side rails, ensure that side rails are lowered before the transfer and raised back into the place once the transfer is done.
- Ensure that the stretcher bed is rigid enough to support the patients, especially in case of patients with a weak back.
- While moving the stretcher or the wheelchair take care while you move the patient on uneven ground. Do not rush the movement.
- Do not stop or start moving the wheelchair or the stretcher with a jerk. Initiate or stop the movement smoothly.
- The medication equipment such as the drip or the breathing support system attached to the patient should be stabilized with the stretcher or the wheelchair.

Safety Measures While Handling the Patient

- The most important precaution that you need to take while handling the patient is getting all the information about the condition of the patient.
- You must understand the painful areas of the patient and be sensitive to the movements of those areas while transferring the patient.
- Do not hold and lift the patients by their armpits while lifting them from a wheelchair. Always use a belt that can be used to hold the patient in position.
- When you use a blanket for lifting the patient, lift the patient gently with the help of other assistants, holding the blanket gently.

- You should also avoid undue strain on yourself when you lift the patient. Do not take the burden of the patient's weight on the back.
- Always use the powerful muscle of your legs, thighs and the arms in lifting and moving the patients.
- In order to avoid undue strain on your back while using the transfer equipment, adjust the height of the equipment to the level of your waist.
- Hold the patient as closely as possible to your body. Do not let the patient slip or roll away. Always slide the patient gently into the wheelchair or the stretcher.

Key Learnings

Sumamrise your understanding of the module. Write your answers in the spaces provided.

1. List the precautions you must take while handling the transporting equipment.

_____

_____

_____

_____

2. List the precautions you must take while transporting patients.

_____

_____

_____

_____

Worksheet

1. *Read the following question. Tick on the correct options given below. There could be more than one correct option.*

   Which of the following steps must a General Duty Assistant follow while handling/transporting a patient?

   a. Ensure wheels are locked.

   b. Cover the patient while he/she is being transported.

   c. Move the wheelchair or stretcher without a jerk.

   d. Rush the movement of the wheelchair or stretcher.

2. *Read the following question. Tick on the correct options given below. There could be more than one correct option.*

   Which of the following steps must a General Duty Assistant follow while transferring a patient?

   a. Hold the patients by their armpits top raise them from the wheelchair.

   b. Be sensitive to the pain area of the patient.

   c. Take the burden of the patient's weight on the back.

   d. Hold the patient as closely as possible to your body. Do not let the patient slip or roll away.

Notes

Positioning the Patient

S No.	Module Name
1	Appropriate Positioning of the Patient

Course Overview

There are some patients who are confined to their beds for long periods of time. This may cause bed sores. For such patients, their position on the bed must be changed. There are some others who may have undergone medical procedures. They may be required to be in a certain position. As a General Duty Assistant, you must know the names of the different positions, which position is suitable for what medical condition and as to how to position a patient as per the advice of the doctor or the nurse. This course will equip you with the necessary knowledge and skill on these.

Course Objectives

After completing this course, you will be able to:

- Position the patient during hospital procedures according to the instructions given by doctors

Appropriate Positioning of the Patient

At the end of this module, you will be able to:

- Position the patient during hospital procedures according to the instructions given by healthcare professionals

Session Plan	
1	Module Overview
2	Importance of Appropriate Positioning
3	Common Positions
4	Aligning the Patient in Supine Position
5	Safety Measures While Positioning the Patient
6	Key Learnings
7	Worksheet

Module Overview

Proper body alignment and position is critical in the maintenance of some body functions such as circulation of blood. The body must be aligned properly to facilitate for the comfortable movement of the patient. Also, some medical conditions require the patient to be placed in specific positions. As a General Duty Assistant you will be expected to assist the patient in positioning him/her into correct positions as instructed by the doctor. So, it is important for you to know the different positions ideal for different medical conditions. In this module, you will learn how to position the patient during hospital procedures as directed by the doctor.

Importance of Appropriate Positioning

In case of patients who are confined to the bed for a long period of time, there has to be a change in the position from time to time. This helps in preventing the blood from getting collected and in proper circulation of blood. When you position a patient properly, the pressure on the different parts of the body is equally distributed. The pressure on the skin on the bony parts is maximum and leads to pain in those areas. Such areas are the elbow, toes. where there is less fat and muscle tissues between the skin and the bones. By frequently monitoring and changing the position of the patient, you can also minimize the risk of bed sores (breaking of skin due to friction or lack of blood supply). Positioning of the patient is also critical while performing a procedure such as a surgery or an injection. As a General Duty Assistant, you must be aware of some of the common positions that ensure the patient's comfort.

Common Positions

The alignment of the patient in a particular position should ensure that patient is comfortable and is approachable for performing a procedure. You must be aware of the different positions that a patient can be placed in. Let us look at some of the common positions.

Supine

In this position the patient is lying on his or her back. This is the most common position for a patient in the inpatient ward.

Prone

The patient in the prone position is lying face down. A patient is placed in this position in case a procedure is performed on the back.

Sim's or Lateral Recumbent Position

In this position the patient is lying on the side. Based on the side it is called:

- Right Lateral Recumbent or RLR if the patient is lying on the right side, or

- Left Lateral Recumbent or LLR, if the patient is lying on the left side.

Lithotomy position

This position is often used during childbirth. In this position, the patient is on their back with the hips and knees flexed and the thighs apart.

Fowler's Position

A person in the Fowler's position is sitting straight up or leaning slightly back. Their legs may either be straight or bent. A 'high fowlers' position is someone who is sitting upright. A 'low fowlers' position is someone whose head is only slightly elevated.

Trendelenberg Position

A person in the Trendelenberg position is lying supine with their head slightly lower than the feet. This position is used for some treatments and procedures such as treating patients with shock, but this position is not preferred much any more.

As a General Duty Assistant, you should be aware of the different position types and assist the nurse when the patient is aligned in the position. You must also ensure that patient is comfortable and safe during the time this position has been suggested.

Aligning the Patient in Supine Position

The supine position is the most common position in which a patient is aligned. This position is used for physical examination of the patient.

Let us look at the steps involved in placing the patient in supine position.

Step1

Assist the patient to lie flat on the back.

Step2

Extend the legs and separate them slightly.

Step3

Place a pillow under the patient's head.

Step4

Cover the patient with a sheet.

This the most basic position of aligning a patient on the bed. Once you align the patient in this position, you can assist the patient to shift into any position as suggested by the doctor.

Safety Measures While Positioning the Patient

- The alignment of the patient on the bed is a medical decision because it is suggested by the doctor to facilitate for the healing of a condition.
- In some cases the doctor suggests a particular position for examination of the patient or performing a procedure. Before you align a patient in a given position, enquire with the doctor or the nurse about the condition of the patient. This will help you in assisting the patient while aligning him or her in a position. Make sure that the alignment is done in the presence of a doctor or a nurse and follow the directions given by them.
- The alignment of the patient on the bed is a medical decision because it is suggested by the doctor to facilitate for the healing of a condition. Do not take a decision on your own about the alignment of the patient.
- Check with the patient for any pain or discomfort and report the condition to the doctor immediately.
- In case the position is aligned for an examination or a procedure ensure that the required equipment is arranged for the nurse or the doctor. Always ensure that the patient's head is supported by a pillow and covered with sheets unless it has been suggested by the doctor otherwise.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Explain the importance of positioning the patient.

2. Explain the common positions.

3. List the safety measures to be taken while positioning the patient.

Worksheet

1. Look at the pictures. Identify the positions.

	_____
	_____
	_____
	_____
	_____

2. *Match the columns.*

Position	
a.	Prone
b.	Supine
c.	Lateral recumbent position
d.	Lithotomy position
e.	Trendelenberg position
f.	Fowler's position

Patient's Alignment	
i.	Patient lying side ways
ii.	Patient is sitting straight
iii.	Treating patient with shock
iv.	Patient lying on his back
v.	Position used during childbirth
vi.	Patient with back operation

Notes

Managing Patient Hygiene

S No.	Module Name
1	Prevention of Bed Sores
2	Bathing
3	Oral Care
4	Hair Care
5	Nail Care
6	Clothing

Course Overview

Some patients may be required to stay in the hospital for long periods of time. During their stay, you as a General Duty Assistant must help them in maintaining personal hygiene. This includes helping the patient in daily activities like bathing, oral care, hair care, nail care and clothing. Besides these, there is one more important duty for you – that of preventing the formation of bed sores on the patient.

This course focuses on your role in all these activities.

Course Objectives

After completing this course, you will be able to:

- Assist the patient in maintaining personal hygiene

Prevention of Bed Sores

At the end of this module, you will be able to:

- Place the correct back rests and support
- Prevent bed sores by using appropriate measures

Session Plan	
1	Pre-requisite Knowledge
2	Module Overview
3	Bed Sores
4	Causes of Bed Sores
5	Prevention of Bed Sores
6	General Precautions to Prevent Bed Sores
7	Key Learnings
8	Worksheet

Pre-requisite Knowledge

- Appropriate positioning of the patient

Module Overview

During the stay of the patient in a hospital, the patient is confined to the bed for a prolonged duration depending on his or her condition and the treatment received. But if a patient remains in the same position for a long period of time, it will lead to painful infections on the patient. This infection is called bed sores. Therefore you, as a General Duty Assistant, have to help the patient move so that the patient is not in the same position for a long time. In this module, you will learn how to safely move the patient in order to prevent bed sores.

Bed Sores

When you sit for 2-3 hours continuously in the same position, you may have experienced pain or pressure on your backside. To prevent it, you often change your position or stand up to relax your muscles. Now, just imagine if you were to sit in the same position for days together without moving, how much pain and pressure you would feel on your back side. Some of the patients treated in the hospitals actually feel this pain. They are unable to move or have restricted movement and stay on bed in the same position for long hours. Certain areas of their skin continuously rub with the clothes they wear or with the surface of the bed. After some time, the skin breaks down and starts to corrode due to continuous damage. This leads to pain and infection. These corroded or infected areas are known as **bed sores.**

Bed Sores also called pressure sores are a major reason for concern in a hospital or a nursing home. Bed sores are areas where the skin has broken down due the pressure created on the body. They can go deep into the bone. Bed sores can cause pain and very serious infections that can lead to death. Bed sores often form over bony areas of our skin where there is little cushion in between the bone and the skin. Most bed sores form on the lower part of the body, including over the tailbone and on the back along the spine, on the buttocks, on the hips and on the heels. Other common spots are the back of the head, the back of the ears, the shoulders, elbows, ankle and between the knees where the legs rub together.

Prevention of bed sores is very important in patients who by themselves are unable to reposition themselves. As a General Duty Assistant, it is your duty to take proper care of the patient and prevent bed sores. In case a patient develops bed sore you must identify it early and take preventive measures to stop it from growing. Bed sores can be prevented by proper skin care, a good diet, drinking a lot of fluids, helping patients walk and by turning and positioning them often.

Let us look at the causes of bed sores and the methods by which you can prevent them.

Causes of Bed Sores

Bed sores can be caused due to multiple reasons in a patient. Some of the common causes and conditions that can lead to bed sores are as follows:

Frictions and shearing - While making a bed, ensure that the bed is free of wrinkles and the mattress is clean and comfortable for the patient. Friction and shearing of the patient's skin with the sheets can lead to a break in the skin leading to bed sores. The lack of blood supply leads to break in the skin especially in the areas where we have fewer muscles between the skin and the bones, such as the tailbone area, knees and elbows. When there is excessive pressure on the skin, it turns whitish in colour due to lack of blood. Once the skin turns white, it becomes dry and breaks.

Age - In case of aged patients, the skin becomes dry and the blood supply to the skin is also not sufficient. Such conditions can put the patient at a greater risk of bed sores.

Lack of mobility - When a person is confined to a bed or a wheelchair, the blood supply to certain areas under pressure, such as the skin covering the bony parts of the body, is cut off. This lack of blood supply to the skin will result in a painful pressure sore.

Mental or neurological problems - Patients with mental or neurological problems cannot feel the sensation of pressure or pain. This leads to build up of pressure in certain areas leading to decreased blood supply. In such cases you must help the patient in moving from one position to another and relieve the pressure.

If care is not taken immediately after the skin is broken, then it leads to the infection of the bone resulting in a very painful condition. Always look for areas on the patient's skin that may have turned whitish in colour. Immediately attend to them and change the position of the patient to relieve the pressure on that area.

Prevention of Bed Sores

One of the most common methods of preventing bed sores is by using back rests and position padding.

Changing position - Change the position of the patient to relieve the pressure point.

Back rest - In some conditions where the patient is unconscious, you have to ensure that the pressure is relieved on certain areas of the patient's body. You can use pillows to relieve pressure on the back of the patients who are in supine position for a long time. Place pillows under the upper and lower back of the patient to ensure that the pressure is equally distributed.

Position padding - Position padding is the technique of placing adequate support to specific areas of the body depending on the position of the patient. Place foam supports such as small cushions to support the head, neck and shin areas

General Precautions to Prevent Bed Sores

Here are few general tips you must follow to take effective care of the patient and prevent bed sores.

- You can prevent bed sores by providing skin care. Use mild soap and gentle strokes with a soft cloth when giving a bath to a patient.
- Rinse the skin well and then pat it dry with a soft towel. Use a bland lotion to lubricate dry skin. Lotion helps to keep the skin healthy and soft.
- Do not use alcohol or alcohol base lotions on skin. Alcohol dries the skin.

- Look at areas where skin touches skin, if these areas are moist then apply some powder to help keep the area dry.
- Do not let the patient remain wet or dirty with urine, feces or other fluids, including water or tea. Wash, rinse and dry all wet and dirty skin.
- For patients who are bed ridden or wheelchair bound, move and re-position them at least every 2 hours.
- Keep a time track sheet to monitor the number of times you have changed the position of the patient.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is a bed sore?

2. Explain the causes of bed sores.

3. List the methods of preventing bed sores.

Worksheet

1. *Read the following question. Tick on the correct option.*

   Which of the following is a cause of bed sore?

   a. Lying on the hospital bed

   b. Undergoing heavy medication

   c. Lack of blood supply

   d. High blood pressure

2. *Read the following question. Tick on the correct option.*

   Which of the following defines bed sores?

   a. Lack of blood flow at a specific point

   b. Area where there is less gap between bone and skin

   c. Corroded area of the skin due to low blood supply

   d. None of the above

3. *Fill in the blanks.*

   a. _____ based skin lotion should not be used, as it make skin dry.

   b. A patient should be repositioned after every _____ hours.

   c. _____ is the technique of placing adequate support to specific areas of the body.

   d. Bed sores are also called _____.

Notes

Pressure Sores

At the end of this module, you will be able to:

- define a pressure sore;
- identify common sites of pressure sores;
- list down the causes of pressure sores;
- identify patients susceptible to pressure sores;
- list down the signs and symptoms of pressure sores;
- describe how to prevent bed sores;

Session Plan	
1	Module Overview
2	Common Sites of Pressure Sores
3	Causes of Pressure Sores
4	Patients Susceptible to Pressure Sores
5	Signs and Symptoms of Pressure Sores
6	Prevention of Bed Sores
7	Role of a GDP in the Prevention of Bed Sores
8	Key Learnings
9	Worksheet

Module Overview

Decubitus Ulcers, also known as pressure sores, are ulcerated or sloughed areas of tissue subjected to pressure from lying on a mattress or sitting on a chair for a prolonged period of time. This results in slowing of the circulation and finally the death of tissues.

Common Sites of Pressure Sores

Pressure sores are usually found on:

- Pressure points that bear weight
- Bony prominences of the body

The pressure points in the supine position are:

- Back of the head (occiput)
- Scapula

- Sacral region
- Elbows and heels

The pressure points in the side lying position are:

- The ears
- Acromion process of the shoulder
- Ribs
- Greater trochanter of the hip
- Lateral condyles of the knee and malleous of the ankle joint

The pressure points in the prone position are:

- Ears
- Cheek
- Acromion process
- Breasts (in females)
- Genitalia (in males)
- Knees and toes

Causes of Pressure Sores

The direct or immediate causes of pressure sores are:

Pressure:

- Pressure is considered to be the primary cause of pressure sores.
- In a sick person, the areas of tissue resting against the mattress are vulnerable areas.
- The pressure over these areas are increased in the following conditions:
  a. When there are lumps and creases on the bed.
  b. When the body is incorrectly positioned.
  c. When there are infrequent changes of position.

Friction:

- Friction of the skin with a rough or hard surface can cause tissue damage.
- Friction can be caused by contact with the rough surfaces of the bed, wrinkles on the bed clothes, hard surfaces of the plaster casts and splints, presence of foreign bodies on the bed, careless handling of the bed pan, pulling sheets under the patients etc.
- Friction is also caused by rough sponge cloths and prolonged massages without lubricants.

Moisture:

- Skin contact with moisture over a period of time can lead to maceration of the skin.
- Patients who sweat profusely, with incontinence of urine and stools are liable to get pressure sores.

Presence of pathogenic organisms:

- Lack of cleanliness harbours pathogenic organisms and infection settles on the skin.

The predisposing causes of pressure sores are:

- Impaired circulation
- Lowered vitality
- Emaciation
- Oedema
- Obesity

Patients Susceptible to Pressure Sores

The following types of patients are susceptible to pressure sores:

- Acutely ill patients, whose general condition is rapidly deteriorating
- Elderly bedridden patients, who make very few movements in bed
- Obese patients
- Very thin and emaciated, malnourished patients
- Sedated patients who do not move readily
- Paralysed patients
- Neurological patients who lack sensation
- Surgical patients with limited movements
- Patients with hyperpyrexia who sweat profusely
- Patient with incontinence of urine and stool
- Diabetic patients

Signs and Symptoms of Pressure Sores

The signs and symptoms of pressure sores are:

- Redness, tenderness, discomfort and smarting.
- The area becomes cold to touch and is insensitive. There is local oedema; later the area becomes blue, purple or mottled.
- Due to continued pressure, the circulation is cut off, gangrene develops and the affected area is sloughed off.

Prevention of Pressure Sores

The steps taken to prevent pressure sores are as follows:

- Identify patients who are particularly prone to the development of pressure sores.

- Examine susceptible patients daily for redness, discolouration or blisters on the pressure points. If found, they should be reported and treated immediately.
- Keep the patients clean and dry.
- Change the position of the patient every 2 hours so that another body surface bears the weight.
- Use the bed cradle to take off the weight of the bed linen of the patient, so as to enable him to move in bed with ease.
- Keep the patient's skin well lubricated to prevent cracking by using powder.
- Protect the damaged skin.
- Attend to the pressure points as often as necessary to stimulate the circulation.
- Patients liable to bed sores must have their back treated two hourly or more often.
- Care should be taken to pad the bed pan to avoid friction.
- Provide a smooth, firm and wrinkle-free bed on which the patient can rest.
- Use special mattresses and beds to decrease the pressure on body parts, e.g. air mattresses, water mattresses etc.
- Cut short the patients' finger nails to avoid scratching of the skin.
- Use adequate amounts of cotton under splints and plaster casts to prevent friction.
- Use the comfort devices to take off the pressure from the pressure points, e.g. air cushions, cotton rings etc. Avoid using rubber rings since they compress the area of the skin beneath them, decreasing blood supply around the pressure points.
- Encourage the patients to move in bed as far it is allowed.
- Change the linen as soon as it becomes wet. The back and buttocks of the patient must also be washed, dried and rubbed with powder, after each urination and defecation.
- Teach the patients and their relatives about hygienic skin care.

Role of a GDP in the Prevention of Bed Sores

A GDP must take certain steps to ensure the prevention of bed sores. A GDP must:

- Report to the sister in charge and the physician, the early symptoms of a bed sore so that steps may be taken as early as possible to prevent further damage.
- Whenever possible take off the pressure from the bed sore by placing the patient on pillows or foam cushions or changing the position of the patient.
- Prevent the ulcerated area from becoming infected. Infection will retard healing of an ulcer. A strict aseptic technique must be followed.
- Apply all possible measures for the healing of the wound.
- Apply a waterproof ointment, e.g., Zinc oxide on the surface of the wound will prevent infection of the underlying tissues. It will be of much value in patients with incontinence of urine.
- If slough is present, clean the area with hydrogen peroxide diluted with distilled water. If the slough is loose, the physician may cut off the slough. If there is delay in healing of the wound, the surgeon may debride the ulcer and a skin graft may be applied over the ulcerated site.
- If the infection is settled, give some of the antibiotics prescribed by the physician.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Define pressure sores and list down the common sites of pressure sores.

2. Write the main causes of pressure sores.

3. Write how to prevent pressure sores.

4. List down the patients who are susceptible to bed sores.

Worksheet

1. Tick the correct answer.

a. A pressure ulcer is an area of skin that has been damaged due to which of the following?

i. Poor hygiene

ii. Pressure

iii. Medication

iv. Prolonged exposure to the sun

b. Pressure ulcers are caused by:

i. Moisture

ii. Shearing

iii. Friction

iv. All of the above

c. Where are pressure ulcers most likely to develop?

i. Bony prominences

ii. Eyes

iii. Hair

iv. Face

d. Who is most likely to get a pressure sore?

i. Someone who has a debilitation physical illness

ii. Someone who is not eating or drinking adequately

iii. Someone who is wheelchair dependent

iv. All of the above

e. Pressure relieving equipment should always be used in which of the following circumstances?

i. After a pressure sore has developed

ii. If the skin has broken

iii. If indicated following skin inspection and assessment

iv. To keep the person comfortable

.

Notes

Back Care

At the end of this module, you will be able to:

- define the term back massage.
- list down the reasons for giving a back massage.
- arrange the articles required for performing a back massage procedure.
- perform a back massage procedure in the correct sequence.
- identify the conditions that are contraindications for performing a back massage procedure.

Session Plan	
1	Module Overview
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3	Articles Required for Performing a Back Massage
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Module Overview

Back care means cleaning and massaging the back, while paying special attention to the pressure points. Back massages provide comfort and relax clients, thereby facilitating physical stimulation to the skin and emotional relaxation.

Reasons for Performing a Back Massage

Some important reasons for performing a back massage are:

- To stimulate circulation and provide comfort
- To prevent pressure sores (Decubitus Ulcers)
- To keep the skin dry, clean and healthy
- To observe the pressure points and back
- To relieve pressure from pressure points
- To refresh mood and feeling
- To relieve fatigue, pain and stress
- To induce sleep

Articles Required for Performing a Back Massage

The following articles are required to perform a back massage:

- Basin with warm water (2)
- Bucket for waste water (1)
- Gauze pieces (2)
- Soap dish with soap (1)
- Face towel (1)
- Sponge cloths (2): 1 to soap with
- 1 to rinse with
- Big towels (2): 1 for covering the mackintosh
- 1 for covering the body
- Mackintosh (1)
- Oil / Lotion / Powder (1): Select according to the patient's skin condition and personal choice
- Tray (1)
- Trolley (1)
- Screen (1)

Procedure for Performing a Back Massage

Take a look at the steps to perform a back massage.

- Wash your hands. Collect and bring the complete set of articles to the bedside.
- Screen the patient. Explain the procedure to the patient. Wash your hands.
- Put the patient in a lateral or prone position. Place the mackintosh with the cover under the patient. Expose the back up to the buttocks. If the patient is stable, place him or her in a sitting position.
- Wet the patient's back with water. Apply soap in a circular motion and massage at the same time, moving from a downward to an upward direction for 3-5 minutes.
- Dry the back. Put some spirit on your palm and apply it all over the back in a motion and massage it till the whole spirit has evaporated and the skin is dry. (In case of dry skin and / or patient with incontinence, use oil in place of spirit).
- Apply powder on the back (if oil has been used, remove the oil after massaging by using a wet sponge cloth, and then apply powder on the dry skin).
- Remove the mackintosh and cover.
- Re-position the patient.
- Remove all the articles and leave the patient in a comfortable position.

- Clean and replace the articles.
- Wash your hands.
- Record and report your observations.

Conditions That Are Contraindications for a Back Massage / Rub

The following conditions are contraindications for a back massage / rub:

- **Fever**: Massage increases the overall circulation and could therefore work against the body's natural defences.
- **Inflammation**: Massage can further irritate an area of inflammation. Inflamed conditions include anything that ends in –itis, such as phlebitis (inflammation of a vein), dermatitis (inflammation of the skin), arthritis (inflammation of the joints), and so on. In the case of localised problems, we can still massage around them, however, avoid the inflammation itself.
- **High Blood Pressure**: High blood pressure means excessive pressure against the blood vessel walls. Massage affects the blood vessels, and so people with high blood pressure or a heart condition should receive light, sedating massages, if at all.
- **Infectious Diseases**: Massage is not a good idea for someone coming down with the flu or diphtheria.
- **Hernia**: Hernias are protrusions of part of an organ (such as the intestines) through a muscular wall. It's not a good idea to try to push these organs back inside. Surgery works better.
- **Osteoporosis**: Elderly people with a severe stoop to their shoulders often have this condition, in which the bones become porous, brittle, and fragile. Massage may be too intense for this condition.
- **Varicose Veins**: Massaging directly over varicose veins can worsen the problem. However, if you apply a very light massage next to the problem, always in a direction towards the heart, it can be very beneficial.
- **Skin Problems**: You should avoid anything that looks like it shouldn't be there such as rashes, wounds, bruises, burns, boils, blisters, and so on. Usually these problems are local, so you can still massage other areas.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Define the term back massage.

2. Note down any three reasons for performing a back massage.

3. List down the conditions that are contraindications for a back massage

Worksheet

1. Tick the correct answer.

a. After giving a backrub to a patient the GDA should always note:

i. The last time the patient had a back rub

ii. Any change in the patient's skin

iii. The patient's weight

iv. The amount of lotion used

b. backrub is usually administered:
   i. Before the patient's bath
   ii. After the patient's bath
   iii. During the patient' bath
   iv. When the patient is going to sleep

c. specialist will massage a patient's back for:
   i. minute
   ii. 2 to 3 minutes
   iii. 2 to 4 minutes
   iv. 3 to 5 minutes

d. backrub is contraindicated (not given) if the patient has conditions like:
   i. Fractured ribs, burns, or high blood pressure
   ii. Fractured ribs, burns, or open wounds
   iii. Pulmonary embolism, heart condition, or open wounds
   iv. Hyper tension, dysrhythmias, or fractured ribs

e. To administer a backrub, the GDA should first:
   i. Explain to the patient what is going to be done
   ii. Prepare the equipment
   iii. Adjust the bed height to the working level
   iv. Provide privacy and a quiet environment

f. Prior to moving to another task following the backrub, GDA should:
   i. Lower the bed rail, and raise the side rail as needed
   ii. Wash hands
   iii. Remove excess lubricant from the patient's back.
   iv. Place the patient in a comfortable position

Notes

Answers: Back Care

The correct answers are:

1	a. ii b. ii c. iv d. ii e. i f. ii

Bathing

At the end of this module, you will be able to:

- Encourage and assist patients to take a bath
- Perform a partial bath in the bed

Session Plan	
1	Module Overview
2	Bathing and its Importance
3	Common Bathing Techniques
4	Role of General Duty Assistant
5	General Precautions to be Followed
6	Key Learnings
7	Worksheet

Module Overview

Bathing is a common daily task that is necessary for our personal hygiene. However during their stay in the hospital, most patients are too weak to bathe and maintain personal hygiene by themselves. As a General Duty Assistant, you should help the patient in bathing. But how to assist the patient in bathing? In this module, let us learn how to assist the patient while bathing.

Bathing and its Importance

Bathing is washing and cleaning your body using water and soap. Bathing is the most basic activity followed to keep the body clean. Bathing regularly helps prevent infection. Bathing also, as an activity, relaxes the patient and keeps the patient fresh. It promotes the circulation of blood within the body.

In many cases, however, patients are unable to perform this activity by themselves. It is your duty to facilitate a bath for the patient and help maintain appropriate personal hygiene. In case of patients who are immobile, you must bathe the patient to prevent infections. You must follow the bathing methods that the nurse or the doctor suggests depending on the condition of the patient.

Common Bathing Techniques

Patients are given a bath according to their needs and medical conditions. Patients, who are able to get up and walk, get a shower or a tub bath; whereas patients who are ill or weak will have a bed bath.

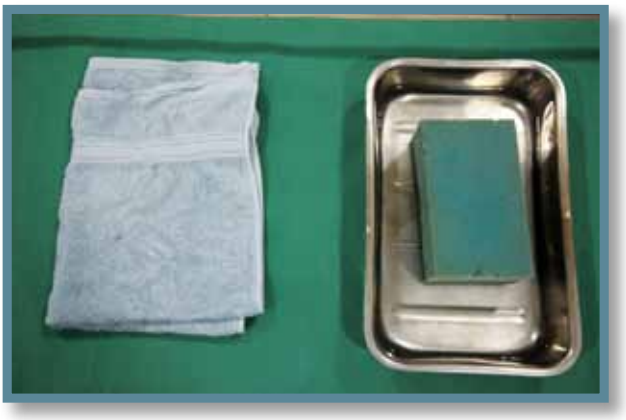
There are three different kinds of bath that are given in a hospital, namely:

- Complete bed bath
- Partial bed bath
- Shower or tub bath

A bed bath is given to a patient completely on bed. It is given to those who cannot move out of their beds.

A partial bed bath is a technique wherein you help the patient in taking a bath close to the bed. It is given to patients who cannot move to use the shower.

A Shower or tub bath is a bathing technique that is followed by patients who can maintain personal hygiene by themselves. The patient might use the tub or the shower for taking a bath.



The type of bathing technique that needs to be followed by a patient is based on the instructions given by the doctor. You must arrange for the bath of the patient by keeping the necessary items in place such as the soap, water and towels for cleaning. While giving bath to the patient you must ensure not to hurt or injure the patient in any way.

While giving bath to a patient you must take care that water does not enter the wounds of the patient.

Role of General Duty Assistant

Once the doctor gives instruction on the method of bathing that needs to be followed, you should prepare the patient for the bathing procedure. Before starting the procedure of bathing the following arrangements have to be made:

In case of complete bed bath

- Set the temperature in the room to keep the patient warm during bathing and close the curtains or blinds for privacy.
- Fill two large basins or bowls with warm water, one for washing and the other for rinsing. Put a wash cloth in each basin.
- Move the patient gently while washing and rinsing the body.

In case of a partial bath

- Keep two trays of warm water ready to be used by the patients for washing and rinsing.
- Help the patient with washing the areas that the patient cannot reach, such as the back.
- Provide the patient with towels and sheets for drying immediately after the bath.
- Move the patient gently while washing and rinsing the body.

In case the patient is able to take a bath in the shower or the tub

- Make certain that the tub or shower appliance is clean. Place a non-skid mat on the tub or the shower floor and a disposable mat outside of the tub or shower.
- Check the water temperature so that it is not too hot.
- Assist the patient to the tub or the shower. Be certain the patient wears the robe and slippers.
- Help the patient sit on the edge of the tub. If there is a grab bar on the back wall of the tub, have the patient hold it with one hand.
- Provide the patient with towels and sheets for cleaning immediately after the bath.

General Precautions to be Followed

- Put on your gloves while bathing a patient using any technique.
- The water that is used should be warm. Have the patient test the water. Adjust the temperature, if needed.
- Instruct the patient on the use of taps and bathroom accessories.
- Help your patient undress and place soiled clothing in the plastic bag in the laundry hamper.
- Maintain the privacy of the patient while taking a bath and draw the with curtains.
- Consult the nurse or the doctor and discuss the method of bathing that must be followed with each patient.
- Stay on the side of the patient and encourage the patient to perform the activity by themselves. After the patient is dried, help the patient in clothing.
- Remove all the wet bed sheets and towels after the bathing procedure is complete. Ensure that the area is dry, as wet areas can lead to infections.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided

1. What is partial bath?

2. Write the steps to be followed while giving the patient a partial bath?

3. What is complete bed bath?

4. Write the steps to be followed to give a complete bed bath.

5. What is shower or tub bath?

6. Write the steps to be followed for shower or tub bath.

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   A patient is capable of going to the shower and taking bath. Which bathing technique must you use?

   a. Partial bath

   b. Tub bath

   c. Complete bed bath

   d. None of the above

2. *Read the following question. Tick on the correct option given below.*

   A patient has fractured his leg and is unable to move from his bed. Which bathing technique must be used for him?

   a. Partial bath

   b. Tub bath

   c. Complete bed bath

   d. None of the above

3. *Read the following question. Tick on the correct option given below.*

   Which of the following is NOT an advantage of bathing?

   a. Keeping body clean

   b. Preventing infection

   c. Increasing blood circulation

   d. Preventing blood loss

Notes

Assisting the Nurse in Bathing the Patient

At the end of this module, you will be able to:

- determine the purpose of giving a patient a bath;
- list the articles required for performing bathing procedure;
- explain the procedure of a sponge bath in sequence;
- identify conditions which encourage skin breakdown;
- identify intervention methods which can prevent skin breakdown;
- identify the needs of the patient to be considered;
- Identify the observations to make during the bathing procedures.

Session Plan	
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3	Purpose of the Bed Bath
4	Articles Required for Performing Bed Bath
5	Procedures
6	Physical Conditions which Encourage Skin Breakdown in a Patient Who is Confined to a Bed
7	Nursing Intervention to Prevent Skin Breakdown
8	Providing for Select Patient Needs While Bathing a Patient
9	Significant Nursing Observations During the Bathing Procedure
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Module Overview

Introduction

Providing for a patient's hygiene is probably the most basic of all nursing care activities, but it is undoubtedly one of the most important. Not only is it a provision for the patient's physical needs; it also contributes immeasurably to the patient's feeling of emotional well-being. An important role for a caregiver to perform is bathing clients when they are unable to do this independently. The caregiver is responsible for ensuring that the hygiene needs of the clients are met whether the caregiver performs the bath or the client does it by them self. The type of bath given is determined by the client's self-care abilities. There are general types of baths, cleansing baths and therapeutic baths.

Types of Bed Bath

Cleansing Baths; is part of routine client care for personal hygiene. The 6 types of cleansing baths are shower, tub bath, self-help bath, bed bath, complete bed bath and partial bath.

- Shower - Most ambulatory clients are capable of taking a shower. Clients with physical limitations can use a waterproof chair in the shower. The caregiver may provide some assistance with the shower.
- Self Help - Some clients are confined to a bed and this type of bath provides the hygiene care needed. The caregiver prepares the bath equipment and assists in washing difficult to reach areas. Areas such as the back, legs, feet, and external genitalia.
- Complete Bed Bath - The caregiver assists the clients, who are confined to a bed, with an entire body wash.
- Partial Bath - The caregiver assists with cleansing only those body areas that would cause discomfort or odour. These areas are the face, hands, and genital areas.

Therapeutic Bath - A Physicians order is required for a therapeutic bath. This order or care plan will state the type of bath, body surface to be treated, temperature of water and type of medication solution to be used. This is usually 20- 30 minutes in a tub. Therapeutic baths can be broken into: hot or warm or cool baths; or soak or sitz bath.

- **Hot or Warm Bath -** The bath is done in the tub and it reduces muscle spasms, soreness and tension, but can cause skin burns.
- **Cool bath -** Also done in the tub where the cool water relieves tension and lowers the body temperature to prevent chilling and rapid temperature fluctuation during the bath.
- **Soak Bath -** This bath is limited to a certain body part but can involve the entire body. Water with or without medication is applied to relieve swelling, pain and irritation to that part or just as a means to remove dead skin tissues.
- **Sitz Bath -** Bath that reduces inflammation and cleanses the genital and anal areas.

At no time during any of these baths does the Caregiver leave the Client alone.

Purpose of the Bed Bath

The purpose of the bed bath is to:

- keep the skin clean;
- make the patient comfortable and fresh;
- stimulate circulation and thereby increase elimination through the skin;
- promote muscle relaxation and induce restfulness;
- observe the skin for redness, injuries, swelling, rashes or other infections and bony prominences for bed sores;
- improve the patient's self-image and emotional and mental well-being;
- prevent pressure sore.

Articles Required for Performing Bed Bath

The articles required to perform a bed bath are:

- Linens for bed making
- Screen
- Bath towels - 2
- Patient's clothes
- Large basin -1
- Jug of hot and cold water – 2
- Bowl with clean cotton balls for eye care
- A clean tray containing:
  - Articles for mouth care
  - Sponge clothes - 2
  - Soap and soap dish
  - Spirit
  - Talcum powder
  - Oil
  - Comb
  - Cotton dressing pads or rag pieces - 2
  - Nail scissors/nail cutter
  - Small bowl (galipot) with antiseptic lotion
  - Mackintosh with cover
  - Kidney tray and paper bag
  - Gloves (optional)

Procedure

The procedure to be followed while performing a body bath is as follows:

1. Wash hands. Assemble all the articles and take them to the bedside after testing the temperature of the water.
2. Explain the procedure to the patient.
3. Place a stool at the foot of the bed. Place the articles near the patient, within reach.
4. Arrange clean linen on the stool in order of use.
5. Screen the patient.
6. Check if there is any drought.

7. Ask the patient if he or she wants a bedpan.
8. Remove all the top linen and patient's clothes except the sheet or blanket and place one pillow under the head if the patient is uncomfortable.
9. Place the bath towel under the patient's chin.
10. Give oral hygiene.
11. Give eye care to the patient using wet cotton balls from inner to outer canthus.
12. After checking the temperature of the water, fold a sponge towel around your hand, then wash the patient's face with water and dry the face with a bath towel.
13. Take the sponge towel and fold it around your hand. Apply soap. Clean the patient's neck and ears. Keep the sponge towel in a soap dish. Take a second sponge towel and rinse it in water and wipe off the soap from the neck and ears. Then dry it with the second bath towel.

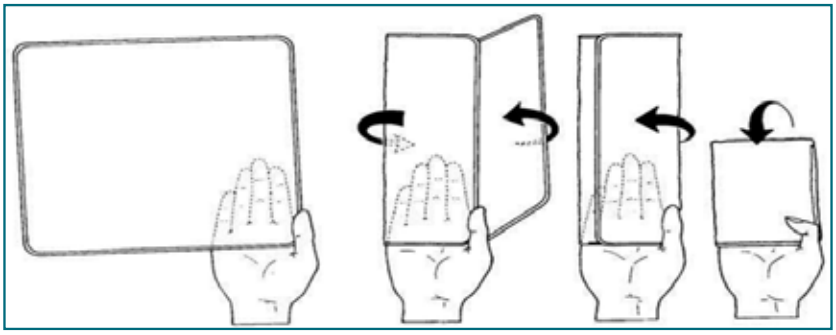

Fig … Method of folding the towel around the hand

14. Spread the mackintosh with cover under the opposite arm. Clean the arm from the distal to the proximal end including the axilla. Use a circular movement, while applying soap.
15. Wash and dry the arm with the bath towel. Place the basin of water under the patient's hand and allow the patient to rinse their hand in the water and then dry it.
16. Spread the mackintosh with cover under the other arm and repeat steps no. 14&15.
17. Change the water.
18. Cover the patient's chest with the bath towel. Fold the top linen at the level of the umbilical area and repeat step no. 14. Use circular movements while applying soap.
19. Spread the mackintosh with cover under the opposite leg and proceed in the same way as in step no 14&15.
20. Spread the mackintosh with cover under the other leg, and proceed in the same as in step no. 14&15.
21. Place the mackintosh and the towel over the bed, then place the basin of water over it, and bend the patient's knees, place one foot in the basin of water, and wash it. Dry the foot with a towel and repeat the procedure for the other foot.
22. Change the water.
23. Turn the patient onto the opposite side. Spread the mackintosh with cover on the patient and tuck it under the patient. Wet the back with water, and apply soap. Then wash and dry the back and buttocks, with special care to the bony prominences. Apply spirit, powder, and remove the bath towel. Then change the water.
24. Give a wet cotton pad to the patient, and ask them to clean the genitalia. If the patient is unconscious, clean and dry the genitalia with two different cotton pads.

25. Apply powder to the body.
26. Put a clean dress on the patient, then comb and set the hair.
27. Remove and replace the articles.
28. Be sure to leave with the patient feeling comfortable and the unit tidy.
29. Wash your hands.
30. Record and report to the ward sister if any there is any redness, cracks on the skin, or any abnormality is observed.

Physical Conditions which Encourage Skin Breakdown in a Patient Who is Confined to a Bed

- The physical conditions which encourage skin breakdown in a patient who is confined to a bed are:
  - **Immobility:** Continuous pressure over any body part impairs circulation to that part and can cause breakdown and eventual ulcerations.
  - **Incontinence:** If the patient is unable to control the bladder or bowel functions, skin breakdown is likely to occur due to the presence of moisture and bacteria on the skin.
  - **Emaciation:** An emaciated patient may be prone to skin breakdown over areas with bony prominence (heels, elbows, and coccyx).
  - **Obesity:** An obese patient may have many skin folds where perspiration and bacteria may contribute to skin breakdown.
  - **Age-Related Skin Changes:** An older person's skin is very thin and inelastic. The sweat and oil glands are less active. Thin, dry skin is more susceptible to pressure areas and skin breakdown.
  - **Any Disease or Condition that Affects Circulation:** Any disease or condition that affects circulation can encourage skin breakdown in a patient who is confined to a bed.

Nurse Station

The caregiver or nurse can prevent skin breakdown in the following ways:

- Observe the patient's skin thoroughly for pressure areas while giving the patient a bath or back massage.
- Wash any areas that are red with soap and water rubbed with lotion. Then take measures to keep the patient off the reddened area.
- Report any signs of pressure to the charge nurse.
- Keep the sheets which are under the patient clean, smooth, and tight to help eliminate skin irritation.
- Ensure adequate nutrition and fluid intake, according to physician's orders.
- Make an effort to keep urine and faeces off the patient's skin, washing the skin with soap and water and keeping the buttocks and genital area dry (lotion or powder may be used depending upon the patient's skin type) when the patient is incontinent.
- Assist obese patients who need help while washing and drying areas under skin folds (groin, buttocks, under breasts, and so forth).

- For patients with very dry skin, various bath oils may be added to the bath water.
  - Omit the use of soaps because of its drying effect.
  - Use lotions and oils after the bath.

Operation Theatre (OT)

The Operation theatre or the OT is a sterile (germ free) area of the hospital where surgical procedures are carried out. In an operation theatre, the inner parts of the body are exposed to the external environment; therefore the room needs to be clean and germ free. Various precautions are taken to keep the room germ free, for example, entry is restricted, special clothes have to be worn before entering the OT, face mask also has to be worn.

The operation theatre comprises of an operating table on which the surgical procedure is carried out. The operating table is illuminated by high powered operating lights that provide focused light for the surgeon. The OT is equipped with the required surgical instruments that are needed during the procedures. These instruments are made germ free by a process known as sterilization.

The OT is also equipped with the anesthesia unit and monitors that display the condition of the patient while the procedure is being carried out.

Providing for Select Patient Needs while Bathing a patient

With regard to safety of the patient, it is important to keep in mind the following:

- The bed may be in the high position during the patient's bed bath, but should be placed in the low position upon completion.
- Put the side rail's up after the patient's bath, especially if the patient is confined to the bed.
  - Side rails help to prevent falls for elderly patients, and patients who are confused or have a decreased level of consciousness.
  - The legal aspect requires diligence on the part of nursing personnel.
- Ensure that the patient's call light should be within easy reach to prevent the patient from reaching for it, and risk them falling out of bed. It also provides easy access in case the patient is in pain or distress.
- Follow the fire safety rules in the patient care areas. The rules are as follows:
  - No smoking in bed.
  - No smoking if oxygen is in use.
    Wash your hands before entering, and upon leaving the patient's room.

With regard to the patient's privacy, the following should be kept in mind:

- Respect for the patient's privacy decreases the patient's emotional discomfort during personal care.
- Keep the door to the patient's room closed.
- Pull the curtains around the unit and drape the patient's body during care.

- Allow the patient to complete as much personal care as possible; self-care is appropriate and provides additional privacy.
- With regard to the patient's comfort, it is important to keep the following in mind:
- Ensure the temperature in the patient's room is comfortable.
- Close any windows and the door to the patient's room to prevent any cold drafts.
- Drape the patient appropriately during the bath.
- For a bedside bath, maintain bath water between 110°F and 115°F; change the water as it cools and/or gets soapy.

Significant Nursing Observations During the Bathing Procedure

The nurse should keep the following points in mind while carrying out physical observation of the patient's skin:

- Observe the skin under good, natural light.
- Describe any abnormal skin condition; its location, colour, and size as well as how it feels to the patient.
- The following skin observations should be checked on admission, and daily thereafter:
  - Cleanliness
  - Odour - may be caused by sweat secreted by the sweat glands; by abnormal conditions, such as infection or kidney disease; or by bodily discharges (urine, faeces) that need to be cleaned.
  - Texture - could be smooth and elastic or dry and rough; nutritional deficiencies can influence skin texture.
  - Colour - reddened areas that could indicate pressure, cyanosis (bluish tinge) or jaundice (yellowish tinge).
  - Temperature - hot skin could mean fever; cold skin could mean poor circulation.
  - Sensitivity - pain, tenderness, itching, or burning.
  - Swelling (oedema) - stretched or tight appearing; usually begins in the ankles or legs or any other dependent part; may be associated with injury.
  - Skin lesions - rashes, growths, or breaks in the skin.
- Observe from the head (scalp) and proceed to the feet in a systematic manner.

While carrying out psychosocial observations, it is important to keep the following in mind:

- Problems in this area may be related to the patient's present problems.
- The time of the patient's bath may be a good time to find out more about the patient's psychosocial needs.
- Remember that the patient's nonverbal communication may tell you much about the way he/she is feeling.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List down the types of bed bath.

2. Name any three purposes for the bed bath.

3. List down the physical conditions which encourage skin breakdown in a patient who is confined to a bed.

4. Name the significant nursing observations to be made during the bathing procedure.

Worksheet

1. *Fill in the blanks*

   a. At the first sign of redness to the skin, the area should be washed with soap and water and rubbed with _____ .

   b. If you notice signs of pressure on a patient's skin, report it to the _____ .

   c. For a bedside bath, maintain bath water between _____ ºF and _____ ºF.

   d. An abnormal body odour may be an indication of infection or _____ disease.

   e. Hot skin could mean fever; cold skin could mean _____ .

   f. Respect for the patient's _____ decreases the patient's emotional discomfort during personal care

2. *Tick the correct answer*

   a. When dressing or undressing the patient:

      i. Start dressing the stronger or unaffected side first

      ii. Start dressing the weak or affected side first

      iii. Choose the clothing the patients will wear

      iv. Provide privacy if the patient is dressing in bed.

   b. The bed bath/partial bath is administered when the patient is either:

      i. Confined to bed, must conserve energy, or is helpless.

      ii. Tired, must conserve energy, or is confined to bed.

      iii. Confined to bed, must get plenty of sleep, or is nervous.

Notes

Clothing

At the end of this module, you will be able to:

- Identify the different types of hospital wear
- Manage the personal belongings of the patient
- Maintain the personal hygiene of the patient while wearing hospital clothing

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2	Types of Hospital Clothing
3	Assisting a Patient While Clothing
4	Principles of Clothing
5	Maintaining the Privacy and Dignity of the Patient
6	Managing Personal Clothing and Needs of the Patient
7	Maintaining Clothing Hygiene
8	Key Learnings
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Module Overview

During the stay in the hospital, patients might be unable to manage their own clothing needs. In some cases the patient is too weak to dress up. Also, a patient undergoing different medical procedures needs to wear clothes designed specifically for that procedure. Therefore, correct clothing of a patient is very essential. As a General Duty Assistant, it is your duty to assist the patient in dressing. In case, the patient is very weak you must dress him/her yourself. But for this you must first know the different types of hospital garments, the procedure to dress a patient, precautions to be taken and the steps to maintain clothing hygiene. This module lists all this for you.

Types of Hospital Clothing

The type of clothing a patient must wear depends on the needs of the patient. In many cases the clothes worn by a patient are designed based on the body area that needs to be examined.

The most common type of hospital clothing that is used is a hospital gown. Based on the need of the patient, hospital gowns are classified as:

- Basic hospital gown
- Isolation gown
- Toddler gown
- Nursing gown

Basic Hospital Gown

This is the most common type of hospital gown and is used for patients whose upper body has to be examined. These gowns can be worn on the patient's regular clothes and are very roomy and comfortable.

Isolation Gown

Isolation gowns are used by patients who need extra protection. In patients where there is secretion of body fluids or if the patient's body is sensitive to infections, isolation gowns are the ideal choice.

Toddler Gown

Toddler gowns are designed for children and typically printed with popular cartoons and images. They are meant to make the child comfortable and cheerful.

Nursing Gown

Nursing gown is a special type of gown that is designed to facilitate the feeding of the child by a nursing mother.

Assisting a Patient While Clothing

The clothes normally worn by a person in day - to - day life are different from those worn by a patient in the hospital. These clothes are specifically designed for the comfort of the patient and to facilitate medical procedures.

In many situations, patients are too weak to change clothes by themselves. In such cases, you should assist the patient in clothing rather than dressing them up yourself. By doing this, the patient will gain confidence in going about their daily activities and this will help in the speedy recovery of the patient.

While changing the clothes of the patient, it is important for you to maintain the privacy and dignity of the patient. Once the soiled clothes are removed, they should be cleared from the room and sent for cleaning.

Principles of Clothing

- One of the most important principles of clothing is to prevent any injury or discomfort to the patient while clothing him or her.
- Check with the doctor or the nurse with respect to the type of clothing that needs to be worn by a patient.

- Always instruct the patient before you actually dress him or her up. Before you start to change the clothes of a patient, describe the process that would be followed and explain what needs to be done while changing their clothes.
- For patients who have suffered a stroke, one side of the body may be weak. Instruct such patients to undress the weak part first. While putting on a dress, it should be put on from the strong side first.

- You will need to put a sweater on the patient too to keep warm as poor blood circulation could make the patient cold.
- Put the patient's shoes or slippers on. Make sure the sole of the footwear is non slippery.
- Try and make the patients wear their clothes themselves. This will help them manage their activities on their own.

Maintaining the Privacy and Dignity of the Patient

Maintaining the patient's privacy is a very important point to be kept in mind while dressing the patient. Some patients may not be able to dress by themselves. You, as a General Duty Assistant, must take care of the following points while dressing the patient:

- You need to gather the patient's clothes. Make sure you get all the under garments such as underwear, vests, briefs and socks.
- If patients are able to, then let them choose what they would like to wear. If they cannot choose for themselves then, you need to pick clothes that are free of holes, and those with proper buttons and zippers. You may dress the patient in the restroom.
- When you do so, make sure you close the door for privacy.

- Even if the patient has a private room, close the bathroom door when the patient is inside the bathroom. This is to maintain the patient's dignity.
- Many a times, you may have to dress the patient while they are on bed, or sitting on the bed. Before you start to dress the patient, make sure you draw the curtains to maintain privacy.

- If the patient wears an adult brief, make sure you put this on first. This is another aspect of dignity.
- Put on the socks or stockings on the patient, then the vests and then put on the top layer of clothes.
- Make sure you dress the patient the same way you would dress yourself. Remember, to maintain the patient's dignity at all times.

Managing Personal Clothing and Needs of the Patient

- You must always give the patient a choice on the clothes they like to wear. Help them in making a choice to wear the right kind of clothes suitable to their condition.
- Before a patient puts on the hospital clothing, ask the patient to remove and keep all their personal clothing and jewellery, if any, aside. Instruct the patient to make a list of items that are being kept aside.
- Notify the nurse about the personal belongings of the patient. The nurse would also keep a record and provide the patient with a receipt of the items lists. Collect the patient's belongings and keep them in safe custody under the supervision of the nurse.
- Make sure that you take the same precautions with the patient's clothing as you would with your own. Maintain the dignity and privacy of the patient.

- Always ask the patient about the comfort of the clothes. If the patient is feeling too warm or too cold, ensure that you cover the patient with the sheets or cover the patient with a sweater.
- If a specialized type of a gown is being used to dress up a patient, check with the patient for the comfort. If the patient is uncomfortable, notify the doctor immediately and change the clothing.

Maintaining Clothing Hygiene

It is important to maintain personal hygiene of the patient with respect to the clothing to avoid any infection. As the clothes worn by the patient come in direct contact with the body, they may be contaminated with germs. To prevent any infection it is very important to change the clothing of the patient and dress him/her with a clean piece of clothing. To do so, you must follow the given points:

- Change the patient's clothes every day. Items such as underwear, personal towels, facecloths, nappies are most likely to be contaminated as they come into direct contact with the body. So change them everyday.
- Change the clothing if it is soiled or stained due to the treatment procedure.
- Every patient's clothes must be washed separately.

- Ensure clothes are not shared between patients. During laundering, microorganisms may spread from one set of clothing or linen to the other. So laundry hygiene must be maintained.
- Patients must always be provided with clothing and gowns that are washed and that smell fresh and good.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List the different type of hospital clothing.

2. What are the different clothing principles?

3. What are the different steps you must take to maintain the patient's privacy and dignity?

4. What are the different steps you must take to maintain clothing hygiene?

Worksheet

1. *Read the following questions. Tick on the correct options given below. There could be more than one correct option*

   Which of the following steps must you ensure while maintaining clothing hygiene?

   a. Change the clothing if soiled.

   b. Change the clothing on the bed.

   c. Ask the patient to remove all the jewellery.

   d. Washing of each patient's clothes separately.

   e. Change patient's undergarment regularly.

2. *Read the following questions. Tick on the correct options given below. There could be more than one correct option*

   Which of the following steps must you ensure while maintaining the privacy and dignity of the patient?

   a. Draw the curtain before the patient starts changing clothes.

   b. Close the door of the bath room in case the patient is changing inside.

   c. Always give the patient clothes he likes to wear.

   d. Ask the patient to remove jewellery.

   e. The patient should wear hole free clothes.

3. *Match the following.*

Gown's Name	
a.	Basic hospital gown
b.	Isolation gown
c.	Nursing gown
d.	Toddler gown

Use	
i.	Used by mothers to feed babies
ii.	Used by small children
iii.	Used by patient's whose upper body has to be checked
iv.	Used by patient's who need extra protection

Notes

Oral Care

At the end of this module, you will be able to:

- Ensure that the oral hygiene of the patient is maintained
- Observe and report abnormalities in the oral cavity

Session Plan	
1	Module Overview
2	Oral Hygiene and its Importance
3	Maintenance of Oral Hygiene
4	Equipment Used for Maintenance of Oral Hygiene
5	General Precautions to be Followed
6	Key Learnings
7	Worksheet

Module Overview

Our mouth is an important organ as it plays a vital role in the digestion of food. Since the mouth is exposed directly to the external atmosphere, a lot of bacteria are found in the mouth.

During the stay in the hospital, a patient might be unable to take care of oral hygiene. So you, as a General Duty Assistant, must help the patient in maintaining oral hygiene. In this module, you will learn how to maintain oral hygiene of a patient.

Oral Hygiene and its Importance

Mouth is an organ which is in direct contact with the outside environment. So, a lot of germs enter our mouth and reside there. Many varieties of bacteria are present in the different regions of the mouth such as the cheek regions, the gums and between the teeth. When we eat food these bacteria survive on the food that is stuck between the teeth. As a result they release toxic materials that affect the mouth leading to bleeding of gums and loosening of the teeth. So keeping the patient's mouth clean is a very important step in keeping him/ her healthy. Cleaning our mouth to prevent the growth of germs is known as **oral hygiene.**

In some cases, the symptoms of any disease spreading inside our body can be determined by the changes in our mouth. For example, when we have gastric problems we tend to develop ulcers in our mouth. You must observe such abnormalities in the oral cavity and report the same to the nurse or the doctor. This will help in providing better and effective treatment.

Maintenance of Oral Hygiene

Brushing the teeth and rinsing the mouth are the most common activities carried out to maintain oral hygiene as a daily habit. Maintaining oral hygiene will depend on the condition and type of food the patient eats. If the patient is eating normal solid food then encourage the patient to brush their teeth every day. Ensure that the required material such as toothbrush, toothpaste and other such material are kept ready for the patient to use. Also, remember to replenish these materials in case they get over.

Teach the patient the correct method to brush teeth. The patient must use soft circular motion while brushing the teeth.

Some patients use false teeth called dentures for chewing food. It is your duty to help the patient in cleaning the dentures on a regular basis. You may clean them under running water or use a soft brush.

After brushing the teeth, encourage and assist the patient in rinsing the mouth with water or a mouthwash. If the patient is not consuming solid food but is being fed with the help of a drip, then ensure that the oral cavity is cleaned by regular use of mouthwash.

Some of the signs of bad oral hygiene include bad smell from the oral cavity or bleeding. If you observe these symptoms then immediately report the same to the nurse or doctor and take instructions for further action.

Teeth having cavity also indicate bad oral hygiene. The germs in your mouth which are not killed or removed, starts attacking your teeth. This can lead to severe teeth pain, bleeding, sensation in teeth while eating sweet or cold. Brush your teeth properly and ideally twice every day to prevent tooth decay.

Equipment Used for Maintenance of Oral Hygiene

Oral hygiene is maintained using a toothbrush, toothpaste, mouthwash and dental floss. A toothbrush is a simple bristled tool that is used to remove the food particles present between the teeth and to keep the tooth surfaces clean. The tooth brush is a hard structure that can injure the mouth. So toothpaste is used to smoothen the action of the tooth brush. Toothpaste also kills bacteria and other germs present in the mouth.

Some bacteria cannot be removed by brushing the teeth alone. So you need to use a mouthwash. A mouthwash is a dilute chemical substance. It is used for rinsing the mouth after mixing it with equal quantities of water.

A dental floss is a thread-like structure that is used to remove food particles stuck between the teeth. You should keep the required equipment ready for the patient's use as and when requested by the patient. You must also encourage the patients to brush their teeth regularly.

Use a tongue scrapper to clean the tongue of the patients. Tongue scrapper has a V shape structure and is use to clean the food stuck to the tongue and it also remove the bacteria buildup.

Provide the patient with towels and sheets for cleaning immediately after the procedure.

General Precautions to be Followed

- Speak in a gentle, soft and soothing voice when helping patients brush and floss.
- Avoid brushing the tongue as this can cause irritation in elderly patients. Instead, use a tongue scraper to clean the tongue.
- Wrap the toothbrush handle with a tape as it makes the toothbrush handle easy to hold.
- Teach patients to brush the eating surfaces using soft, circular motions.
- Instruct patients and caregivers to replace toothbrushes every three months.
- If the patient is using a denture, remove the dentures. Clean them gently under running water or by brushing with a soft brush.

- The various abnormalities that can be observed in the oral cavity include redness of the skin, bleeding of the gums or bad breath. Report these abnormalities to the nurse or a doctor immediately.

Key Learnings

Summarise your learnings here. Write your answers in the spaces provided.

1. What is oral hygiene and its importance?

2. Write the steps to maintain oral hygiene.

3. List the equipment and their functions used to maintain oral hygiene.

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   Tongue scrapper is used to remove":

   a. Bacteria build up on tongue

   b. Bacteria build up on teeth

   c. Remove the excess saliva

   d. Both a and b

2. *Read the following question. Tick on the correct option given below.*

   Which of the following is NOT a symptom of bad oral conditions?

   a. Bad breath

   b. Bleeding gums

   c. Tooth with cavities

   d. Throat pain

3. *Read the following question. Tick on the correct option given below.*

   What is the ideal toothbrush movement for effective cleaning of teeth?

   a. Hard and straight motion

   b. Soft and straight motion

   c. Hard and circular motion

   d. Soft and circular motion

4. *Read the following question. Tick on the correct option given below.*

   Which one of the following is NOT a function of the toothpaste?

   a. Soften the action of toothbrush

   b. Kill bacteria

   c. Stop bleeding of gums

   d. Both a and b

5. *Fill in the blanks.*

   a. Cleaning our mouth to avoid growth of germs is known as _____.

   b. Use _____ and _____ while rinsing the mouth.

   c. A _____ is a thread like structure that is used to remove food particles stuck between the teeth.

   d. A toothbrush should be ideally replaced after _____.

Notes

Oral Care of an Unconscious Patient

At the end of this module, you will be able to:

- explain the effects of a neglected mouth;
- list down the purpose of mouth care for an unconscious patient;
- arrange the articles required for performing the procedure of mouth care on an unconscious patient;
- perform the procedure in the correct sequence;
- discuss the care of dentures.

Session Plan	
1	Module Overview
2	Effects of a Neglected Mouth
3	Purpose of Oral Care
4	Articles Required for Performing Oral Care
5	Procedure for Performing Oral Care
6	Care of Dentures
7	Key Learnings
8	Worksheet

Module Overview

Oral hygiene helps to maintain the healthy state of the mouth, teeth, gums, and lips. It also massages the gums and relieves discomfort resulting from unpleasant odours and tastes. Some clients require special oral hygiene methods because of their level of dependence.

Effects of a Neglected Mouth

The mouth presents all requirements for bacterial growth such as warmth, moisture, and food supply from residual foods. It causes some local infections like:

- Gingivitis: Inflammation of the gums
- Glossitis: Inflammation of the tongue
- Root Abscess: Pus formation of the root of the teeth
- Stomatitis: Inflammation of the mucus membrane of the mouth

- Dental Caries: Is decaying of the tooth
- Bleeding Gums

Purpose of Oral Care

Oral care is important to:

- keep the mouth clean and moist.
- keep the teeth and gums in good condition.
- keep the oral cavity free from bad odours.
- stimulate appetite.
- prevent infection and tooth decay.

Articles Required for Performing Oral Carere

To perform oral care, a tray containing the following articles is required:

- Gauze pieces in a small bowl
- Container with artery forceps, swab sticks, tongue depressor and mouth gag
- Container with 1:8 hydrogen peroxide, Condy's lotion 1/6000(KMnO4) Listerine/Betadine, Chlorhexidine Gluconate, Boroglycerine, Vaseline, and Olive Oil
- Feeding cup with water
- Kidney tray and paper bag
- Small mackintosh with towel

Procedure for Performing Oral Care

Take a look at the steps to perform oral care.

- Explain the procedure to the patient / relative.
- Provide privacy.
- Position the patient so he or she is comfortable (Fowler's position with cardiac table in front or lateral with face at the edge of the pillow).
- Place the mackintosh and face towel across the patient's chest.
- Place the kidney tray close to the patient's cheek.
- Arrange the articles.
- Wash your hands.
- Prepare the mouth wash or use the commercially available mouth wash solution.

- Take a gauze piece and wrap it around the artery forceps, covering the tips completely.
- Open the unconscious patient's mouth gently by pressing the lower jaw forward.
- Moisten the gauze. Dip it in the cleansing agent and clean the inside of the cheeks and the tongue.
- Clean the upper teeth starting from the gums and going downwards. Then clean the lower teeth starting from the lower side and moving upwards. Massage the gums while cleaning the teeth. Clean the inside of the cheeks in a circular motion.
- Let the fluid flow through the corner of the mouth or clean with wet gauze sponges. Clean the patient's lips with the towel.
- Observe for tooth decay, coated tongue, cracked lips or any other abnormalities and report the same to the senior.
- Apply glycerine or any other emollients to the tongue, gums and lips.
- Remove the kidney tray, mackintosh and towel.
- Place the patient in a comfortable position.
- Clean and replace the articles.
- Wash your hands.
- Record the procedure mentioning the observations made during the procedure.

Direction of the Strokes:

a. Opposite side inner teeth surface (both upper and lower jaws)

b. Opposite side chewing surface (both upper and lower jaws)

c. Same side inner teeth surface (both upper and lower jaws)

d. Same side chewing surface (both upper and lower jaws)

e. Inner teeth surface front teeth (upper and lower jaw)

f. Same way outer teeth surface for both sides

g. Outer teeth surface front

h. Roof of the mouth, inside of cheek in circular motion

Care of Dentures

The following steps should be followed to take care of dentures:

- Put on clean gloves before handling the denture.
- Line the bottom of the sink and/or partially fill the sink with water before holding the denture over the sink.
- Rinse the denture in moderate temperature running water before brushing it.
- Apply toothpaste to the toothbrush.
- Brush the surfaces of the denture.
- Rinse the surfaces of the denture in moderate temperature running water.

- Before placing the denture into a cup, rinse the denture cup and lid.
- Place the denture in the denture cup. Fill the cup with moderate temperature water/solution and place the lid on the cup.
- Rinse the toothbrush and place it in its designated toothbrush basin / container.
- Maintain the clean technique with the placement of the toothbrush and denture.
- Remove the sink liner and dispose of it appropriately and/or drain the sink.
- After rinsing the equipment and disposing of the sink liner, remove and dispose of the gloves (without contaminating self) into the waste container. Wash your hands.

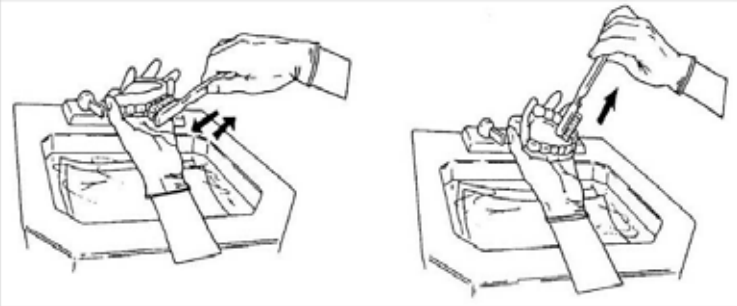


Fig... Care of Dentures

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Name any three local infections of the oral cavity.

_____

_____

_____

_____

_____

2. Name any three purposes of mouth care.

_____

_____

_____

_____

_____

3. Mention the direction of strokes for oral care.

4. Explain how to care for dentures.

Worksheet

1. *Tick the correct answer.*

   a. Inflammation of the gums is termed as:

      i. Gingivitis

      ii. Stomatitis

      iii. Glossitis

Notes

Hair Care

At the end of this module, you will be able to:

- Maintain cleanliness and hygiene of the patient's hair

Session Plan	
1	Module Overview
2	Hair Care and its Importance
3	Common Methods of Hair Care
4	Steps for Assisting a Patient with Hair Care
5	Tips for Maintaining Hair Hygiene
6	Key Learnings
7	Worksheet

Module Overview

One of the aspects in maintaining personal hygiene is taking care of the hair. Excessive hair needs to be trimmed and maintained properly and hair that has fallen off the patient should be cleaned. There are various methods that need to be followed for hair care of a patient. In this module, you will learn the steps to maintain cleanliness and hygiene of the patient's hair.

Hair Care and its Importance

The head and the face are the predominantly hairy regions of the body. In addition to these areas, hair is present under the armpits, chest, and genital areas of both male and female patients. The outer most layer of skin on the head is called the scalp. Hair cells are embedded in the scalp and each strand of hair keeps growing during the life time of an individual. Different types of bacteria are present on the scalp and the hair. If the hair is not kept clean, it tends to become matty, greasy and can smell bad. These conditions aid the growth of germs in the hair and lead to infections. You must ensure that the hair is kept clean and excess hair is periodically removed to avoid any discomfort to the patient.

Let us look at the different methods of maintaining the hygiene of the hair of a patient.

Common Methods of Hair Care

- Patients who can take a shower by themselves should be encouraged to wash their hair regularly.
- Shampoo is a special agent that can be used to clean the hair. You must motivate patients to shampoo their hair regularly.
- In case of patients confined to the bed, you must shampoo the hair of the patient and keep the hair of the patient clean.
- Hair should be properly combed from time to time. You should assist the patient in combing the hair and keeping it clean.
- In the case of male patients, facial hair in the form of a beard or a moustache has to be shaved and trimmed according to the patient's choice.
- Excess hair in other regions of the body such as the armpits or the chest has to be removed according to the directions of the doctor.
- Hair is cut and shaved by barbers. Barbers can provide hair cutting services in the hospital as and when requested.

Steps for Assisting a Patient with Hair Care

Arrange for all the required equipment by the side of the bed, before you start cleaning the hair of the patient.

The equipment needed include

- A large pitcher of warm water
- Shampoo
- Bed Shampoo pan
- Towels and wash cloth
- Clean comb and brush

These are the steps to be followed for hair care of a patient:

Step 1

Cover the pillow with a towel or any protective cover, to keep it dry.

Step 2

Untie the gown or loosen the bed clothing.

Step 3

Put a towel under the person's neck and arms.

Step 4

Put the bed shampoo pan under the person's head.

Step 5

Place a washcloth over the person's eyes so the shampoo does not burn them.

Step 6

Wet the hair of the patient first and then apply the shampoo.

Step 7

Wash the hair of the patient until it is clean and shiny. It takes more rinsing for a female patient. Hair should be shampooed two to three times a week as it becomes dirty or greasy soon. However, before washing the hair of the patient, check with the doctor if it is fine to use a shampoo.

Step 8

Gently dry the hair of the patient using a clean dry towel.

Step 9

Now, help the patient comb the hair with a comb or a brush.

Provide the patient with towels and sheets for cleaning immediately after the procedure.

Tips for Maintaining Hair Hygiene

- If the hair is wet, do not dry the hair fully with a hair dryer. Let it dry naturally, if possible.
- Combing the hair prevents it from getting entangled.
- Use short-tooth combs for short hair and large-tooth combs for curly hair.
- To untangle hair, use a wide-toothed comb, starting from the ends. When all tangled ends have been removed, comb the hair from root to end.
- Parting allows for ease in brushing smaller sections of hair. First, part the hair into two sections and then separate each section into two more sections.
- Brushing helps to keep the hair clean and distributes the oil evenly along the hair shafts.
- Do not strain the hair strands by brushing too vigorously.
- Avoid tying or braiding your patient's hair too tightly.
- After use, wash the brush and comb in hot soapy water.
- If necessary, engage a local hairdresser in the care process.

Key Learnings

Summarise your learnings here. Write your answers in the spaces provided.

1. What is the importance of hair care?

2. Write steps for assisting a patient with hair care.

3. List the tips for hair care.

Worksheet

1. *Fill in the blanks.*

   a. _____ is a special agent that can be used to the clean the hair.

   b. To untangle hair, use a _____ comb.

   c. Each hair strand is embedded into the _____ of our head.

   d. _____ allows for ease in brushing smaller sections of hair.

2. *State True or False.*

   a. Combing helps entangling of hair. _____

   b. The braiding of the patient should be done very tightly. _____

   c. Excess hair in body parts such as the armpits or the chest has to be removed regularly. _____

   d. Small tooth comb must be used for combing curly hairs. _____

   e. Apply shampoo and then wet the hair of the patient. _____

3. *Read the following question. Tick on the correct option given below.*

   What is the outermost layer of the head called?

   a. Slack

   b. Scrap

   c. Scalp

   d. Scoop

Notes

Assisting the Nurse in Grooming the Patient - Hair Care

At the end of this module, you will be able to:

- differentiate between the various aspects of hair care;
- list down the purposes of hair care;
- arrange the articles required for various aspects of hair care;
- sequence the steps of the procedure;
- consider the selected patient needs while providing hair care.

Session Plan	
1	Module Overview
2	Purpose
3	Preliminary Assessment
4	Daily Care by Brushing and Combing - Preparation of the Articles
5	Daily Care by Brushing and Combing - Preparation of the Patient
6	Daily Care by Brushing and Combing – Procedure
7	Shampooing Hair on the Bed - Articles Required
8	Shampooing Hair on the Bed – Procedure
9	Pediculosis Treatment – Purpose
10	Pediculosis Treatment - Articles Required
11	Pediculosis Treatment – Procedure
12	Select Patient Needs While Providing Hair Care
13	Key Learnings
14	Worksheet

Module Overview

Introduction

The appearance of one's hair and skin reflects the general health of the person. The cleanliness and grooming of hair is frequently related to one's sense of well being. One has to care for the hair in order to keep it clean and healthy. Hair needs light and fresh air. Stimulation of blood circulation by massage and brushing is essential to keep the hair healthy. Illness, worry, grief etc., affects the health of the hair, often by loss of hair. An unclean scalp will allow the growth of

micro-organisms and parasites on the scalp. Keeping the scalp clean by brushing and shampooing will help to relieve the dandruff. There are three aspects of the care of hair:

1. Daily care by brushing and combing.
2. Shampooing the hair in order to maintain its cleanliness.
3. Treatment of hair for infestation such as lice.

Purpose

The purpose of hair care is the following:

- To keep the hair clean and healthy.
- To promote the growth of hair.
- To prevent loss of hair.
- To prevent itching and infection.
- To prevent accumulation of dirt, dandruff and oils.
- To prevent tangles.
- To provide a sense of well being.
- To stimulate circulation.
- To destroy pediculi.
- To appear well groomed.
- To observe the scalp.

Preliminary Assessment

The following should be carried out as a part of the preliminary assessment:

- Check the physician's and nurse's orders to see the specific precautions for the patient's movement and positioning.
- Assess the general condition of the patient and their ability for self care.
- Assess the condition of scalp and hair.
- Assess the patient's mental ability to follow directions.
- Check the articles available in the patient's unit.

Daily Care by Brushing and Combing - Articles Required

- Clean towels two – one to protect the shoulders and garments, and one to protect the bed cloths
- Clean comb with coarse and fine teeth- coarse teeth is used for removing tangles, and fine teeth for removing nits and for making the hair glossy

- Kidney tray with disinfectant solution- to disinfect the comb
- Oil in a container
- Paper bag to collect the loose hair

Daily Care by Brushing and Combing - Preparation of the Patient

Here are some things a caregiver should so while preparing the patient:

- Explain the procedure to the patient
- Make the patient sit on a bedside chair if possible, otherwise maintain fowler's position.
- Protect the caregiver's uniform with aprons to prevent the pediculi from sticking to their own dress.

Daily Care by Brushing and Combing - Procedure

The procedure for hair care is as follows:

1. Wash hands.
2. Collect articles and bring them to the bedside.
3. Explain the procedure to the patient.
4. Place the patient in a sitting position if possible otherwise turn the patient's head to the side.
5. Place one towel over the patient's shoulders if the patient is in sitting position, otherwise spread it over the pillow.
6. Loosen or unbraid any tied hair. Comb any tangles from the ends first, gradually moving upward.
7. Comb hair starting by at the root and working towards the end. Remove tangles to prevent pulling of the hair. Hold the hair above.
8. Apply oil, and remove tangles gently if any.
9. Divide the hair in two halves and braid each. Tie the end of each braid, and keep in mind that the braids should not be very tight.
10. Remove the towel and make the patient comfortable.
11. Leave the unit clean and replace cleaned articles.
12. Wash hands.
13. Record the procedure mentioning the observations made, if any, and the condition of the scalp and hair with the time and date.

Shampooing Hair on the Bed - Articles required

A tray containing the following articles is required:

- Bath towels (two) – one to protect the pillow and the other to dry the hair
- Wash cloth or face towel – to protect the eyes from splattering soap and to dry the face at the end of the procedure
- Mackintosh (two) – one to make a trough, and the other one to protect the pillow and bed clothes
- Cotton balls in a container to plug the ears
- Oil
- Shampoo
- Hair comb
- Kidney tray and paper bag to collect the loose hair and the cotton plugs
- Basin (one) to take water
- Bucket (one) to collect the dirty water
- Mug (one) to pour water
- Jugs (two) one for hot water and the other for cold water
- Low stool (one) to adjust the height of the bucket
- Clean linen to change after shampooing
- Plastic apron to protect the caregiver's clothes

Shampooing Hair on the Bed - Procedure

The procedure to be followed when shampooing hair on the bed is as follows:

1. Wash hands.
2. Assemble all the articles near the bed.
3. Explain the procedure to the patient.
4. Screen the patient.
5. Put on a plastic apron.
6. Position the patient, and bring the patient's head to the edge of the bed.
7. Place a pillow under the patient's shoulder.
8. Spread the mackintosh with the cover on a flat surface, and make a trough by rolling the sides inwards.
9. Tie the trough around the patient's neck.
10. Place an empty bucket on the floor or on a stool and put the lower end of the mackintosh in it.
11. Loosen the hair.
12. Plug the patient's ears.

13. Put off the fan.
14. Cover the patient's eyes with the face towel or ask the patient to close his or her eyes.
15. Wet the patient's hair by pouring warm water over the hair.
16. Apply soap or shampoo and rub it into the hair to produce lather.
17. Wash the hair thoroughly and massage the scalp.
18. Repeat steps 14 and 15 if necessary.
19. Dry the hair as much as possible.
20. Remove the ear plugs and the mackintosh.
21. Cover the back of the patient with a dry towel if he or she is in a sitting up position, or cover the pillow if he is lying down.
22. Allow the hair to dry completely and then apply oil.
23. Comb the patient's hair.
24. Clean and replace the articles.
25. Wash hands.
26. Record the procedure.

Special points to remember:

1. Give the patient a hot drink if necessary.
2. Note the patient's pulse before the procedure in case of very serious patients, or patients with heart ailments and make every effort to prevent from exertion.

Pediculosis Treatment - Purpose

The term pediculosis is defined as the state of being infected with lice. Lice or pediculi are small wingless blood sucking insects which are parasitic on warm blooded animals. They are found on the head, the body, the perineal area, eyebrows, eyelashes and the beard. It is mainly associated with poor hygiene, crowded living conditions and exposure to other individuals with pediculosis. We need pediculosis treatment for the following reasons:

- To destroy head and body lice and to keep hair free from nits.
- To protect health personnel and other persons from being infested with pediculli.

Significant Nursing Observations During the Bathing Procedure

The nurse should keep the following points in mind while carrying out physical observation of the patient's skin:

- Observe the skin under good, natural light.
- Describe any abnormal skin condition; its location, colour, and size as well as how it feels to the patient.

Pediculosis Treatment - Articles Required

For pediculosis treatment, you would require a clean tray containing with the following objects:

- Anti lice agent (either liquid or powder form e.g. Lysil, Medikr,Vinegar or DDT powder mixed with oil or powder 1:9)
- Vaseline
- A pair of gloves and a mask
- Cotton swabs in a container
- Face towel to protect the eyes
- Mackintosh with cover
- Kidney tray with carbolic solution
- Paper bag
- Apron
- Screen

Pediculosis Treatment - Procedure

The following is the treatment to be followed for pediculosis:

1. Explain the procedure to the patient.
2. Wash hands.
3. Assemble all the articles and take them to the bedside.
4. Screen the patient.
5. Put on the gown, and position the patient, preferably in a sitting up position.
6. Place the mackintosh with cover over the patient's shoulders if they are in a sitting up position, or under the head and over the pillow if they are lying down.
7. Cover the patient's eyes with the face towel.
8. Put on the gloves.
9. Apply Vaseline on the skin around the hair line.
10. Apply the anti-lice agent to the hair and scalp, following the prescribed instructions whenever necessary.
11. Cover the hair with a towel or a triangular bandage and leave it on overnight, or for the amount of time prescribed by the anti-lice agent being used.
12. Remove the articles.
13. Clean and disinfect the articles.
14. Wash hands.
15. Record the time, treatment, type of agent used and condition of the patient.

16. Shampoo hair or wash it with soap the next day.
17. Repeat the procedure if required after one week.

Anti-lice agents which can be used are:

- DDT powder 1:9 ratio (mixed with oil or powder)
- Kerosene mixed with sweet oil (1:1)
- Warm vinegar
- Commercial anti-lice agents (e.g. Medikar, Lysil)

Special points to remember:

- Protect yourself and others from an infestation.
- Repeat the procedure as and when necessary.
- Instruct the patient to avoid touching the hair after application of anti-lice agent.

Select Patient Needs While Providing Hair Care

With regard to the patient's safety, it is important to keep the following in mind:

- The bed may be in the high position during the patient's hair wash, but should be placed in the low position upon completion.
- Ensure that the side rails are put up after the patient's hair wash or treatment.
  - Side rails help to prevent falls for the elderly patient or the patient who is confused or has a decreased level of consciousness.
  - The legal aspect requires diligence on the part of nursing personnel.
- Ensure that the patient's call light is within easy reach to prevent the need to reach for it and risk falling out of bed, and to provide easy access in case the patient is in pain or distress.
- Follow the following fire safety rules in the patient care areas:
  - No smoking in bed.
  - No smoking if oxygen is in use.
- Wash your hands before entering and upon leaving the patient's room.

With regard to the patient's privacy, it is important to keep the following in mind:

- Respect for the patient's privacy decreases the patient's emotional discomfort during personal care.
- Keep the door to the patient's room closed.
- Pull the curtains around the unit and drape the patient's body during care.
- Allow the patient to complete as much personal care as possible; self-care is appropriate and provides additional privacy.

With regard to the patient's comfort, it is important to keep the following in mind:

- Ensure that the temperature in the patient's room is comfortable.
- Close any windows and the door to the patient's room to prevent any cold drafts.
- Drape the patient appropriately during the treatment and care.
- For a hair wash, maintain water temperature between 1100F and 1150F; change the water as it cools.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List down the various aspects of hair care.

2. Write any three purposes of providing hair care to a patient.

3. Mention the special points to remember after completing the hair wash.

4. List down commercially available anti-lice agents.

Worksheet

1. *Identify the statement that is untrue about the benefits of daily hair care for patients who are dependent:*

   a. There are no benefits.

   b. It promotes independence and a feeling of self-esteem.

   c. It stimulates the scalp and is refreshing to the patient.

   d. It provides the patient with a feeling a being well groomed.

Notes

Nail Care

At the end of this module, you will be able to:

- Ensure maintenance of hygiene in the nail regions of the palms and toes

Session Plan	
1	Module Overview
2	Nail Care
3	Common Methods of Nail Care
4	Steps to Maintain Nail Care
5	Key Learnings
6	Worksheet

Module Overview

Nails of our hands and feet collect dirt and germs. Therefore nails should be kept short and clean. Dirty fingernails spread infection. Also, broken nails can lead to injuries, therefore shaping the rough edges of the nail is also important. A patient may be too weak to take proper nail care. As a General Duty Assistant, you must ensure that nail hygiene of the patient is maintained. In this module, you will learn how to take proper nail care.

Nail care

The nail region of the fingers and the toes of a patient are susceptible to infection as dirt accumulates in these regions. In case of patients who are infected, the infectious organisms lodge in the nail region leading to spread of infection from one person to another. Nails should be cut and trimmed smoothly to prevent injury to other persons helping the patient in managing their activities. In patients suffering from chronic conditions like diabetes, it is important to keep the toe nails clean of infection as it can lead to various dangerous conditions for the patient.

Common Methods of Nail Care

Improper nail care leads to infections. Also, actions like biting nails and overgrowing nails can damage the nails. Sharp edges of broken nails can lead to cuts. Whereas overgrown nails increases the risk of infection. In case the patient is weak, then you as a General Duty Assistant must take the patient's nail care.

For proper nail care, cutting and shaping of the nail is very important. The fingernails are cut using a nail cutter or sharp scissors, straight across and then a nail file is used , if available, to round off the nail. During the morning bath the nail care of hands and feet is administered as nails are softer and easier to trim after a bath. Provide the patient with towels and sheets for cleaning immediately after the procedure.

Steps to Maintain Nail Care

The equipments needed include:

- Washbasin
- Washcloth
- Hand towel
- Nail cutters
- Disposable bath mat
- Disposable gloves

Let us look at the procedure for nail care, step by step.

Step 1

Wash hands, and arrange supplies within easy reach.

Step 2

Position patient in chair, place disposable mat under patient's feet if possible, and provide patient with privacy.

Step 3

Fill the basin with warm water. Place the basin on a disposable mat and help patient place his feet into the basin.

Step 4

Soak the feet for 5 to 10 minutes. Re-warm the water if necessary.

Step 5

Trim nails straight across using a nail cutter and even with clippers.

Step 6

Round the fingernails to be smooth, without any jagged edges using a filer.

Step 7

Trim and clean toenails in the same way as for fingernails.

Step 8

Remove gloves and dispose them properly.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is the importance of nail care?

2. What are the equipments used to maintain nail hygiene.

3. What are the steps to maintain nail care?

Worksheet

1. *Arrange the steps in correct sequence.*

   a. Soak the feet for 5 to 10 minutes.

   b. Round the fingernails to be smooth, without any jagged edges using a filer.

   c. Position patient on the chair, place disposable mat under patient's feet if possible and provide patient with privacy.

   d. Fill the basin with warm water.

   e. Remove gloves and dispose them properly.

   f. Wash hands, and arrange supplies within easy reach.

   g. Trim nails straight across.

Notes

Assist a Nurse in Grooming Patients With Specific Health Needs

At the end of this module, you will be able to:

- assess the specific needs of a patient depending on the diagnosis;
- perform the grooming procedure for a patient suffering from dementia;
- identify the special hygiene need for a diabetic patient.

Session Plan	
1	Module Overview
2	Grooming Procedure for a Patient Suffering From Dementia
3	Grooming Procedure for a Patient Suffering From Diabetes
4	Key Learnings
5	Worksheet

Module Overview

Dementia:

Dementia is a chronic or persistent disorder of the mental processes. It is caused by brain disease or injury and is marked by memory disorders, personality changes, and impaired reasoning.

One of the ways in which we stand out as individuals in the world is through our appearance. As dementia progresses, self grooming tasks such as caring for teeth, shaving, or even brushing hair can become more and more challenging for the patient. He or she may even forget the function of a nail clipper, comb or toothbrush.

Diabetes:

Diabetes can affect every part of the body. Fortunately, there are many activities one can incorporate into their daily routine to head off problems before they turn into serious complications. So daily care (personal hygiene) is important to prevent further complications in diabetes.

Grooming Procedure for a Patient Suffering From Dementia

Hair Style and Makeup:

Try to keep short hair for both men and women, as this is easier to manage. Use minimal or no makeup.

Shaving:

- At first, just a reminder to shave may be needed. If the patient already uses an electric razor, he may be able to continue shaving relatively longer as it takes less dexterity and is safer.
- If the patient starts cutting himself with the razor, it may be time to take over shaving.
- Use a cloth to wet the man's beard area and apply shaving cream.
- Shave in the direction that the hair grows using short strokes. Be gentle over sensitive areas.
- Rinse with a fresh wet cloth and then dry his skin. After-shave lotion is optional.
- With electric razors you may want to use a pre-shave lotion that is specifically meant for electric razors. Use firm circular motions.

Eye Care:

- Glasses are frequently misplaced by people with dementia.
- A person with dementia may eventually reach a point where he or she forgets to wear needed glasses and will need reminding. Eventually, he or she may need help putting the glasses on.
- It is important for people with dementia to continue to wear glasses to help make mobility safer and to provide visual stimulation to the brain.
- Glaucoma and cataracts are common eye problems that need to be detected and treated to prevent blindness.

Suggestions: Remember to always put the glasses in the same place when not in use. Provide frequent reminders to wear glasses. Remember to take the patient for regular eye doctor checkups for as long as possible.

Mouth Care:

- In the early stages of dementia, there is often no problem with mouth care. Eventually, patients may need to be reminded to brush their teeth or care for their dentures.
- Dentures are frequently misplaced by people with dementia. They may reach a point where they forget to put in their dentures and will need reminding. Eventually, patients may need help with these tasks. It is important that they continue to wear dentures for proper digestion.

Suggestions: Remember to always put dentures in the same place when not in use. Remind the person to wear dentures. Make sure that regular dental checkups are done.

Finger, Toe Nails and Other Foot Care:

- People suffering from dementia may lose the ability to groom their own nails, especially their toe nails.
- Painful foot problems such as bunions or calluses are common in the elderly. However a person with dementia may not be able to clearly communicate what is wrong.

Suggestions: Establish a regular routine for grooming nails and assist as needed. While you are grooming the feet, check for signs of irritation that might indicate shoe problems or any enlargements, discolorations or other changes that might indicate a foot problem. It is important to catch foot problems while they are minor before they progress to serious problems.

Dressing:

Try:

- Simple and comfortable clothing.
- Clothing with elastic or velcro fasteners.
- Shoes with non-slip soles that are easy to put on.

Avoid:

- Clothing with buttons, clasps, laces, or snaps as fasteners.
- Accessories such as belts, jewellery, ties, and scarves.

Grooming Procedure for a Patient Suffering From Diabetes

Foot Care:

- **Take care of diabetes**. Keep your blood glucose in your target range.
- **Check feet every day.** Examine bare feet for red spots, cuts, swelling, and blisters.
- **Make sure the patient washes his or her feet every day.** Dry them carefully, especially between the toes.
- **Keep the skin soft and smooth.** Rub a thin coat of skin lotion over the tops and bottoms of the feet, but not between the toes.
- **Trim the toenails** when needed. Trim the toenails straight across and file the edges with an emery board or nail file.
- **Ask the patient to wear shoes and socks at all times.** Never allow the patient to walk barefoot. Ask the patient to wear comfortable shoes that fit well and protect the feet. Check the inside of the shoes before the patient wears them. Make sure the lining is smooth and there are no objects inside.
- **Protect the feet from hot and cold temperatures.**

Skin Care:

- Keep the patient's skin clean and dry. Use talcum powder in areas where skin touches skin, such as armpits and groin.
- Avoid very hot baths and showers. If the skin is dry, don't use bubble baths. Moisturising soaps may help. Afterwards, use a standard skin lotion, but don't apply the lotion between the toes. Extra moisture there can encourage fungus to grow.
- Prevent dry skin. Scratching dry or itchy skin can open it up and allow infection to set in. Moisturise the skin to prevent chapping, especially in cold or windy weather.
- Treat cuts right away. Wash minor cuts with soap and water. Do not use Mercurochrome antiseptic, alcohol, or iodine to clean the skin because they are too harsh. Only use an antibiotic cream or ointment.
- Cover minor cuts with sterile gauze.
- Use mild shampoos. Do not use feminine hygiene sprays.
- Take good care of the feet. Check them every day for sores and cuts. Ask the patient to wear broad, flat shoes that fit well. Check the inside of the shoes for foreign objects before putting them on.

Mouth Care:

- Use a brush with soft bristles and rounded ends. Soft bristles are less likely to hurt the gums.
- Angle the brush against the gum line, where the teeth and gums meet.

- Move the brush back and forth using short strokes. Use a gentle, scrubbing motion.
- Brush the outside surfaces of the teeth. Do the same for the backs of the teeth and chewing surfaces.
- Brush the rough surface of the tongue to remove germs and freshen breath.
- Get a new toothbrush about every 3-4 months when the bristles are worn or bent.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Explain the procedure of giving eye care to a dementia patient.

2. Explain the importance of foot care in a diabetic patient.

3. What are the important points to remember while dressing a dementia patient?

Worksheet

1. *Tick the correct answer.*

a. Dementia is a disorder related to the:

i. Brain

ii. Nervous system

iii. Blood disorder

b. 1.You can prevent foot injury in patients with diabetes by advising them to:

i. Wear slippers

ii. Walk bare foot

iii. Use shoes and socks of the proper size

c. As a health personnel, you have to take over shaving a patient with dementia:

i. If the patient starts cutting himself with a razor

ii. If the patient refuses to shave

iii. If the patient becomes bedridden

Notes

Feeding the Patient

S No.	Module Name
1	Types of Feeding
2	Assisting in Feeding Patients in Different Medical Conditions
3	Serving Food and Assistance While Eating

Course Overview

Feeding and/or assisting a patient in feeding is one of the most important roles for you as a General Duty Assistant. Different patients with different medical conditions must be fed in different ways. Which are the different feeding techniques? What is your role in feeding? All this and more in this course.

Course Objectives

After completing this course, you will be able to:

- Assist in feeding a patient

Types of Feeding

At the end of this module, you will be able to:

- List the different methods of feeding the patient

Session Plan	
1	Module Overview
2	Feeding and its Types
3	Oral Feeding
4	Tube Feeding
5	Intravenous Fluids
6	General Principles of Feeding a Patient
7	Key Learnings
8	Worksheet

Module Overview

Feeding is the process of ingesting food. It is a critical activity as food ingested into our body is converted into energy by the process of digestion. Depending on the medical and physical condition of the patient, feeding has to be carefully assisted and monitored by you. But before that you must know the different and correct ways of feeding a patient according to the patient's medical condition. In this module, you will learn to identify different methods of feeding the patient.

Feeding and its Types

In a hospital, patients have various physical conditions. Some of them are often unable to eat or feed by themselves. Eating food provides nutrients to our body for its proper functioning. Therefore, eating is necessary for healing of a patient. If the patient is not able to feed himself/herself, then as a General Duty Assistant you must feed the patient according to his/her medical condition.

Depending on the physical condition and the type of nutrition needed by the patient, doctors decide the methods of feeding that needs to be followed.

The different types or methods of feeding are classified as:

- Oral feeding
- Tube feeding
- IV fluids or intravenous route

Let us learn about them one by one.

Oral Feeding

Oral feeding is providing food or fluids through the mouth. Oral feeding is done using spoons and other normal cutlery. This is suggested for a patient who can perform the daily activities normally and is able to respond to the instructions given by you. You must arrange for the food and the required cutlery. Before serving the food, ensure that food provided is according to the diet plan given by the expert. Serve the food to the patient by the hospital bed. Ensure that you wear gloves while carrying and serving the food. While feeding the patient by this method, encourage the patients to eat by themselves. If, however, they are unable to eat, then help the patient by feeding him or her.

Tube Feeding

In tube feeding, a type of external nutrition is delivered into the digestive system in a liquid form. A tube is inserted into a part of the digestive system, often the throat or nose. The tube carries the food directly into the digestive system. It is most often used to give nutrition and medications to someone who is unable to swallow and chew food, fluids and medication orally. Sometimes, it is used in addition to the oral feeding method. The most common type of tube used for feeding is called the Ryle's tube.

Ryle's tube is also called a nasal tubet or NG tube. The ryle's tube is placed through the nose into the stomach or the small intestine.

Sometimes, it is surgically placed into the stomach or the intestine through an opening made on the outside of the abdomen depending on how long it will be used. The insertion of the tube is a specialized technique that is done by the doctors. You must ensure that the patient is feeding properly with the help of the tube.

Intravenous Fluids (IV Fluids)

In case of patients who are unable to feed even with your assistance, an intravenous or an IV line is used. It is a short-term device used to give fluids containing essential nutrients directly into the bloodstream through a vein. The process of insetting an IV line is specialized and is carried out by the nurse. The IV line is usually inserted by the nurse on the instruction of the doctor. You must monitor the level of the IV fluid from time to time and report the same to the nurse. This feeding method can supply all the essential nutrients that the body needs.

General Principles of Feeding a Patient

- Patients should be allowed and encouraged to be as independent as possible.
- Check the patient records for any instructions on the diet to be followed or any food to be avoided.
- A person may need to follow a special diet because of a medical condition.
- Patients must have enough time to feed themselves. They should not be fed to speed up the feeding time.
- Check, record and report how much of what the person has eaten. Write down the person's name and how much of meat, peas, potatoes and milk, or other fluid, they have eaten.
- If the person has not eaten well, you must report this immediately to the nurse in charge.
- Sit on a chair close to the person so he or she can see or hear you. Talk to him or her about the food you are feeding.
- A person who has had a stroke may feel weak and numb on one side of the body. In such a case, sit on the side that is not numb or weak.
- Put the spoon on the side of the mouth where there is feeling. Be sure food is being swallowed and not collecting on the numb side of the patient's mouth.
- Stop feeding a patient if they tell or show that they have had enough. Stop feeding a person if they fall asleep during the meal.
- Give five to six small meals during the day, instead of three big meals.

- Offer healthy snacks, such as fruit or cheese when a patient is hungry, even if it is not time for a meal.
- If the patient can walk, encourage him or her to walk before a meal. Walking may help in gaining appetite and helps the body digest the food.
- With these basic principles in mind, you should ensure that the patient is comfortable while feeding and the essential nutrients are provided to the patient.
- Wear gloves while carrying, serving or feeding the patient. If the patient express discomfort while feeding you can remove the gloves, wash your hands thoroughly and continue feeding the patient

Key Learnings

Sumamrise your understanding of the module. Write your answers in the spaces provided.

1. What is the importance of feeding?

2. Explain oral feeding.

3. Explain tube feeding.

4. Explain intravenous feeding.

5. List the general steps you must follow to feed a patient.

Worksheet

1. *Read the following question. Choose the correct option.*

   In which kind of feeding technique is a tube introduced into the digestive system through your throat?

   a. Intravenous feeding

   b. Tube feeding

   c. Oral feeding

   d. Both a, b

2. *Read the following question. Choose the correct option.*

   In which kind of feeding technique is a short-term device used to give drugs or other fluids directly into the bloodstream through a vein?

   a. Intravenous feeding

   b. Tube feeding

   c. Oral feeding

   d. Both a and b

3. *Fill in the blanks.*

   a. _____ is necessary for providing nourishment to our body.

   b. A spoon should be kept on the side of the mouth where it is not _____.

   c. A _____ is injected into our body, during intravenous feeding.

   d. The most common type of tube used for feeding is called _____.

   e. _____ is providing food or fluids using spoons and other normal cutlery.

Notes

Assisting in Feeding Patients in Different Medical Conditions

At the end of this module, you will be able to:

- Assist patients in different medical conditions during food intake
- Assist the health professional and the patient during the feeding process

Session Plan	
1	Module Overview
2	Types of Medical Conditions
3	Methods of Feeding Patients Under Different Medical Conditions
4	Precautions While Feeding a Patient with a Medical Condition
5	Key Learnings
6	Worksheet

Module Overview

The most important aspect in the treatment of a patient is the food that is consumed by the patient. The nutrients that are supplied by the consumption of food aid in the speedy recovery of the patient. The medical condition of the patient determines the type of nutrition that needs to be given to the patient. For different patients a different diet and technique of feeding is used according to their medical conditions. As a General Duty Assistant, you will be expected to monitor and assist the patient in the process of feeding themselves. But before doing so you must be fully aware of the correct diet and technique to feed a patient as per his/her medical condition. Therefore, in this module, you will learn to identify the feeding technique you must use for different medical conditions and assist patients during food intake.

Types of Medical Conditions

The medical condition of a patient is described based on the vital signs shown by the patient. Vital signs include body temperature, pulse rate, breathing rate and blood pressure. If these vital signs are in the normal range of functioning consistently, then the patient is considered to be healthy.

The condition of the patient can be described as "good" if the vital signs are normal patients with a good medical condition are able to feed themselves by the oral route.

In some medical conditions, the patients are confined to the bed and are unable to ingest food by themselves due to a physical injury. In such cases, the digestive system is fully functional and the patient needs to be provided with proper nutrition. Such patients need assistance while feeding orally.

In some cases, the patient is unable to move and is in the reclining position in the bed. Such a patient with a functioning digestive system can be fed with the help of a ryle's tube.

Some patients are in an unconscious state and their digestive system is not functional. These patients need nourishment for proper functioning of their body. Intravenous fluids with essential nutrients are given to such patients for their nutrition.

The feeding technique and diet must be planned after consulting a doctor, as the medical condition of the patient will play a big hand in determining it. For example, a patient with diabetes mellitus should not have any thing sweet to increase the sugar level in the blood. The doctor will most probably prescribe a diet which is low on sugar for this kind of a patient.

You must check with the nurse about the condition of the patient before planning the feeding method for patients in different medical conditions.

Methods of Feeding in Patients Under Different Medical Conditions

Here are some of the steps you must keep in mind while feeding a patient:

- Patients who have suffered from a stroke and are immovable, feed the patient from the side that is not weak. Put the spoon on the side of his / her mouth where there is feeling. Be sure food is being swallowed and not collected on the numb side of his/ her mouth.

- Solid food must be fed in small portions. Make small bites of solid food and place them on the tip of the spoon.
- If the patient tends to choke, give some water or other liquids with a spoon. This will help the patient swallow the food.
- Patients who are suffering from a spinal cord injury are bed ridden, the food given to them can enter the lungs; so ensure that food is swallowed properly by the patient.

- In case of patients with injuries due to accidents, ensure that patients consume food normally. If they do not eat properly, then the rate of recovery will be very slow.
- While feeding patients who have vision problems, always describe and talk about the food that is to be consumed. Help these patients by cutting and chunking the food into small pieces and by keeping these chunks within their reach.
- The types of food that need to be consumed or avoided by a patient suffering from a given medical condition are listed by the dietician.
- Patients suffering from medical conditions like diabetes need to be fed regularly. Give them small meals of the given diet every 2 to 3 hours as they can be weak.
- Check with the nurse on the condition of the patient and arrange for all the items listed by the dietician before you begin the feeding of the patient.
- If a patient is given intravenous fluids, remember to change the packet of intravenous fluid once it is finished.

- In case on tube or intravenous feeding, do not disturb the feeding tube or the hollow needle respectively inserted into the patient's body.

Precautions While Feeding a Patient with a Medical Condition

A General Duty Assistant is needed while giving oral feeding. In intravenous and tube feeding, the role of a General Duty Assistant is restricted to just monitoring the condition of the patient and changing the packet of fluid in case it is over. No matter which feeding technique he/she is using, he/she must follow these precautions while feeding a patient:

- Only feed the patient at a pace he or she is comfortable with.
- Check the diet of the patient with the dietician or the nurse before feeding the patient.
- Make sure the patient is completely awake and alert before feeding.
- Make sure the patient's food or liquids are of the correct consistency before feeding them to the patient.
- Check the temperature of the food or liquids to ensure each item is suitable for the patient to consume.
- Check to see if the patient has any food allergies before feeding. Do not feed the patient an item he or she may be allergic to.

- If the patient begins coughing excessively or choking, stop feeding immediately. Provide appropriate care and notify the health care provider.
- Never rush the patient while eating.
- Never feed a patient who is not properly positioned.
- Provide the patient with towels and sheets for cleaning immediately after the procedure.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Explain the various medical conditions of patients.

2. List the feeding methods you must use for different medical conditions.

3. List the precautions you must take while feeding a patient.

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   Incase the patient is unconscious and is considered to be a critical medical case, which kind of feeding technique is ideally used for the patient?

   a. Intravenous feeding

   b. Oral feeding

   c. Both a and b

   d. None of the above

2. *Read the following question. Tick on the correct option given below.*

   A patient having diabetes must be fed after how many hours?

   a. 5-6 hours

   b. 12 hours

   c. 2-3 hours

   d. 1 hour

3. *Fill in the blanks.*

   a. A patient with "fair" medical condition is normally fed using _____ method.

   b. A person whose vital signs are not normal, patient is conscious and is not able to perform the activities by himself/herself, the medical condition is termed as _____.

   c. Check _____ and _____ of the food before feeding the patient.

   d. A person with "good" medical condition is fed using _____ technique.

4. *State true and false.*

   a. Only feed the patient at a pace he or she is comfortable with. _____

   b. If the patient is choking, put some water or liquid along with the food for patient to swallow easily. _____

   c. In patients suffering from spine problems, while swallowing, food can enter the nose. _____

   d. All patients can be given solid food. _____

   e. For a heart attack patient, food should be placed on the weaker side of the mouth. _____

Notes

Serving Food and Assistance While Eating

At the end of this module, you will be able to:

- Serve food to the patient for intake in a convenient manner
- Help the patient while consuming the food

Session Plan	
1	Pre-requisite Knowledge
2	Module Overview
3	Guidelines for Serving Food
4	Assisting the Patient While Eating
5	Precautions While Feeding a Patient
6	Key Learnings
7	Worksheet

Pre-requisite Knowledge

- Types of feeding

Module Overview

The nutrients required by a patient for recovery or maintaining a healthy lifestyle are provided from the food that is consumed and digested. It is your duty, as a General Duty Assistant to ensure that the food is served to patients in a manner that enables them to digest food quickly and completely.

Guidelines for Serving Food

The primary purpose of serving food is to facilitate the feeding process for the patient.

In order to make sure that you serve the patient effectively, you must follow some of the following guidelines:

- Ask the nurse about the diet plan of the patient.
- Help the patient to the washroom in washing their hands before dining.
- Check the temperature of the food that is being served. It should be comfortable for the patient.
- Keep noise levels low.
- Do not shout or raise your voice.
- Do not bang plates or cups.
- Arrange the food to be consumed by the patient in a manner where all the items are kept open for the patient to choose from.

- Always tell the patient what is being served and encourage the patient to eat the items that are being served.
- Tell the patient about the benefits of the food items being served.
- Encourage the use of dentures, if the patient uses a denture. This will help the patient in chewing better and therefore in better digestion of the food consumed.

Assisting the Patient While Eating

Before you plan to feed the patient, try and understand the mood of the patient. When you feed a patient it is important for them to have a peaceful mind.

- If a patient is agitated and does not want to eat any food, talk to the patient softly. Do not force the patient into eating anything. Tell them the advantages of eating and how important it is for them to eat well to recover fast.
- Ensure that a patient is calm and comfortable before you start feeding.
- Say positive things about the food such as “this smells really good and fresh”.
- Check the meal tray against the patient identification band to make sure the patient gets the correct meal.

- The meal tray should be served to the patient at a comfortable distance. Cut the food like vegetables or meat into small bite size portions, if necessary.
- Check the comfort level of the patient with respect to the temperature of the food.
- Cover the patient's clothes with a clothing protector such as a bib.
- If milk or juice glasses are covered, they should be opened and served to the patient.
- Tell them what they are eating. Talk with them and give them time between bites so they can enjoy their food.
- Help the patient with their meal, as much as needed.
- Call for help if the patient chokes on food or fluid and is not able to cough.
- Keep the patient in a sitting position for at least 30 minutes after the meal so that he/she does not choke.

Precautions While Feeding a Patient

- Pay attention to the patient. Do not talk to anyone else while feeding the patient.
- Never treat the patient like a child. Be supportive and encouraging while serving and feeding the meal.
- Before serving food, check the temperature. Do not touch the food with your hand. Feel the heat of the utensil instead.
- Ask the patient what he or she wants to eat first. Allow him or her to make a choice.
- Do not mix the food unless the patient prefers it.
- Do not rush the meal. Allow time for the patient to chew and swallow.
- If the patient wants something different from what is being served, honour the request and try to serve alternate food after consulting the doctor or the nurse.
- Keep hand towel within the reach of the patient while eating.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List the guidelines for serving food.

2. List the precautions while feeding a patient.

Worksheet

1. *Read the following question. Tick on the correct options given below. There could be more than one correct option.*

   Which of these must you ensure or do while the patient is having his/her food?

   a. Touch the food directly into the container to check if it is not too hot or too cold.

   b. Constantly speak to the patient in a loud enthusiastic voice to keep the patient happy while he/she is eating.

   c. Tell the benefits of the food items being served.

   d. Encourage the patient to eat the food quickly.

   e. Ensure cups and plates are not banged loudly.

   f. If the patient does not wish to eat, leave him/her alone and walk away.

   g. If the patient chokes and is unable to cough, immediately call for help.

Notes

Assistance in Medication

S No.	Module Name
1	Methods of Drug Administration
2	Role in Drug Administration

Course Overview

One of the most important aspects of a treatment plan is the administration of the drugs, prescribed by the doctor. A drug that is prescribed to a patient has to be given to the patient in an appropriate dose, time and method.

Some methods of drug administration require specialized skills and require special drug delivery equipment. It is important for you to develop awareness about the techniques of delivering the medication to a patient in order to assist the nurse or the doctor.

Course Objectives

After completing this course, you will be able to:

- Identify the different types of techniques that are used to deliver the prescribed medication
- Assist and motivate the patient to take the appropriate medication at the right time
- Support the nurse or the doctor while using a specialized technique of drug administration
- Identify and organize the equipment that is needed for drug administration

Responding to a Patient's Call

At the end of this module, you will be able to:

- describe actions to reduce the call light frequency;
- manage requests.

Session Plan	
1	Module Overview
2	How to Reduce Call Light Frequency
3	Managing Requests
4	Key Learnings
5	Worksheet

Module Overview

Call Light Study Encourages Nurses To Be Proactive

Responding to patient call lights involves making quick decisions that can sometimes be stressful. No nurse will ignore a possible emergency. But, at the same time, it is disheartening to leave a patient with immediate needs for another whose needs are less urgent.

"If we can anticipate patients' needs before they use their call lights, then we'll have fewer interruptions on our rounds, and patient satisfaction will increase."

How to Reduce Call Light Frequency

The top 3 reasons patients use call lights are to:

1. Report pain or request pain medication
   Report unusual monitor noises
   Request daily living needs, such as bathroom assistance or an extra blanket

An effective way to decrease call light frequency is to remove the reason for call lights in the first place. Hourly nursing rounds to ascertain and meet patients' needs are an evidence-based strategy that reduces dependence on call lights.

Specific actions are to be taken by the rounder, whether this individual is a nurse, certified nursing assistant, nurse's aide, or nursing technician.

Upon entering the patient's room, the rounder must identify him or herself by name, tell the patient that he or she is there to do rounds, and:

- Assess the patient's pain level (if the patient is experiencing pain, the RN is contacted immediately);
- Put pain medication doses on the RN's list of scheduled items and offer when the dose is due;

- Offer toileting assistance;
- Assess the patient's position and position comfort and ask if the patient is comfortable or needs to be repositioned;
- Make sure the call light is within the patient's reach;
- Put the telephone within the patient's reach;
- Put the TV remote control and bed light switch within the patient's reach;
- Put the bedside table next to the bed;
- Put the tissue box and drinking water within the patient's reach;
- Put the trash can next to the bed;
- Prior to leaving the room, ask, "Is there anything I can do for you before I leave? I have time while I am here in the room"; and
- Tell the patient that a member of the nursing staff will be back in the room in an hour to round again.

Rounding not only fulfils the more mundane requests that are usually made via call lights but also demonstrates the nurse's availability to the patient and her readiness to anticipate the patient's needs. Rounding is about building relationships and trust as much as it is about meeting physical needs. Patients like to know someone is watching over them.

Hourly rounding with specific nurse actions is proactive, allowing nurses to manage patient care and their own time more efficiently. Hospitals adopting hourly rounds have reported a fall in medication errors concurrent with fewer work interruptions from call lights.

Rather than adding to the nurse's workload, rounding takes less time than answering call lights and dealing with repeated requests. Some units distribute the workload of hourly rounds by having nursing assistants or technicians round on odd hours and nurses round on even hours. Rounds are reduced to every 2 hours during the night but continued hourly during the day. "Rounding every 2 hours during the day just isn't often enough."

Managing Requests

The study also suggests that spending a few extra moments with patients may cut down on their call light requests.

"Before leaving, ask the patient if he or she is in pain, so you know a medication may be necessary," Dr. Albert says. "A simple, 'Is there anything else I can get for you?' may save you from coming back later when the patient realises that an extra blanket would improve comfort."

Patients were also asked if they felt they had control over their lives and if they had high or low patience levels, as these factors could affect call light use. The study found that patients who believed they were in control of their actions and those with more patience were less likely to use call lights.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What are the top three reasons for patients using call lights?

2. How can we reduce the call frequency?

3. What is the schedule for making rounds to reduce call lights?

Worksheet

1. Tick the correct answer.

a. How frequently should a GDP take rounds in order to reduce the frequency of call bells?

i. 6 hourly

ii. 4 hourly

iii. 2 hourly

iv. Hourly

Notes

Methods of Drug Administration

At the end of this module, you will be able to:

- Identify the different methods used in drug administration

Session Plan	
1	Module Overview
2	Importance of Drug Administration
3	Routes of Drug Administration
4	Equipment Used in Drug Administration
5	Key Learnings
6	Worksheet

Module Overview

For a patient to recover from illness, he/she is given drugs and medicines by the doctor. For a drug to act effectively without causing harm to a patient, it needs to be given in an appropriate dose in a specific method. The doctor prescribes a medication and specifies the details of the dosage and method of administration.

As a General Duty Assistant, your job will be to assist the nurse who will ensure if medicines are given on time and in right quantity. For performing this duty effectively, you must be first aware of all the routes for giving drugs. In this module, you will learn about the route for drug administration.

Drug Administration

Drugs or medicines are substances that are used by doctors to treat patients suffering from illnesses. They are available in different forms and types. These substances are absorbed by the body and aid in fighting an illness. The method of giving a drug to a patient is important, as it is going to affect the action of the drug on the patient and will help the patient in recovering fast.

Drug administration involves providing the patient with the prescribed substance for the treatment or prevention of a medical illness. The method in which a drug is introduced into the patient's body is called the route of administration. There are different routes of administration based on the condition of the patient.

Medicines are made in many forms based on the route of administration. The action of the drug within the patient's body depends on the quantity of the drug absorbed by the patient. The absorption rate of a drug depends on the route in which the drug is given to the patient.

Routes of Drug Administration

Most medicines are prepared according to the route of administration that would be chosen for a patient. The prescription is a statement given by the doctor that suggests the quantity or the dosage and the method of administration of a drug. The prescription also states the number of times a drug has to be given.

The different routes of administering drugs are as follows:

Oral route - This is one of the most common methods of taking a medicine. The medicine is swallowed and absorbed through the digestive system. The absorption of the drug through this method is slow and it cannot be used for patients who have vomiting.

Mucosal route - In the mucosal route of administering a drug, the drug is inhaled with help of an inhaler through the nose.

Percutaneous route - Some medications are absorbed directly from the skin, this method is called the percutaneous method.

Parenteral route - The fastest action of a medication is observed when the medication is delivered directly into the blood or any given part of the body. This is called parenteral method.

Through this route the medication is delivered into the vein, artery and tissues beneath the skin or abdominal cavity directly. Many of the drug administration techniques involve the use of special equipment such as syringes, catheters, IV lines. The technique that needs to be followed is decided by the doctor and the nurse usually follows the technique. You should assist the nurse while a technique is followed by arranging for all the required equipment.

Equipments Used in Drug Administration

Drugs are manufactured in different forms such as tablets, syrups, suspensions and IV fluids. These forms have to be delivered into the body with the help of special equipment that is based on the route of administration that is chosen.

Some of the common equipments that are used for the administration of the drug include:

Injections

An injection is a method of administering a drug into the body .It is done using a combination of a needle and a syringe. The drug is drawn into the syringe through the needle. The needle is then pierced into the tissue, muscle, vein or an artery to introduce the drug into the body.

Catheters

These are tubes that are used in administering the medication through IV fluids. The needle of the catheter in placed in the vein of the body and is used to create a channel for introduction and withdrawal of IV fluids.

IV Lines

IV lines are long tubes that are connected to the a needle that is inserted into vein of the patient. The IV lines is connected to bottle that is filled with the drug and hang on a stand. The drug is delivered directly into the blood stream facilitation a fast absorption and action of the drug.

Nebulizer

Nebulizer is a special device that is used to deliver the drugs directly into the lungs of the patient.

In addition to these equipments that are used for drug administration, some medication in the form of tablets and syrups are consumed directly by the patient. You must check with the nurse about the route of medication that would be followed for a patient and ensure that all the necessary equipment is arranged for the same.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is the importance of drug administration?

2. What are the different routes of drug administration?

3. List and explain the different equipments used in drug administration.

Worksheet

1. *Read the following question. Choose the correct options.*

   In which of the drug administration methods, is the drug given from the rectum?

   a. Oral route

   b. Mucosal route

   c. Parenteral Route

   d. Enteral route

2. *Read the following question. Choose the correct options.*

If the doctor uses a nebuliser, which route of drug administration is the doctor using?

a. Oral route

b. Mucosal route

c. Parenteral route

d. Enteral route

3. *Match the columns.*

Route for Drug Administration	
a.	Oral route
b.	Mucosal route
c.	Enteral route
d.	Percutaneous route
e.	Parenteral route
f.	Nebulizer

Description	
i.	Inhaling the drug
ii.	Drug absorbed by the skin
iii.	IV lines
iv.	Device used to give the drug directly into the lungs
v.	Swallowing drug
vi.	Medicine delivered from the rectum

Notes

Role in Drug Administration

At the end of this module, you will be able to:

- Assist in drug administration

Session Plan	
1	Pre-requisite Knowledge
2	Module Overview
3	Principles of Safe Drug Administration
4	Role of the General Duty Assistant
5	General Precautions to be Taken During Drug Administration
6	Key Learnings
7	Worksheet

Pre-requisite Knowledge

- Routes of drug administration

Module Overview

Once the doctor prescribes the medication, the nurse is provided with instructions about the administration of the drug. Your role as assistant is to assist the nurse during the drug administration process. Also, you must monitor that the patient gets the right medicine at right time. In this module, you will learn about the steps to assist in the process of drug administration of a patient.

Principles of Safe Drug Administration

The main responsibility of administering drug is held by the nurse attending to the patient. The prescription is a document given by the doctor which states the medication that is used for the treatment of the patient. It is the duty of the nurse to facilitate the administration of the drug to the patient following the correct principles. There are six principles of safe drug administration. The principles of right drug administration are:

Right Patient

When the prescription is issued by the doctor, the name, age, sex and the medical condition of the patient is mentioned on the prescription note.

Right Drug

The drug name must be identified from the doctor's order. The medication provided must be arranged from the pharmacy of the hospital. In case of any doubt on the medication that is being delivered, check with doctor.

Right Dose

The dosage of the drug that needs to be given is mentioned in the prescription. Once the medication is arranged from the pharmacy, the nurse divides the medication into the appropriate dose for administration.

Right Time

The amount of time a drug acts on the body is limited, so a drug must be given at regular intervals of time. The doctor mentions the number of times the drug has to be given to the patient.

Right Route

The action of the drug also depends on the route in which the drug is administered, the nurse must check the prescription for instructions on the route of administering a drug.

Right Documentation

Once the medication is administered, the nurse must observe for the changes in the patient condition to understand the action of the drug. The dose, time and the route must be documented for further reference.

If these principles of drug administration are followed, the drug administered will act on the patient and help in the fast recovery of the patient.

Role of the General Duty Assistant

- The drug that has been prescribed by the doctor is procured from the pharmacy. You must assist the nurse in procuring the ordered medicine.
- The nurse divides the drug into the prescribed dosage. Help the nurse in making and storing the correct dosage of the medication.
- Depending on the route of administration the required equipment has to be arranged for the nurse to administer the drug.
- If the drug is administered through an IV, keep checking the level of the drug in the IV fluid bottle and report the same to the nurse.
- Check with the nurse on the timing of administering the drug. Remind the nurse if the time of the drug administration is approaching.
- The documentation of the drug administration process is prepared by the nurse. Assist the nurse in the process of documentation.

General Precautions to be Taken During Drug Administration

- Administration of the wrong medication can be life threatening, always double check if the correct medication is being given to the patient.
- Some medications may have side effects such as vomiting and loose motion. If the patient complains of any abnormality after the drug has been given, report it to the nurse and the doctor immediately.
- Patients might react adversely with sneezing and rashes on skin immediately after the drug is administered. Such reactions should be reported to the doctor immediately and need emergency care.
- The equipment that is used for the administration of the drug must be kept sterile and kept infection free.
- You must ensure that the equipment of drug administration is sterilized and arranged for the nurse.
- Drug administration is a very critical process in the treatment of a medical condition and the process of administration is a team effort with the nurse playing a central role.
- You must be aware of the process and help the nurse at the different stages to facilitate a safe administration of the drug.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List the different principles for safe drug administration?

2. Explain your role as a General Duty Assistant in drug administration.

3. List few precautions you must take during administration.

Worksheet

1. *Match the columns.*

Principles	
a.	Right patient
b.	Right drug
c.	Right dosage
d.	Right route
e.	Right documentation

Description	
i.	Correct quantity of drug
ii.	Correct way of giving the medicine
iii.	Noting the drug, dose, time for further reference
iv.	Giving the correct medicine
v.	Giving the medicine to correct patient

2. *Read the following questions. Tick on the correct options given below. There could be more than one correct option.*

while administering drugs to a patient which of these steps will you follow?

a. Use non sterilized equipments in case of emergency.

b. The right medicine is given to the right person.

c. Adverse reaction of the medicine like rashes or sneezing must be immediately reported to the doctor.

d. Prescribing the drugs to the patient.

e. Changing the route of drug administration.

Notes

Managing Elimination Needs

S No.	Module Name
1	Using the Bed Pan
2	Proper Disposal of Urinary Waste

Course Overview

Some patients may not be in a position to move in order to eliminate their body wastes. Some may not even be aware of the need for elimination of their body wastes. How must you help such patients? Are there any special equipments that you must use to help such patients? Which are these equipments and how to use them? Learn this, in this course.

Course Objectives

After completing this course you will be able to:

- Remove the excretory wastes of the patients in a safe way

Using the Bed Pan

At the end of this module, you will be able to:

- Use the bed pan appropriately
- Dispose the wastes excreted by the patients in a safe way

Session Plan	
1	Module Overview
2	Managing Elimination Needs of the Patient
3	Equipment Used for Managing Elimination Needs
4	Placing the Bed Pan for Use
5	Removal of Bed Pan after Use
6	Precautions to be Taken While Using Bed Pan
7	Key Learnings
8	Worksheet

Module Overview

While performing the various functions of the body, our body produces various waste materials. These wastes are eliminated from our body in various ways. For example, once the process of digestion is completed, the undigested food is removed from the body as feces. The medical condition of the patient might make it difficult for the process of eliminating or removing of these wastes. Therefore, as a General Duty Assistant, you must assist the patient in facilitating waste elimination process. In this module, you will learn the appropriate methods and equipments to use while assisting the patient in the process of waste elimination.

Managing the Elimination Needs of the Patient

The undigested food is excreted or removed from the body as feces. These wastes are eliminated from the rectum. The toxic wastes such as urea or ammonia are excreted by the kidneys as urine from the urinary bladder. The removal of wastes from the body is an involuntary function and it cannot be controlled by the patient. In some medical conditions the patient is unaware, when the wastes are removed from the body. Process of excreting wastes as feces is called defecation and excretion as urine is called urination.

The wastes are excreted in the toilet when the patient feels the urge or the need to pass the wastes. In patients who can walk, they can express the need and with your assistance can walk to the toilet.

However, in many cases, where the patient is unable to move, you must support the patient by facilitating the passage of the wastes safely within the bed. If the wastes passed from a patient are accumulated and are not cleaned from time to time, it can lead to a variety of infections to both the patients and the people around them. You must not only help the patient in the process of safely eliminating the wastes from their body but also ensure that the surroundings are kept clean.

Equipment Used for Managing Elimination Needs

Most patients who are in a good medical condition can express the need to use the toilet and manage their needs themselves. However, many of them may need some help to move to the toilet. For patients who are confined to the bed, different types of equipment can be used to manage their elimination needs.

Some of the equipment used are:

Bed Pan

A bed pan is used for patients who cannot get out of bed easily but are able to express their need to pass urine or defecate. The bedpan is placed underneath the patient, who can urinate or defecate as needed.

Urinal

A urinal is much like a bed pan but is meant only for a male. The urinal is shaped in a way that only a male patient may use it while still on bed and remain comfortable.

Diapers

Diapers are used for patients who are confined to the bed and are unable to express or control the need for elimination.

Foley Catheters

These are tube like equipment that are inserted directly into the urinary bladder and are used to empty the urine directly from the bladder.

Based on the condition of the patient the doctor would suggest the use of the appropriate equipment. You must know the equipment to be used depending on the medical condition of the patient.

Placing the Bed Pan for Use

In order to help a person with the bedpan, you must put the following items within easy reach of the patient.

- A basin with warm water
- Disposable gloves
- Toilet paper
- Towels
- Wash cloths

Step 1

Explain to the person that you are going to help him/her use the bed pan. This can ease any fear or uncertainty he/she may have.

Step 2

Lower the head of the bed to the lowest position tolerated by the patient. Make the bed as flat as possible so that it is easier to roll the person to his or her side.

Step 3

Ask the person which side he or she is more comfortable rolling to.

Step 4

Put on the disposable gloves.

Step 5

Ask the patient to grab the bed rails (if available) to stay onto the side when they roll.

Step 6

Bring the patient a warm bed pan which is rinsed in hot water and then dried. Bring it inserted in paper cover.

Step 7

Place the bed pan against the buttocks, ensuring that the curved edge of the bed pan is under the buttocks.

Step 8

Ask the patient to roll back ensuring that the bed pan stays in place. Keep your hand on the bed pan until the patient is almost completely rolled back over.

Step 9

Elevate the person's head on the bed slightly into more of a sitting position. This may make it easier for him to relieve himself.

Step 10

Give the patient privacy. Make sure he has a call light button or other means of contacting you when finished.

Step 11

When the patient is through, answer his signal promptly. Bring a basin of warm water.

Step 12

Remove the bed pan after use.

Removal of Bed Pan after Use

Step 1

Lower the head of the bed to a flat position, if possible.

Step 2

Ask the person to roll over so that you can remove the bed pan.

Step 3

Grab the bed pan with one hand and carefully remove it from the person's buttocks.

Step 4

If the person has had a bowel movement, use a washcloth and towel to clean the area using the appropriate cleansing methods per your hospital's protocol.

Step 5

Place the bed pan on a chair and place a towel over the contents of the bed pan. Never place the bed pan on a side table or a bed table.

Step 6

Cleanse the person's buttocks or genital area first with toilet paper or wet wipes. If necessary, wash the anal area with soap and warm water. Dry thoroughly.

Step 7

Adjust the position and dressing of the patient. Keep the bedding in order.

Step 8

Open the windows to keep the air fresh and clean.

Elimination of wastes such as feces and urine can lead to different types of infections. You must maintain hygiene while helping the patient in managing their elimination needs.

Precautions to be Taken While Using Bed Pan

- Respond to the call of the patient quickly.
- Explain the process politely before placing the bed pan.

- Always wear gloves while helping the patient use the bed pan.
- If the patient complains of pain while urinating or if you observe any abnormality such as bleeding while passing urine or blood in the fecal matter, report it to the nurse or the doctor immediately.
- If you find any areas of redness or soreness on the skin of the patient near the buttocks or the genitals, report to the doctor immediately.
- Once the bed pan is removed and cleaned, fill it with warm soap water. Use a toilet brush to clean the pan thoroughly. You can also use a bleach to clean the bed pan. After cleaning the bed pan, sanitize it immediately.
- Maintain proper hygiene while managing the elimination needs of the patient. It is very critical in the prevention of many infections.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is the importance of managing elimination needs?

2. List the equipments used for managing elimination needs.

3. List the steps for using a bed pan.

4. List the precautions to be taken while using a bed pan.

Worksheet

1. *Match the following.*

Waste Managing Equipment	
a.	Diaper
b.	Foley catheters
c.	Bed pan
d.	Urinal

Uses	
i.	Used by male patient to pass urine on the bed
ii.	Used for patients who are unable to control the need of elimination
iii.	To help the patient pass urine on the bed
iv.	Used to empty the urine directly from the bladder

2. *Read the following question. Tick on the correct options given below. There could be more than one correct option.*

Which of the following steps must you take while assisting in waste removal of the patient?

a. Elevate the person's head on the bed slightly into more of a sitting position.

b. After the patient has used the bed pan, place it on the bed table.

c. Place the narrower part of the bed pan under the patient's buttock.

d. Wash the genital area of the patient after the patient has excreted the waste.

e. Wear gloves while helping the patient use the bed pan.

Notes

Care of an Indwelling Catheter

At the end of this module, you will be able to:

- define catheterisation.
- list down the purposes of catheterisation.
- identify the hazards of catheterisation.
- perform the steps for catheter care.
- empty a urine collection bag.
- identify the complications of catheterisation.
- know the procedure of catheter removal.

Session Plan	
1	Module Overview
2	Purpose of Catheterisation
3	Hazards of Catheterisation
4	Caring for a Patient with an Indwelling Catheter
5	Procedure For Emptying a Urine Collection Bag
6	When to Inform the Higher Authority for Further Management
7	Procedure For Catheter Removal
8	Care After the Removal of a Catheter
9	Key Learnings
10	Worksheet

Module Overview

A urinary catheter is a flexible plastic tube used to drain urine from the bladder when a patient cannot urinate by him or herself. Health personnel will place the catheter into the bladder by inserting it through the urethra, the opening that carries urine from the bladder to the outside of the body. When the catheter is in the bladder, a small balloon is inflated to keep the catheter in place. The catheter allows urine to drain from the bladder into a bag that is usually attached to the thigh.

A catheter may be needed because of certain medical conditions, such as an enlarged prostate, the inability to control the release of urine, or after surgery on the pelvis or urinary tract. Urinary catheters are also used when the lower part of the body is paralysed.

Purpose of Catheterisation

Catheterisation is carried out for the following reasons:

- To relieve urinary retention, provision of decompression.
- To obtain a sterile urine specimen for diagnostic purposes.
- To measure the amount of residual urine when the bladder is incompletely emptied.
- To obtain a specimen when the specimen cannot be secured satisfactorily by other means, for example, to get an uncontaminated specimen from a menstruating woman.
- To empty the bladder before, during or after surgery and before certain diagnostic examinations.
- To prevent urine from passing over a wound, for example, after the repair of the perineum.
- To provide for intermittent or continuous bladder drainage and irrigation.
- To manage incontinency when all other measures to prevent skin breakdown have failed.
- To deal with obstruction to urine outflow, for example, prostate enlargement.
- To measure the urinary output in critically ill clients.
- To prevent urethral obstruction from blood clots.
- To provide long term management of patients with spinal cord injuries, neuromuscular degenerations or incompetent bladders.

Hazards of Catheterisation

There are several risks associated with catheterisation. Some of the risks to watch out for are:

- Sepsis and trauma
- Urethra injury: The urethra is vulnerable to injury. Forcing the catheter, and friction caused by the catheter can damage the mucous membrane lining.
- Bacteria can enter the bladder when the catheter is inserted and the organisms may move up.
- Bacteriuria: Bacteria is present in the urine. Most patients with an indwelling catheter in place for more than 4 weeks develop bacteriuria.
- UTI: Bacterial colony > 105 CSF / HPF

Caring for a Patient with an Indwelling Catheter

When caring for a patient with an indwelling catheter, always wash your hands before and after handling the catheter. Follow all the instructions your authority has given you. Also:

- Make sure that urine is flowing out of the catheter into the urine collection bag. Make sure that the catheter tubing does not get twisted or kinked.
- Keep the urine collection bag below the level of the bladder.

- Make sure that the urine collection bag does not drag and pull on the catheter.
- Make sure the patient has a generous fluid intake.
- Unless the patient has been told not to, it is okay to shower with the catheter and urine collection bag in place. Avoid tub baths.
- Check for inflammation or signs of infection in the area around the catheter. Signs of infection include pus or irritated, swollen, red, or tender skin.
- Clean the area around the catheter twice a day using soap and water. Clean the perineal area thoroughly, especially around the meatus, daily after each bowel movement. Dry with a clean towel afterward.
- Do not apply powder or lotion to the skin around the catheter.
- Do not tug or pull on the catheter.
- Accurately measure and record the urine output.

Procedure For Emptying a Urine Collection Bag

You will need to empty the bag regularly, whenever it is half full, and at bedtime. If a health personnel has instructed you to measure the amount of urine, do so before you empty the urine into the toilet.

The steps for emptying a urine collection bag are as follows:

- Wash your hands with soap and water. Wear disposable gloves.
- Remove the drain spout from its sleeve at the bottom of the collection bag. Open the valve on the spout.
- Let the urine flow out of the bag and into the toilet or a container. Do not let the tubing or drain spout touch anything.
- After you empty the bag, wipe off any liquid on the end of the drain spout. Close the valve and put the drain spout back into its sleeve at the bottom of the collection bag.
- Wash your hands with soap and water.

When to Inform the Higher Authority for Further Management

The higher authority for further management should be informed when:

- No urine or very little urine is flowing into the collection bag for four or more hours.
- No urine or very little urine is flowing into the collection bag and the patient feels like his or her bladder is full.
- The patient complains of new pain in the abdomen, pelvis, legs, or back.
- Urine has changed colour, is very cloudy, looks bloody, or has large blood clots in it.
- The insertion site is swollen, red, or tender, or has pus draining from the catheter insertion site.
- Urine has a foul odour.

- Urine is leaking from the insertion site.
- The patient has a fever of 100°F (37.8°C) or higher or back or flank pain.
- The patient develops nausea, vomiting, or shaking chills.

Procedure for Catheter Removal

- The steps for removal of a catheter are as follows:
- Wash your hands before and after the procedure.
- Make sure the balloon is deflated before attempting to remove the catheter: Insert a syringe into the balloon valve and aspirate the fluid used to inflate the balloon.
- Ask the patient to take a deep breath to relax while removing the catheter.
- Clean the perineal area after removal.
- Record and report any unusual signs such as discomfort, burning sensation when voiding, bleeding, or changes in vitals especially temperature.

Care After the Removal of a Catheter

It is important to take care after the removal of a catheter.

After the catheter is taken out:

- The patient may have trouble urinating. If this happens, make the patient sit in a few inches of warm water (sitz bath). This may help the patient to relax and feel the urge to urinate.
- The patient may complain of some burning the first few times of urination. If the burning lasts longer, it may be a sign of infection.
- Ask the patient to drink plenty of fluids, enough so that the urine is light yellow or clear like water.
- Advise the patient to wear loose cotton underwear if the patient has irritation or a rash from the catheter.

It is important to know when the patient is facing a problem. Once the catheter is removed, the doctor should be called if:

- The patient does not urinate within eight hours after the catheter is taken out.
- The patient has a feeling of fullness or pain in his or her bladder or belly.
- The patient has signs of a urinary infection. For example, the patient has:
  - Blood or pus in urine.
  - Fever, chills, or body aches.
  - Pain in the back just below the rib cage. This is called flank pain.
  - Pain in the groin or belly.
  - Pain when urinating.

Key Learnings

1. Summarise your understanding of the module. Write your answers in the spaces provided.

1. Define catheterisation.

2. List any three purposes of catheterisation.

3. List any three complications of catheterisation.

4. Discuss the care after removal of a catheter.

Worksheet

1. *Tick the correct answer.*

   a. A patient has an indwelling urinary catheter. While making rounds, the GDP notices that there is no urine in the drainage bag. The GDP should first:

      i. Ask the patient to try urinating

      ii. Offer the patient fluid to drink

      iii. Check for kinks in the tubing

      iv. Obtain a new urinary drainage bag

   b. You are asked to change a urinary drainage bag attached to an indwelling urinary catheter which you never done before. The best response by you is to:

      i. Change the indwelling catheter at the same time

      ii. Ask another GDP to change the urinary drainage bag

      iii. Change the bag, asking for help only if you face any problem

      iv. Ask a nurse to watch the procedure as it is the first time

   c. The urinary bag should be placed:

      i. Above the chest

      ii. Below the chest

      iii. Above the bladder

      iv. Below the bladder

Notes

Administration of an Enema

At the end of this module, you will be able to:

- define the term enema.
- differentiate between the different types of enemas.
- list down the purpose of an enema.
- explain the method of administering different types of enemas.

Session Plan	
1	Module Overview
2	Definition of Enema
3	Types of Enemas
4	Purposes of an Enema
5	Simple Cleansing Enema
6	Glycerine Enema
7	Key Learnings
8	Worksheet

Module Overview

An enema is the insertion of a liquid into the rectum or colon by way of the anus. The colon, also called the large intestine or large bowel, is a long, hollow organ in the abdomen. It plays an important role in digestion by removing water from digested material and forming faeces (stool).

An enema is only one method used to diagnose or treat diseases and conditions of the colon and rectum.

Definition of Enema

An enema is an introduction of fluid into the colon through the rectum.

Types of Enemas

Take a look at the different types of enemas:

- **Large Enemas**

  1. **Purgative enema** is given to purge / catharsis (cleanse) and perform evacuation of the rectum, e.g. soap and water enema (500 -1500 ml) (Temperature 37.2oC, one ounce of soap in 500 ml of water).

2. **Cleansing enema** is given for mild cleaning of the bowel, e.g. with normal saline (2 teaspoons of salt in one litre of water).
3. **Carminative enema** is given to relieve distension and expulsion of gases, e.g. Turpentine enema (2 tsf / litres of soap and water enema).
4. **Asafetida enema** (2 tsf / litres of soap and water enema).
5. **Antihelminitic enema** is given for the expulsion of worms, e.g hypertonic saline for threadworms (2 tsf / 500 ml of water).

- **Small Enemas**

1. **Glycerine enema** is prepared by mixing 100 ml of water with 100 ml of glycerine (in the ratio of 1:1).
2. **Oliva Oil / Sweet Oil enema** is prepared by mixing 100 ml of water and 100 ml of olive oil / sweet oil.
3. Commercially available preparation – proctoclysis enema.

- **Retention Enema:**

1. As a nutrient enema with glucose (1 oz of glucose / 500 ml of normal saline temperature - 40o C).
2. Normal saline enema (1 tsf of common salt into 500 ml of water) for replacement of fluids in burns, hemorrhage, dehydration etc. (temperature 40o C).

Note:

- Evacuate the bowel first with a regular enema before giving retention enema.
- Ice enemas are also sometimes used for hyperpyrexia and heat stroke. Temperature of water for an ice enema is 65o F (300 - 500 ml).
- Simple enema, i.e., tap water about 1000 ml (temperature 37.8o C) is sometimes used for cleansing purposes.

Purposes of an Enema

Enemas are used to:

1. Expel gas and faeces
2. Stimulate peristalsis
3. Administer medication
4. Aid in diagnosis
5. Provide nutrition
6. Provide heat, cold and fluid

- Doctors may recommend a therapeutic enema to treat diseases and conditions of the colon or rectum including:
  - **Constipation**: Hard, dry, infrequent stools that are difficult to pass
  - **Excessive gas:** Belching, bloating, distended abdomen

- **Fecal impaction:** A large amount of hard stool that is stuck in the rectum
- **Ulcerative colitis:** Inflammation and bleeding in the colon.

Simple Cleansing Enema

Definition:

Introduction of fluids into the rectum to stimulate defecation.

Purposes:

- To aid in the elimination of faeces and gas.
- To cleanse the colon prior to certain tests and bowel surgery.

Solutions used:

1. Plain water
2. Soap and water
3. Normal saline

Quantity:

500 cc to 1000 cc (Half to one litre)

Temperature:

100 - 105o F at the time of administration.

Equipment:

- A tray containing:
  - An irrigating can with 2 feet tubing and clamp, glass connection and rectal catheter
  - A pint measure with prepared solution
  - Lubricating jelly and gauze piece
  - A kidney tray and paper bag
  - A pair of gloves, tissue paper / cotton swabs
  - A mackintosh with cover

Equipment for cleaning of patient who is unable to go to the toilet:

- Bowl with water
- Bedpan with cover
- Cotton swabs / toilet paper
- Long Forceps
- Wash cloth / towel and soap
- Spirit and powder for back care

Procedure:

1. Wash your hands and explain the procedure to the patient.
2. Bring the equipment to the bedside and screen the unit.

3. Put on clean gloves and place the patient in the left lateral position with buttocks resting on the edge of the bed. Remove the pillows. Roll the draw sheet close to the patient.
4. Hang the irrigating can on the irrigation stand. It should not be more than 18" from the level of the bed.
5. Remove the top bedding except the top sheet. Roll back the patient's clothing towards the waist.
6. Connect the rectal tube to the glass connection. Pour fluid into the can. Loosen the screw clip and expel the air by allowing the same solution to run through the tube.
7. Lubricate the tip of the rectal tube 4". Separate the buttocks with the thumb and fore fingers of the left hand, using two cotton swabs.
8. Introduce the tube gently, about 4" and let the fluid flow in. Press both buttocks together so that the tube is secured in position.
9. Encourage the patient to relax and ask the patient to take deep breaths.
10. If the patient complains of mild discomfort during the procedure, clamp the tube for a few minutes and then continue slowly. Discontinue the procedure if the patient complains of severe discomfort.
11. Clamp the tube before the can gets emptied, Grasp the catheter near the anus and withdraw the catheter gently after informing the patient. Disconnect the rectal tube and place it in the kidney tray. Encourage the patient to hold the fluid for another 5 - 10 minutes. Turn the patient on his back and give him a pillow.
12. Offer a bedpan and let the patient empty his bowel. Patient could be left alone unless he is too sick. Give a second bed pan and finish the procedure of perrineal care.
13. Clean and leave the patient dry and comfortable.
14. 14.Make sure that the mackintosh is dried of any fluid and pull and tuck the draw sheet.
15. 15.Note the patient's reaction, amount, colour and consistency of the outcome and record the same on the chart, with date, time and result.
16. Wash all the articles with soap and water and rinse well. Run water through the eye of the tube and make sure that it is cleaned well. Boil the rectal tube for 5 minutes by putting it into boiling water or send it for autoclaving. Reset the tray and keep it ready for the next use.

Special points:

If the patient is incontinent, place a bedpan before introducing the fluid. In this case the patient will be in the dorsal position. Place a pillow under the curve of the back and remove the pillow from under the patient's head.

Glycerine Enema

Purposes:

- To induce bowel movement by irritating the mucous, causing peristalsis and evacuation of faecal matter. This is preferred for a patient who cannot stand the strain of a longer cleansing enema.
- As preparation of the bowel.

Preparation of fluid:

- Take 2 to 4 oz of glycerin and mix with an equal amount of warm water.
- Stir well.
- The temperature should be 100o F at the time of administration.

Articles:

A tray containing:

- A funnel and tubing (18-24" long)
- A glass connection
- A rectal catheter
- A small pint measure along with fluid
- Gauze pieces in a bowl
- A kidney tray and paper bag
- Clean gloves
- A bed pan with cover
- A mackintosh with cover
- Toilet paper

Procedure:

1. Wash your hands.
2. Explain the procedure to the patient.
3. Bring the articles to the bedside and screen the patient.
4. Put on gloves and turn the patient to the left lateral position, buttocks resting at the edge of the bed. Unstick the draw sheet and roll it towards the patient.
5. Drape the patient exposing the anus.
6. Take the funnel and tubing and connect the catheter. Hold the tip of the catheter above the funnel level and pour the solution into the funnel. Gently lower the tip of the catheter to expel air. Pinch the tube and lubricate the catheter with a small amount of fluid expelled.
7. Introduce the catheter into the rectum about 4" (10 cm). Hold the funnel 8" above the bed level and let the fluid to flow in.
8. Before all the fluid gets over, pinch the catheter and remove it after informing the patient. Clean and replace it in the kidney tray.
9. Encourage the patient to hold the fluid in for another 15 - 20 minutes by raising the foot end of the bed or pressing the buttocks. Pull and tuck the draw sheet and leave the patient comfortable in bed.
10. Offer the bedpan when the patient wants to defecate.
11. Clean and leave the patient comfortable.
12. Observe the result and record the same.
13. Clean, disinfect and dry all the articles. Keep them ready for the next use.
14. Wash your hands.

Key Learnings

15. Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is an enema?

2. List down the types of enemas.

3. What is the main purpose of a simple cleansing enema?

4. Discuss a glycerine enema.

Worksheet

1. *Tick the correct answer.*

a. An antihelmenthic enema is indicative for:

i. Expulsion of air from the rectum

ii. Relieving abdominal distention

iii. Expulsion of worms

iv. Expulsion of faeces

b. An enema which is administered during heat stroke is called a:

i. Simple glycerine enema

ii. Purgative enema

iii. Nutrient enema

iv. Ice enema

c. During the administration of a simple cleansing enema, the temperature of the water should be:

i. 100 - 1050 F

ii. 95 - 1000 F

iii. 990 F

iv. 940 F

d. The enema which is administered to replace the electrolyte and fluid in the body is called a:

i. a.Cleansing enema

ii. b.Retention enema

iii. c.Purgative enema

iv. d.Carminative enema

e. The main purpose of administering a carminative enema is to:

i. Relieve the distention and expulsion of gases

ii. Clean the bowel

iii. Administer nutrients

iv. Expel worms

Notes

Perineal Care

At the end of this module, you will be able to:

- define perineal care;
- list down the purposes for performing perineal care;
- identify the indications for perineal care;
- understand the preliminary assessment to be done before performing perineal care;
- list down the articles required for performing perineal care;.
- perform the procedure of perineal care.

Session Plan	
1	Module Overview
2	Definition of Perineal Care
3	Purposes of Perineal Care
4	Indications for Perineal Care
5	Preliminary Assessment Before Performing Perineal Care
6	Articles Required for Perineal Care
7	Procedure for Perineal Care
8	Key Learnings
9	Worksheet

Module Overview

Perineal hygiene involves cleaning the external genitalia and surrounding area. The perineal area is conducive to the growth of pathogenic organisms because it is warm, moist and not well ventilated. Since there are many orifices situated in this area (urinary meatus, vaginal orifice, and the anus), the pathogenic organisms can enter into the body. Thorough cleanliness is essential to prevent bad odour and to promote comfort.

Definition of Perineal Care

Perineal care is bathing the genitalia and surrounding area. Proper assessment and care of the perineal area will need professional clinical judgment.

The most pertinent principle for perineal care is to clean the perineum from the cleanest to the less clean area. The urethral orifice is considered as the cleanest area and the anal orifice is considered as the unclean area.

Purposes of Perineal Care

Perineal care is carried out to:

- Keep cleanliness and prevent infections in the perineal area
- Relieve inflammation and congestion
- Relieve pain
- Stimulate circulation
- Prevent infection and promote healing
- Prevent the spread of infection
- Make the patient comfortable

Indications for Perineal Care

Perineal care should be carried out for the following types of patients:

- Patients who are unable to carry out self care
- Patients with genitor-urinary tract infections
- Patients with incontinence of urine and stool
- Patients with excessive vaginal discharge
- Patients with indwelling catheters
- Post partum patients
- Patients after surgery on the genitor-urinary system
- Patients with injury, ulcers or surgery on the perineal area

Preliminary Assessment Before Performing Perineal Care

Before performing perineal care, a prelimary assessment must be made. You must:

- Assess the condition of the perineal skin – check for any itching, irritation, ulcers, oedema, drainage etc.
- Assess the need for and frequency of perineal care.
- Assess whether the perineal care should be done under an 'aseptic' technique or a 'clean' technique. **Remember, when there is a wound, the perineal care should be done under aseptic technique**.
- Check the physician's orders and any specific instructions.
- Assess the patient's ability for self care.
- Assess the patient's mental state to follow instructions.
- Check the articles available in the unit.

Articles Required for Perineal Care

The articles required for perineal care are:

- Gloves (non-sterile) (1 pair)
- Sponge cloth (1)
- Basin with warm water (1)
- Waterproof pad or gauze
- Towel (1)
- Mackintosh (1)
- Soap dish with soap (1)
- Toilet paper
- Bed pan (1): As required

Procedure for Perineal Care

- Take a look at the steps for carrying out perineal care:

1. Arrange all the equipment.
2. Explain the procedure to the patient.
3. Perform hand hygiene and wear gloves.
4. Provide privacy to the patient by closing the door or by putting the screen.
5. Position the patient. Uncover the patient's perineal area.
6. Place a mackintosh and towel (or waterproof pad) under the patient's hips.
7. Cleanse the thigh and groin by:
    - Making a mitt with the sponge cloth.
    - Cleansing the patient's upper thighs and groin area with soap and water.
    - Rinsing and drying.
    - Washing the genital area.

Female Patient (Fig A)

a. Use a separate portion of the sponge towel for each stroke.

b. Change the sponge towel as necessary.

c. Separate the labia and cleanse downward from the pubic to the anal area.

d. Wash between the labia including the urethral meatus and vaginal area.

e. Rinse well and pat dry.

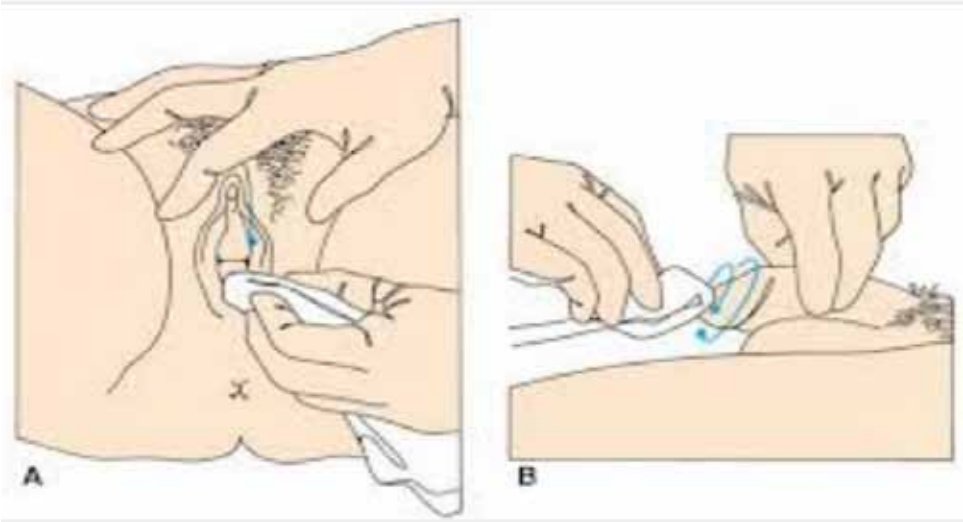


Fig: Performing perineal care

Male Patient (Fig B)

a. Gently grasp the patient's penis.

b. Cleanse in a circular motion moving from the tip of the penis backwards toward the pubic area.

c. In an uncircumcised male, carefully retract the foreskin prior to washing the penis.

d. Return the foreskin to its former position.

e. Wash, rinse, and dry the scrotum carefully.

8. Assist the patient to turn on his or her side. Separate the patient's buttocks and use toilet paper, if necessary, to remove fecal materials.

9. Cleanse the anal area, rinse thoroughly, and dry with a towel. Change the sponge towel as necessary.

10. Apply skin care products to the area according to need or doctor's orders.

11. Return the patient to a comfortable position.

12. Remove your gloves and perform hand hygiene.

13. Document the procedure, describing the patient's skin condition. Sign the chart.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is perineal care? List down the purposes of perineal care.

2. Note down any three indications for performing perineal care.

3. As a GDP what are the main preliminary assessments that you will do before performing perineal care?

4. Write down the steps for cleaning the female perineum.

5. Write down the steps for cleaning the male perineum.

Worksheet

1. *Tick the correct answer.*

a. Perineal care is the procedure of:

i. Cleaning the rectum

ii. Cleaning the vagina and urinary meatus

iii. Cleaning the genitalia and the surrounding area

iv. Cleaning the genetalia

b. The main principle of perineal care is to clean the perineum:

i. From the less clean area to the cleanest area

ii. From the cleanest area to the less clean area

iii. At the centre

iv. Sideways

c. The part of the perineum that is considered the cleanest area is the:

i. Urethral orifice

ii. Anal orifice

iii. Vagina

iv. Groin

d. In the presence of a wound in the perineum, perineal care is considered a:

i. Clean procedure

ii. Septic procedure

iii. Aseptic procedure

iv. Unclean procedure

e. When performing perineal care for a female patient, clean the perineum:

i. Downwards from the pubic area to the anal area

ii. Upwards from the anal area to pubic area

iii. From the labia majora

iv. Upwards from the pubic area

.

Notes

Proper Disposal of Urinary Wastes

At the end of this module, you will be able to:

- Assist the patient in the proper usage of the urinals
- Dispose urinary wastes excreted by immobile patients
- Measure and report urinary output

Session Plan	
1	Pre-requisite Knowledge
2	Module Overview
3	Removal of wastes excreted by Urination
4	Placing the Urinal for use by a patient
5	Measuring the Urine Output
6	Precautions to be Taken While Assisting in Urination
7	Key Learnings
8	Worksheet

Pre-requisite Knowledge

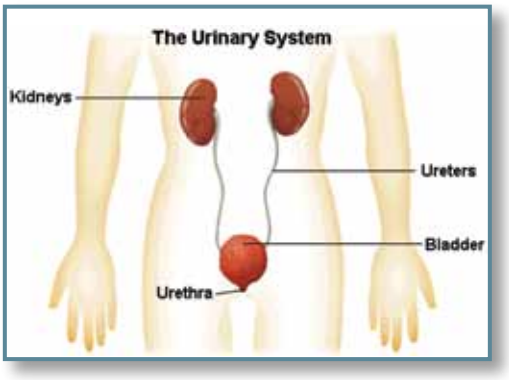
- Equipments used for managing waste elimination

Module Overview

The urinary system of the human body functions as the body's filtering system, wherein it removes all the toxic waste materials along with excess water in the body. The accumulation of wastes, if not removed, may lead to medical complications. You must help the patient in the process of urination. In this module, you will learn the importance of waste elimination by urination and the procedure to use the urinal.

Elimination of Wastes by Urination

The kidneys are the central units of the excretory system. The blood carrying the waste materials enters the kidneys where they are filtered out and removed from the body with excess water in the form of urine.



Urine is filled up in the urinary bladder which opens into the genital area through the urethra. When the bladder is full, the patient develops an urge to empty the bladder. If the bladder is not emptied then it can lead to extreme discomfort of the patient.

When the patients express the need to empty the bladder, you must immediately facilitate for the same. You must help the patient to the toilet if the patient can walk. If the patient cannot walk, then you must arrange for the equipment for the passage of urine by the bed.

The urine output of a patient in a day is critical to understand the functioning of the kidneys. If the kidneys are infected or are not functioning properly then the urine output is low. If the waste materials are not removed by production of urine then they can accumulate within the body leading to severe complications.

Placing the Urinal for Use by a Patient

The urinal is an equipment used for a male patient and is designed to facilitate the passage of urine by the patient in the confines of the bed.

The urinal can be used in the following steps:

Step 1

Explain to the person that you are going to help him use the urinal. This can ease any fear or uncertainty he may have.

Step 2

Raise or level the bed as necessary. For example, some patients may desire to have the head of the bed raised. Others may require the knee part of the bed to be lowered or leveled.

Step 3

Bring the urinal to the patient inserted in a paper cover. Screen the patient and give the urinal directly to him, placing the cover on the seat of the chair.

Step 4

Ask the person to put the urinal between the legs. Assist the patient as needed; for example, adjust his pajama, trousers or position the urinal properly.

Step 5

Position the urinal and hold it gently while the person urinates.

Step 6

Instruct the patient to signal when finished.

Step 7

On signal, return promptly, bringing a basin of warm water.

Step 8

When the person is done, carefully remove the urinal. Gently wipe between the legs with a damp washcloth.

Step 9

Assist the patient to wash his hands.

In case of female patients the same procedure can be followed with the use of a bed pan in place of a urinal. Some patients are not in a state to express their need to urinate. In such cases a catheter is inserted directly into the urinary bladder and the urine is collected in a bag attached to the catheter tube. The catheter is a tube that is inserted by the doctor or the nurse and should be regularly monitored to check for infections.

Measuring the Urine Output

It is important to measure the urine output of a patient in a day as it indicates the normal functioning of the kidney. You must help the nurse in measuring and reporting the urine output in a day. In order to measure the urine output you must collect the urine from the urinal or the catheter bag in a measuring cup and hand it over to the nurse.

The nurse records the amount of urine that is collected and makes note of the same. The nurse also keeps a record of the fluids that are taken by the patient. The fluids taken up by the patient and the urine that is excreted should be balanced. If the urine output is low and fluid intake is normal, then the kidneys are not functioning properly. In some cases, where the patient is suffering from heart problems, the kidneys might be unable to produce urine properly. If urine output is low, then it must be reported to the doctor immediately as it can become a medical emergency.

Precautions to be Taken While Assisting in Urination

- Once the urine is passed from the body, it should be drained out immediately.
- Urine should not accumulate anywhere in the surroundings of the bed or the room. It can lead to infections with severe complications. You must take proper hygiene measures to prevent infections arising out of urine that is accumulated.
- In case of patients who are able to move, help the patients by keeping the toilet ready to use when they express the need to use. Instruct the patient not to latch the door from inside of the toilet, as you cannot enter the toilet if the patient needs help.
- Maintain the privacy and dignity of the patient.
- Explain the process of urination with the help of the equipment and cover the patient appropriately while they are urinating.
- In case the patient has passed urine on the bed, gently clean the bed and change the clothes of the patient. Ensure that the patient is not embarrassed.

- Always wear gloves while assisting the patient in urination or while collecting the urine to measure the output.
- Dispose off any urine that is collected into the toilet and ensure that all the equipment is thoroughly cleaned and sanitized.
- In many cases urine accumulation can lead to bad smell. Open the windows and ensure that the air is cleared from time to time.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is the importance of eliminating wastes from the body?

2. What are the steps you are going to follow while assisting the patient in using a urinal?

3. What is the importance of measuring urine output?

4. What are the precautions you must take while assisting in urination?

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   What is the role of General Duty Assistant in measuring urine output?

   a. Recording the urine collected

   b. Collect the urine in a measuring cup

   c. Measuring the fluid intake

   d. None of the above

2. *Read the following question. Tick on the correct option given below.*

   A patient is not in a state to show his need to urinate. What is the equipment that can be used facilitating the waste elimination process of such a patient?

   a. Urinal

   b. Bed pan

   c. Urinary catheters

   d. All of the above

Notes

Measuring Vital Signs

S No.	Module Name
1	Importance of Vital Signs and Measuring Radial Pulse
2	Measuring Body Temperature
3	Measuring Blood Pressure
4	Measuring Breathing Rates

Course Overview

The general health condition of a patient is measured using parameters that indicate the heart rate, blood flow, body temperature and the oxygen supply. These four parameters are described as the "Vital Signs". These vital signs are measured from time to time to understand the status of the patient's health. Increase or decrease in these measurements can lead to medical emergencies.

Course Objectives

After completing this course, you will be able to:

- Identify the different vital signs that need to be measured
- Assist the nurse in assessing the vital signs of a patient
- Identify and arrange the equipment that is need to measure a vital sign
- Measure radial pulse and body temperature and report the same

Importance of Vital Signs and Measuring Radial Pulse

At the end of this module, you will be able to:

- Identify the various signs that need to be measured
- Measure and report the radial pulse

Session Plan	
1	Module Overview
2	Vital Signs
3	Equipments Used for Measuring Vital Signs
4	Pulse Rate
5	Measuring Radial Pulse Rate
6	Key Learnings
7	Worksheet

Module Overview

Vital signs are statistics that indicate the proper functioning of the human body. Vital signs are the first thing to be checked by a doctor to understand the status of the health condition. As a General Duty Assistant, you will be expected to track the health conditions of the patient. Monitoring the vital signs of the patient will give you a fair idea of the patient's condition. But before that you must know the different vital signs that indicate the patient's health and how to measure the vital signs. This module lists all that for you.

Vital Signs

There are four important vital signs:

- **Pulse** is the representation of the heartbeat. It indicates the functioning of the heart and the flow of blood in the body.
- **Body temperature** - any abnormality in the body temperature level indicates presence of an infection. The normal human body temperature is 37 ^{o} C or 98.6 ^{o} F.
- **Blood pressure** - indicates the pressure exerted by blood on the blood vessels. Abnormal blood pressure can be harmful to body functioning.
- **Breathing rate** - also called respiratory rate, indicates the functioning of the lungs. Abnormal breathing rate is observed when the body requires oxygen.

Equipments Used for Measuring Vital Signs

To measure the vital signs, there are some basic instruments that you require. They are:

- **Thermometer** - to measure the body temperature.

- **Stethoscope** - is used to listen to the internal sounds of the body such as heart beat or breathing sounds.

- **Blood pressure apparatus** - also called sphygmomanometer, is used to measure the blood pressure.

Pulse Rate

Pulse rate represents the number of heart beats that are palpitated in one minute. Measuring the pulse can give an important indication about the patient's heart. Abnormal pulse rate like very low pulse rate or very high pulse rate is considered to be a medical emergency. For healthy adults the pulse rate should be in the range of 60 to 100 beats per minute, with an average pulse rate at 72 beats per minute.

Pulse can be measured at many places of the body, such as:

- Radial pulse observed at the wrist
- Carotid pulse observed at the neck
- Brachial pulse observed near the elbow
- Popliteal pulse observed behind the knees
- Dorsalis pedis observed on top of the foot

The radial pulse rate is the quickest and accurate measure to understand the pulse rate.

Measuring Radial Pulse Rate

As a General Duty Assistant, you must be able to measure the radial pulse rate of an individual at rest.

Step 1

First, prepare the patient to rest. If the resting heart rate must be taken, ensure that the patient has been resting for at least 10 minutes.

Step 2

Ask the patient to stretch his hand.

Step 3

Place fingertips of the 3 middle fingers over the patient's wrist. Make sure your fingers are flat.

Step 4

Finally, press lightly against the wrist until you feel the pulse.

Step 5

Once you find the pulse, count the beats for 1 full minute using a watch. The number of beats counted is the radial pulse rate of the individual. In case the pulse rate is found to be abnormal, repeat the process and measure the pulse rate again.

Step 6

If the rate remains abnormal, report the same to the attending nurse or the doctor immediately.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. List the vital signs of a human body.

2. List the equipments used to measure vital signs of our body.

3. What is pulse rate?

4. How do you measure pulse rate?

Worksheet

1. *Read the following question. Tick on the correct option.*

   What is pulse rate?

   a. Number of heart beats in a minute

   b. Number of breaths taken in a minute

   c. Number of lung beats per minute

   d. None of the above

2. *Read the following question. Tick on the correct option.*

   Which of the following is considered to be a vital sign?

   a. Blood sugar level

   b. Blinking rate

   c. Body temperature

   d. None of the above

3. *Read the following question. Tick on the correct option.*

   What is the normal range of pulse rate of a regular adult human being?

   a. 60-100 beats per minute

   b. 120-140 beats per minute

   c. 30-50 beats per minute

   d. 150-180 beats per minute

4. *Read the following question. Tick on the correct option.*

   How much time do you need for counting pulse?

   a. 60 minutes

   b. Half a minute

   c. 30 seconds

   d. 1 minute

Notes

Measuring Body Temperature

At the end of this module, you will be able to:

- Measure the body temperature of the patient using the oral method
- Report high and abnormally low temperature

Session Plan	
1	Module Overview
2	Importance of Body Temperature
3	Equipments Used for Measuring Body Temperature
4	Measuring Body Temperature Using the Oral Method
5	Reporting Abnormal Body Temperature
6	Key Learnings
7	Worksheet

Module Overview

One of the common vital signs which indicates abnormal body functioning is the abnormal change in body temperature. Rise in body temperature usually indicates infection. Therefore, monitoring the body temperature of the patient can give an idea of the patient's health. As a General Duty Assistant, you will have to monitor the temperature of a patient regularly in order to evaluate the health condition of a person. In this module, you will learn how to measure the temperature of a patient and the measures you should take in case of abnormalities.

Importance of Body Temperature

Body temperature is a measure of the body's ability to regulate heat. The body is very good at keeping its temperature within a narrow, safe range in spite of large variations in temperatures outside the body. The human body functions normally in a specific range of temperature. If the body temperature is steady, the body functions normally. If it is either high or low, it means you are not normal and that you need medical attention. Body temperature is measured in degrees Fahrenheit (F) and degrees Celsius (C). The normal body temperature for a healthy person is 98.6 degrees Fahrenheit or 37 degrees Celsius. It may also be 1 ^{o}F (0.6 ^{o}C) above or below 98.6 ^{o}F (37 ^{o}C). The body temperature is normally measured using a thermometer.

The most common places for measuring body temperature are:

- Mouth
- Ear
- Forehead
- Armpit (also called axillary method)
- Rectum

Equipments Used for Measuring Body Temperature

Body temperature is measured using a thermometer. In the hospital, body temperature is measured using a clinical thermometer. Clinical thermometers are of two types.

- Liquid Filled
- Electronic

The traditional thermometer is a glass tube. It has a bulb at one end. The bulb contains a liquid which is often mercury. The liquid expands with a rise in the temperature. The glass wall of the thermometer is calibrated to indicate the temperature levels. The bulb of the thermometer is inserted into a body part to measure the temperature.

Let us now learn the procedure to measure and report the body temperature using the oral method.

Measuring Body Temperature Using the Oral Method

We can measure body temperature by placing the bulb of the thermometer in the mouth. This method is known as the oral method. The oral method is the most common method of measuring body temperature. As a General Duty Assistant, you must be able to measure the body temperature using the oral method.

Follow the given steps for measuring body temperature using oral method.

Step 1

Wash the thermometer in water under normal room temperature.

Step 2

Ensure that the reading of the mercury level is below the 95 ^{o} F mark.

Step 3

Reset the mercury level below the 95 ^{o} F level by shaking it vigorously.

Step 4

Place the bulb thermometer under the tongue. Ask the patient to close the lips tightly around it. The person must be able to breathe through the nose. Keep the thermometer in the mouth for a minute. Use a watch to measure the time.

Remember, in order to get an accurate reading, you must ensure that the patient breathes through the nose while you take the temperature.

Step 5

Remove the thermometer from the mouth and note the reading.

Step 6

Clean the thermometer in water under normal room temperature.

Remember that thermometers must always be cleaned before and after use. As the thermometer comes in direct contact with bodily fluids (saliva, sweat) it may be contaminated with germs. If it is used by some other person then the germs may spread. Therefore, it is very important to clean the thermometer after every use.

Reporting Abnormal Body Temperature

The normal temperature for a healthy person is 98.6 degrees Fahrenheit or 37 degrees Celsius. Temperature can vary, normally by as much as 1 ^{o}F (0.6 ^{o}C) during a day. Body temperature is said to be abnormal if it is less than 98 degrees Fahrenheit or more than 99.4 degrees Fahrenheit. The term “fever” is given when the temperature of a person rises above 100 degrees Fahrenheit. If the temperature is above 103 degrees Fahrenheit, it is called “high fever”. When the temperature is lower than 95 degrees Fahrenheit (35 degrees Celsius), it is called “hypothermia”.

You must report abnormally high and low temperatures immediately to the doctor as they are both medical emergencies.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is the importance of monitoring body temperature?

2. What is the structure of a thermometer?

3. What are the steps to measure body temperature of a patient using the oral method?

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   What is the normal body temperature of human being?

   a. 98.6 º C

   b. 98.6 º F

   c. 37 º F

   d. 38 º F

2. *Read the following question. Tick on the correct option given below.*

   What is axillary method?

   a. Taking rectal temperature

   b. Taking temperature in the mouth

   c. Taking temperature under armpit

   d. All of the above

3. *Read the following question. Tick on the correct option given below.*

   Which liquid is use in a thermometer?

   a. Water

   b. Glass

   c. Silver

   d. Mercury

4. *Match the columns.*

Body Temperature	
a.	Less than 95 degrees Fahrenheit
b.	More than 100 degrees Fahrenheit
c.	98º6 degrees Fahrenheit
d.	More than 103 degrees Fahrenheit

Medical Condition	
i.	Normal body temperature
ii.	High fever
iii.	Fever
iv.	Hypothermia

Notes

Blood Pressure

At the end of this module, you will be able to:

- Assist the doctor or nurse while measuring the blood pressure of a patient.

Session Plan	
1	Pre-requisite Knowledge
2	Module Overview
3	Blood Pressure
4	Equipment for Measuring Blood Pressure
5	Measurement of Blood Pressure
6	Role While Measuring Blood Pressure
7	Key Learnings
8	Worksheet

Pre-requisite Knowledge

- Important vital signs of human body
- Functioning of the circulatory system of the human body

Module Overview

Blood carries essential nutrients and oxygen to the different parts of the body including the brain. If the blood does not reach some of the organs like the brain, liver or the kidneys these organs fail to function normally. The blood is pumped by the heart to all the organs and it is continuously flowing within the system. The blood flows to different parts of the human body through arteries and veins. Blood exerts a pressure on the walls of these vessels. This is known as Blood Pressure. If blood pressure is not in a normal range level then, it can lead to abnormal functioning of the body. As a General Duty Assistant, you will be expected to assist the nurse or the doctor in monitoring the blood pressure of a patient to evaluate his medical condition. This module, tells you the importance of blood pressure, steps to measure blood pressure and steps that needs to be taken on your part incase of any abnormalities.

Blood Pressure

During each heartbeat, the heart pumps blood to different parts of our body. Blood flows to different parts of our body within blood vessels and exerts certain pressure on the wall of the vessels. This pressure is known as **blood pressure.** An increase in the blood pressure can damage the body organs

and a decrease in the blood pressure results in insufficient supply of blood to the body organs. The vessels may break leading to haemorrhage (blood clots), further leading to death of a person. Also, low blood pressure indicates that blood flow to the organs is not adequate. Therefore, blood pressure is a good indicator of the person's health as it indicates the flow of blood to the various organs.

During each heartbeat, blood pressure varies between a maximum (systolic) and a minimum (diastolic) pressure. A person's blood pressure is usually expressed in terms of the systolic pressure over diastolic pressure (mmHg), for example 140/90.

The normal range of blood pressure in a regular adult is in the range of 110/65 to 140/90.

Equipment for Measuring Blood Pressure

Blood pressure is measured using sphygmomanometers or the BP apparatus. The BP apparatus comprises a pressure cuff which is wrapped around the arm of the patient. The pressure cuff is attached to the hand bulb. The hand bulb pumps air into the pressure cuff. A release value on the hand bulb controls the air pumped into the cuff. The pressure cuff is attached to the mercury gauge through rubber tubing .The mercury level keeps rising as the hand bulb pumps air into the pressure cuff. The BP apparatus is used along with a stethoscope which is used to hear sounds that are generated in the vessels as the blood flows. The drum of the stethoscope is placed under the pressure cuff on the arm.

Let us now observe how the blood pressure is measured.

Measurement of Blood Pressure

These are steps for measuring the blood pressure of a patient.

- First, the patient is relaxed and is comfortably positioned on the bed.
- The patient extends the arm. The cuff of the BP apparatus is wrapped around the patient's upper arm.
- The drum of the stethoscope is placed under the pressure cuff. The sound of the blood flow is heard when the drum is placed.
- The hand bulb is used inflate the cuff to create maximum pressure. This is indicated in the mercury gauge by the rise in the level of mercury.
- The doctor inflates the pressure cuff until the sounds of blood flow stop. Now the pressure cuff is deflated by using the release valve of the hand bulb and the pressure drop is indicated by the mercury level.
- The reading of the mercury level is noted when the first sound is heard on the stethoscope.
- The pressure cuff is deflated until the normal blood flow sounds are heard again. The reading of the mercury level is noted when the blood flow sounds are heard normally.
- The pressure cuff is removed from the arm of the patient and the patient is asked to relax.

The level of the mercury noted when the first sound is heard is equal to the maximum blood pressure or the systolic blood pressure. The level of the mercury noted when the blood flow sounds are heard normally is equal to the minimum blood pressure or diastolic blood pressure.

Role While Measuring Blood Pressure

As a General Duty Assistant, you must ensure that the patient is relaxed and positioned on the bed. Arrange the equipment needed for measuring blood pressure. Hand over the equipment to the doctor as and when asked.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is blood pressure? What is the normal range of blood pressure in the human body?

2. How is blood pressure denoted?

3. What are the different components of a BP apparatus?

4. What are the steps to measure blood pressure?

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   What is the other name of BP apparatus?

   a. Stethoscope

   b. Sphygmomanometers

   c. Sphygamometer

   d. None of the above

2. *Read the following question. Tick on the correct option given below.*

   What of the following is not a part of a BP apparatus?

   a. Hand bulb

   b. Pressure cuff

   c. Hearing drum

   d. Mercury gauge

3. *Read the following question. Tick on the correct option given below.*

   If the diastolic pressure of a patient is 60 and systolic pressure is 180. How will you represent the patient's blood pressure?

   a. 60/180

   b. 180

   c. 180/60

   d. a and c

4. *Read the following question. Tick on the correct option given below.*

   What is the normal range of blood pressure for a regular adult?

   a. 70/80-80/90

   b. 40/60-50/50

   c. 90/30-60/30

   d. 110/65- 140/90

Notes

Measuring Breathing Rate

At the end of this module, you will be able to:

- Observe the breathing status of the patient
- Report abnormally high and low breathing rates

Session Plan	
1	Pre-requisite Knowledge
2	Module Overview
3	Breathing Rate
4	Measuring Breathing Rate
5	Abnormal Breathing Rate
6	Key Learnings
7	Worksheet

Pre-requisite Knowledge

- Important vital signs of human body

Module Overview

Oxygen is important for the functioning of the body organs. Organs fail to function if oxygen is not supplied to them continuously. Oxygen is present in the air. Oxygen enters ours body, when we breathe in air, it is absorbed from air by the lungs. The process by which air enters in and out of the body is called breathing.

Breathing rate is considered to be a vital sign as it indicates the flow of oxygen into the body. General Duty Assistants are expected to observe the breathing rate of a patient in order to evaluate the patient's health condition. In this module, you will learn how to observe the breathing rate of a patient and measures you must take in case of any abnormalities.

Breathing Rate

Breathing is a process of taking in breath which we call inspiration and letting out breath which we call expiration. When we breathe in air, the lungs get filled with air. The lungs absorb the oxygen in the air inhaled. The blood then carries this oxygen and supplies it to all parts of the body. Breathing rate is the number of breaths a person takes in a minute. Measuring breathing rate is a good way to check on the supply of oxygen within the body. Normal breathing rate for adults is 12 to 20 breaths per minute.

Measuring Breathing Rate

The most common method of measuring breathing rate is by physical examination of the patient for a minute. Follow these steps:

Step 1

Seat the patient comfortably on the examination stool.

Step 2

Ask the patient to breath normally. Observe the number of chest expansions.

Step 3

Measure the breathing rate by counting the number of chest expansions in one minute.

Abnormal Breathing Rate

The normal breathing rate of a healthy person is 12 to 20 breaths per minute. If the breathing rate is higher than 20 breaths per minute it indicates that the oxygen supplied to the body parts is inadequate. Lower breathing rate indicates the abnormality of the functions of the lungs. Both high and low breathing rates need medical attention. You must report them to the doctor immediately.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is breathing? What is the normal range of breathing rate?

2. What are the steps to measure breathing rate?

Worksheet

1. *Read the following question. Tick on the correct option given below.*

   What is the normal breathing rate of a normal adult?

   a. 12 to 20
   b. 25 to 27
   c. 8 to 10
   d. None of the above

2. *Read the following question. Tick on the correct option given below.*

   What is breathing rate?

   a. Number of breaths in 5 minute
   b. Number of breaths in 1 minute
   c. Number of breaths in 1 second
   d. None of the above

3. *Read the following question. Tick on the correct option given below.*

What is meant by expiration?

a. The air we breathe in

b. The air we breathe out

c. Both a and b

d. None of the above

Notes

Measuring the Height and Weight of a Patient

At the end of this module, you will be able to:

- define height and weight;
- list down the purposes of measuring height and weight;
- observe the key points which are to be kept in mind before taking height and weight;
- list down the articles required for measuring height and weight;
- perform the procedure for measuring height and weight.

Session Plan	
1	Module Overview
2	Definition of Height and Weight
3	Purposes of Measuring Height and Weight
4	General Instructions Before Taking Height and Weight
5	Articles Required for Measuring Height and Weight
6	Procedure for Measuring Height and Weight
7	Key Learnings
8	Worksheet

Module Overview

Body measurements have been used as nutritional indices for many years. Some, such as height, are associated with previous nutritional conditions, while others reflect more recent nutritional status. Some measurements can distinguish between fat and fat-free mass, providing separate information about energy and muscle protein stores.

Height and weight measurements are routinely measured for most patients during their admission to a health care facility. An accurate measurement of height and weight is essential for calculating doses of drugs, contrast agents and assessing the nutritional status of the patient.

Weight can be measured with a standing scale, chair scale or bed scale. Height can be measured with a measuring bar on a standing scale, using a ruler or tape measure for a supine patient.

Definition of Height and Weight

Height is the measurement taken from crown to heel after ensuring that the neck, hip joint and knees of the client are extended and weight is the heaviness of the person.

Purposes of Measuring Height and Weight

Height and weight are measured to:

- Monitor a person's growth and development
- Determine the maintenance of health
- Estimate the rate of growth in a child
- Detect any deviations in a child's growth
- Correlate height / weight with general health

General Instructions Before Taking Height and Weight

Before taking a person's height and weight, certain general instructions must be followed:

- The calibration of the weighing scale must be done from time to time.
- The weighing scale must be accurate. The zero error should be removed before taking weight.
- The baby scale's platform must be safe and secure to prevent the child from falling.
- The mother or nurse must stay with the child when he is being weighed to prevent falling.
- The weight must be recorded properly.
- An expert should check the scale periodically for accuracy.

Articles Required for Measuring Height and Weight

To measure height and weight, the following articles are required:

- Scales with a height rod / height measuring apparatus
- Tape measures or measuring rod
- Weighing machine / Weight balance / Weighing scale
- Pen / Pencils / Chalk to mark
- Height and weight record sheet.

Procedure for Measuring Height and Weight

The procedure for measuring weight is as follows:

To weigh a patient:

- Explain the procedure to the patient being weighed.
- When weighing children, explain the procedure to the mother.

To weigh an infant:

- Place a clean paper or plastic sheet on the platform of the scale and balance the scale.
- Place the child on the platform.
- Read the weight after balancing and record it on the infant's chart.
- Tell the mother the recorded weight and show / tell how much weight the child has gained or lost.

Fig: Infantometer

Fig: Weighing scale used for weighing the weight of a newborn

To weigh children and adults:

- Balance the scale / weighing machine.
- Instruct the person to stand on the middle of the platform of the weighing machine.
- In case of a scale, move the bar to the right or left until the scale balances.
- Read the scale or the reading on the weighing machine.
- Record the weight on the chart immediately. Tell the person his weight.

The procedure for measuring height is as follows:

To measure the height of a newborn / infant:

- Place the tape measure or measuring rod on a table or firm surface and place the infant alongside the measure. Hold the head and heel firmly and note the reading

Or

- Place the infant on a white cloth or paper, hold the head and feet in a straight line; have someone mark the position of the head and heel; place the tape measure on the marked area and read the length.

To measure the height of school children and adults:

- Instruct the person to stand against the height rod, with his feet together, with his back towards

the height rod, arms and hands adducted, head erect and eyes straight.

- Place a flat board or ruler on top of his head and read the figure appearing at the point where the ruler touches the head.
- Read out the height to the person and record it.

Fig: Weighing scale used for school going children and adults

Fig: Measuring height

Special points to remember:

1. Measure the height at eye level.
2. Check the things needed to measure the height and weight for accuracy and working conditions before starting the procedure.
3. Extra clothing should be removed before weighing, e.g. coat, shoes, etc.
4. The weighing scale / machine and the measuring rod / scale should be placed in a well lit area.
5. While weighing, be sure that the person does not touch anything and that nothing touches him.
6. Write down the height and weight immediately in the record and compare it with the previous record to report correctly.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Write down the purposes of measuring height and weight.

_____

_____

_____

2. Name the Instruments which are used for measuring height and weight.

_____

_____

_____

3. List down the purposes for measuring the height and weight of a patient.

4. Describe the procedure for weighing an infant.

5. Describe the procedure for measuring the height and weight of school age children.

Worksheet

1. Tick the correct answer.

a. An accurate measurement of height and weight is essential for calculating:

i. Drug dosage

ii. Contrast to be used for investigation

iii. Nutritional assessment of a patient

iv. All of the above

b. Before taking the weight of a patient, the weighing scale should be kept at a reading of:

i. Zero

ii. Anywhere the weighing scale shows

iii. Between 1 and 2

iv. 10

c. Identify the right method of measuring height from the following pictures:

i. 

ii. 

Notes

Medical Record Documentation

At the end of this module, you will be able to:

- describe the purpose for documentation;
- document in a complete, correct, timely, legal and professional manner;
- list some of the aspects of care that must be documented.

Session Plan	
1	Module Overview
2	Method of Doing the Documentation
3	Complete Documentation
4	Correct Documentation
5	Timely Documentation
6	Legal Documentation
7	Professional Documentation
8	Key Learnings
9	Worksheet

Module Overview

Medical records are legal records that must be done in a very careful legal way. They must also be used in a legal way. Medical records:

- tell us and all the other members of the health care team about a patient, his or her care and treatments.
- tell us facts about the patient.
- help people like the doctor and the nurse, to make good decisions about the patient and his or her care.
- help us to find out how the care that is being given is helping the patient.

Method of Doing the Documentation

Documentation of records must be:

- Complete
- Correct
- Timely
- Legal
- Professional

Hospitals and nursing homes use many kinds of forms and ways to document the care that patients get. Daily care and hygiene in some places is written on a flow sheet form. In other places this care is written in a progress note. In still other hospitals and nursing homes, this daily care is put into a computer. Many hospitals and nursing homes now use computers. They do not use paper forms any more.

One must follow the rules that are in place at their own hospital or nursing home. Ask the nurse if you are not sure of where you should write about your patient or resident.

Complete Documentation

Documentation must be complete. You must record everything that you do and everything that you observe.

All care and all treatments must be recorded. You must also record all your observations of the patient. You must record all the things that you see, feel, and hear, especially if they are not normal and / or not normal for the patient that you are taking care of. You have to document EVERYTHING. If it is NOT documented, it was NOT done. So, if you have done it, take the time to document it.

If you gave your patient a complete bed bath and the patient told you that he has a headache, you must record the fact that you have given the patient his bath and that he has told you that he has a headache. You should also tell the nurse about the head pain as soon as possible. This observation, and all other observations that are not considered normal, must be reported to the nurse right away. It should also be written in the patient's medical record as soon as possible.

Nursing assistants must document the following:

- Baths
- Showers
- Oral care
- Denture care
- Foot care
- Hair and nail care
- Urinary catheter care
- Back care
- Turning and positioning
- Meal intake
- Fluid intake
- Activities like walking
- Range of motion exercises if done
- Warm soaks
- Cold applications
- Talks that you have had with the patient or resident and family members.

Some of the observations that nursing assistants must document are:

- Level of consciousness
- Orientation to time, place and person

- Height
- Weight
- Urinary drainage bag output
- Temperature
- Pulse
- Respiration rate
- Blood pressure (if you can take it)
- Blood glucose readings (if you can take it)
- Colour of the skin,
- Warmth and characteristics of skin (wet, dry, etc.)
- Things that the patient says
- Things that the patient communicates to you, like a frown which may mean they are angry or in pain
- Behaviours like anger and yelling
- All other things that you see, hear or feel, especially if it is not normal

Correct Documentation

All of your documentation in the patient or resident chart must be correct. If a patient's temperature was 101.4 at 2:30 pm, the reading and the time that it was taken must be written in the correct way. You should not write that it was taken at 2 pm if it was taken at 2:30 pm. And you should not write that it was 101 degrees when it was 101.4.

You must also write only those things that you actually do, see, hear or feel.

You should not write, "The resident is lazy today." This may not be true. You did not see "lazy". You thought that the person may be lazy, but you did not see or hear the patient being lazy. It may not mean that the patient is "lazy" when you see them sleep most of the day. The patient could be very ill. Or, it may be that the patient did not sleep at all the night before because the other patient in the room was noisy all night.

Instead, you should write, "The patient slept from 8 am until 12 noon and was only awake when vital signs were done at 10 am" or, if the patient says he is feeling lazy, you should write and report that the patient said, "I am feeling very lazy today".

Timely Documentation

Documentation must also be done on time. It must be done in a timely manner. It must be done as soon as possible because documentation is used to communicate about the patient or resident. It must be ready to see and ready to use for decisions. You should NOT wait until the end of the shift to do it. It is a very important part of care. Take the time to document and report as often as needed.

For example:

> You are taking care of an 82-year-old resident with Alzheimer's disease. You see that this resident has suddenly become loud, angry and hostile towards other residents during breakfast in the dining room. This person has never been like this before. This is a new thing for this resident.
>
> You do NOT report or record this observation. You planned on documenting it at the end of the shift. Later in the day, this resident hurts and injures a visitor with punches and slaps during an afternoon group activity.

Could this injury have been prevented?

The injury to the other person may have been prevented if the nursing assistant had reported and recorded the resident's behaviour right after it happened. The resident could have been:

- Watched more closely by the person who was running the afternoon group activity if they had know about the resident's anger and hostility that morning, or
- Given some activity in his own room, rather than being around other people that day until the problem was taken care of.

What should the nursing assistant have done differently?

All facts and findings that are NOT normal must be reported immediately and then documented in the patient's medical record. It should also be reported orally to all those who care for the patient.

The nursing assistant should have reported the resident's anger to the nurse as soon as it happened. The nursing assistant should also have written this behaviour in the resident's medical record. This communication is very important. Documentation and reporting should be done as soon as it happens. You should never wait until the end of the shift to write or report things that are not normal.

Legal Documentation

Medical records are legal documents. They must be used according to the law and the policies of your own hospital or nursing home. They must also be kept according to the law and the policies of your own hospital or nursing home.

Some things that are you should do in order to make sure that you treat these records as legal documents are:

- Use blue or black ink unless you are using a computer or your hospital uses a special colour ink for different shifts.
- Do NOT use pencil or ink that can be erased.
- Write so that it can be read clearly. There should be no sloppy writing.
- Date all of your notes.
- Write the time that you write your note.
- Sign your full name and title.
- Do NOT scribble things out if you make a mistake.
- Do NOT use “White Out” or any other thing that covers up writing.
- Write only facts.
- Do NOT chart before the fact. For example, do not check off a bath on the flow sheet until the bath is done.
- Do NOT use abbreviations unless they are accepted for use by your hospital or nursing home.
- Do NOT allow anyone to touch or look at a medical record unless they are a healthcare provider taking care of that patient.
- Keep all medical records in a safe and secure place.
- Medical records are confidential. Do not tell anyone about what is in them unless they are taking care of the person.

Professional Documentation

Documentation should also be professional. Handwriting should be neat and easy to read. Spellings should be correct. Look up the spelling of a word if you do not know how to spell it.

Also, be professional and careful with what you write. These records are not the place to air your own feelings about the patient and his or her care. For example, you should never write that "the nurse has not seen the patient all morning" or something like, "As usual, the doctor has not come to see the patient after he was called." These statements are not at all professional.

Medical records, whether or not they are on the computer and on paper, hold very important information about patients and their condition. These records must be complete, accurate, timely, legal and professional. Well done medical records help the members of the healthcare team to communicate and coordinate care.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Define documentation. Write the purpose of documentation.

_____

_____

_____

2. List down some of the care that nursing assistants must document.

_____

_____

_____

3. List down the observations that have to be documented immediately by the nursing assistant.

_____

_____

_____

Worksheet

1. *Tick the correct answer.*

   a. The nursing assistant should document his or her observation:

      i. At the end of his / her duty

      ii. Immediately after completing a procedure

      iii. When the nurse asks him / her to do so

      iv. Whenever he / she gets time

   b. Legal documentation should be written using:

      i. A pencil

      ii. Any colour pen of your choice

      iii. A blue or black colour pen

      iv. A red colour pen

2. *Mark the statements 'true' or 'false' after reading.*

   a. Medical records can be accessed by all those who want to see them.

      i. True

      ii. False

   b. You must never chart a procedure before you complete it.

      i. True

      ii. False

   c. Writing your name and signature at the end of the documentation is not important.

      i. True

      ii. False

Notes

Management of Specimens

S No.	Module Name
1	Understanding Medical Lab Testing Procedures
2	Transportation of Specimens

Course Overview

The medical lab is one of the most important departments of the hospital that facilitates the doctor in in making a correct diagnosis in a patient. Once the doctor identifies a particular condition in a patient, specimens from the patient are collected and sent to the laboratory. The laboratory is managed by a specialist along with laboratory technicians. It is equipped with various advanced equipments that identify and report the normal or abnormal functioning of a specimen. Based on the report sent by the lab, the doctor decides the treatment that needs to be given to a patient.

Course Objectives

After completing this course, you will be able to:

- Identify the different types of specimens that are collected from a patient for testing
- Assist the nurse or the lab technician while collecting the specimen
- Transport the specimen by taking necessary precautions

Understanding Medical Lab Testing Procedures

At the end of this module, you will be able to:

- Identify the various specimens that are collected for medical lab testing
- Assist the nurse or the lab technicians while collecting the specimens

Session Plan	
1	Module Overview
2	Importance of Laboratory Testing
3	Principles of Specimen Collection
4	Collection of Specimens
5	Precautions to be Taken While Collecting Specimens
6	Key Learnings
7	Worksheet

Module Overview

One of the most important steps in diagnosis of a disease in a patient is testing a sample of a body tissue or body fluid such as blood, urine or sputum. This sample that is collected to understand the functioning of the body is called a specimen. The laboratory in the hospital is where these specimens are examined and the condition is reported to the doctor.

A General Duty Assistant must assist in collection of these specimens. For this he/she must know the different types of samples and the procedure to manage these specimens. In this module on "Understanding Medical Lab Testing Procedure", you will learn about the different lab specimens and how to manage lab specimens.

Importance of Laboratory Testing

Laboratory (lab) tests help doctors diagnose medical conditions, plan or evaluate treatments and monitor diseases. Laboratories use a variety of methodologies to test the samples that are collected from the patients. The laboratory scientist follows step-by-step procedures until the test result is achieved. Laboratory methods are based on established scientific principles involving biology, chemistry, and physics. The specimens that are normally collected from the patients for testing include:

- Blood (liquid or dry)
- Stool, sputum, urine
- Skin scrapping, tissue material
- Nasal secretions, throat swab
- Pus and other body fluids

Once the samples are collected and delivered in the lab, the lab uses chemicals to understand the presence of any abnormality in the collected specimen. Accurate analysis is crucial in determining the correct diagnosis, or detecting an infectious agent, so that appropriate and timely treatment can be commenced. Factors such as the correct collection technique, storage conditions and interval before reaching the laboratory, supporting information and patient details are taken into consideration before the test results are finalized. Proper specimen procurement and handling is an integral part of obtaining a valid and timely laboratory test result.

You must assist the nurse or the doctor while the sample is collected and ensure that the sample is delivered to the lab for testing.

Principles of Specimen Collection

While collecting the specimen for testing, it is important to remember the four "Right" principles that need to be followed. The specimens are collected by the nurse on the advice of the doctor. Before collecting the specimen from the patient, it is important to take consent from the patient. The four right principles are as follows:

Right Specimen

It must be reconfirmed that the specimen that is being collected is the same as ordered by the doctor.

Right Time

Certain blood tests must be obtained at specific times. For example, the sample of blood collected to test the blood sugar levels should be done at least 2 hours after the patient has consumed any food.

Right Patient

The patient's identification must be verified before collecting any specimen.

Right Method

Universal precautions such as wearing gloves must be followed while performing a procedure involving the collection of blood or any fluids.

Collection of Specimens

The procedures that need to be carried out for collecting the specimens from the patients vary according to the type of the specimen that is collected.

Blood Sample Collection

Blood specimen collection is performed routinely to obtain blood for laboratory testing. Blood is most frequently obtained by puncturing any peripheral vein. Drawing a blood sample and collecting the same for testing is skilled procedure and is often carried out by a nurse or lab technicians. Based on the amount of blood needed for testing, the sample is collected from the vein or by needle prick. Prior to obtaining blood specimens, the nurse should assess the patient, noting factors that may affect test results, including medications, pregnancy, age, and sex.

The blood is collected in a blood collection tube. Blood collection tubes come with a variety of coloured stopper caps, and may contain chemicals that preserve the sample from clotting. This colour coding of the blood collection tubes is important to categorize the test that needs to be carried out. The specimen containers should then be labelled and sent to the laboratory.

Urine Sample Collection

The purpose of obtaining a urine sample is to test for any abnormalities that may be present in the urine. The nurse records the normal urine output and checks if the patient has any difficulty in passing urine. The urine sample is collected in a sterile container by the patient if the patient is able to move.

Once the specimen is obtained, it is sent immediately for testing. If there is a delay in sending the specimen for testing, some organisms present in the urine may die while others multiply, resulting in a false reading.

Sputum Sample Collection

Sputum specimen collection is a procedure designed to collect the salivary secretions from a patient's oral cavity. The sputum samples are usually collected to diagnose infections in the respiratory tract. This procedure should not be performed if the patient is unable to take several deep breaths or cough deeply from the lungs.

Stool Sample Collection

Stool specimen collection is the process of obtaining a sample of a patient's feces for diagnostic purposes. This procedure is used to test for infectious organisms, mucus, fat, parasites, or blood in the stool. Depending on the proposed analysis of the feces, watery feces will not be suitable for conducting a test for any fat that may be present, but can be used for other analyses, such as testing for bacteria.

In addition to the above specimen collections, other specimens such as throat swabs and specialized specimen collection such as biopsy are also carried for lab testing.

Precautions to be Taken While Collecting Specimens

- Proper specimen collection and handling is crucial in obtaining a valid laboratory test result.
- Specimens must be collected in the proper tubes and containers, correctly labelled, and promptly transported to the laboratory.

- Always follow standard infection control precautions when handling specimens. For example, ensure appropriate protective equipments are used and wastes including sharps are disposed off safely and correctly.
- Make sure that the patient is aware of the instructions that need to be followed before a specimen is collected. These instructions are provided by the doctor.
- Write details of the patient such as name and sex on a label and paste it on the container immediately after taking the specimen. Do not take away and label prior to filling.

- The specimen should then be placed directly into the clear bag and then into the specimen transport container.
- Use proper containers for collection and storage. Using the wrong container often leads to erroneous results. Do not freeze specimens in glass tubes. Always use plastic containers.

Key Learnings

Summarise your learnings here. Write your answers in the spaces provided.

1. Why is lab testing important?

   _____

2. List a few specimens which are normally taken for testing.

   _____

3. Explain the principles for specimen collection.

   _____

4. Explain the ways to collect different specimens.

   _____

5. List the precautions that must be taken while collecting specimen.

   _____

Worksheet

1. *Read the following question. Choose the correct option.*

   A blood test is done by:

   a. Measuring blood cells in urine

   b. Pricking the finger

   c. Sputum collection

   d. All of the above

2. *Read the following question. Choose the correct options. There could be more than one correct answer.*

   Which of the following principle must be followed while collecting a test specimen?

   a. Specimen should be collected at right time.

   b. Specimen should be collected in the right method.

   c. Putting the correct label on the collection tube.

   d. All of the above.

3. *Read the following question. Choose the correct options. There could be more than one correct answer.*

   Which of the following steps must you ensure while collecting a test specimen?

   a. The specimen should be kept in any container as soon as possible.

   b. Specimen collection tube must be labelled with patient's name.

   c. Before collecting the sample confirm the name of the patient.

   d. All of the above.

Notes

Transportation of Specimens

At the end of this module, you will be able to:

- Transport samples from bedside to the lab

Session Plan	
1	Pre-requisite Knowledge
2	Module Overview
3	Importance of Transportation of Specimens
4	Procedure to Transport Specimens
5	Importance of Labelling
6	Key Learnings
7	Worksheet

Pre-requisite Knowledge

- Medical lab testing procedure

Module Overview

Once a sample is collected from a patient, the details of the patient have to be labelled correctly and promptly transported to the lab for testing. The samples collected should be stored properly and delivered promptly to the lab for testing. The storage methods and the delivery time for a specimen to reach the lab play an important role in giving a correct result.

As a General Duty Assistant, you will be expected to carry specimens from the point of collection to the laboratory. Therefore, for you it is very important to know the procedure of transporting specimens safely. In this module, you will learn the procedure to transport specimens and the precautions you must take.

Importance of Transportation of Specimens

A specimen might comprise of a blood, urine or a tissue sample that is tested for making a diagnosis. A vast majority of specimens are collected in one place and transported to another for analysis. The specimen should be transported to the lab as soon as possible. If we delay, the cells in the sample may get contaminated leading to wrong result. Therefore, continuous effort must be made in order to ensure proper timely transportation of clinical specimens. Full cooperation of nursing staff and others concerned with specimen collection, storage and transportation is required and can be achieved once they are made aware of the principles involved and the significance of what they are being asked to do.

As a General Duty Assistant, your role is to assist the nurse or the doctor while the sample is collected, labelled and making sure that the sample is delivered to the lab at the right time.

Procedure to Transport Specimens

The following procedure should be adopted for the transport of all specimens. These apply within hospitals and laboratories as well as for specimens sent to the reference laboratory:

- Once the sample is collected from the patient, Store the sample following the standard procedure.
- The primary container should be screwed tight, labeled and placed in an intact plastic bag. A "Bio Hazard" label should be affixed on the specimens. Bio hazard label indicates a potential danger if the contents are leaked or opened without proper protection.

- The bag should be sealed, using tape or heat sealer. Pins, staples and metal clips should not be used. A separate bag should be used for each specimen.

- Each specimen must be placed in a leak-proof secondary container with sufficient absorbent material to absorb all the contents in case leakage occurs. The secondary container should be externally disinfected.
- It is the responsibility of the assistant to ensure the correct designation, packaging, labeling and documentation of all infectious substances and diagnostic specimens in good condition.
- The efficient transport and transfer of infectious materials requires good coordination between the nurse, the assistant and the lab technician (receiving laboratory), to ensure that the material is transported safely and arrives on time. Such coordination depends upon well established communication between the three parties.

Importance of Labelling

Labelling the specimen is considered to be very important step while collecting specimens. The importance of labelling is as follows:

- Every specimen container and request form must describe the nature of the specimen, source, full patient information. It allows the laboratory staff to identify the source quickly in the event of the specimen and form getting separated.
- An additional "Danger of Infection" label must be attached to specimens and request forms for known or suspected high risk pathogens.
- If staff does not have access to such labels then the form and specimen must be clearly identified as 'Bio Hazard' (staff may wish to write in red or use a highlighter pen).
- If the specimen has 'Bio Hazard' label on it then while transporting it through rail, ship, air, the specimen is given a special packaging. The package should be certified to the standard and carry appropriate certification numbers on the tertiary packaging along with the following information:
  - BIOHAZARD - danger of infection symbol
  - Instructions on not to open if found
- Labelling plays an important role in the transportation of the correct sample to the lab for testing and is a critical step to ensure the timely delivery of the sample.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. What is importance of timely transportation of the specimens?

2. What are the steps for transportation of specimens?

3. What is the importance of labelling?

4. What are the steps to measure blood pressure?

Worksheet

1. *Read the following questions. Tick on the correct options given below. There could be more than one correct answer.*

   What is the role of the General Duty Assistant in transporting the specimen?

   a. Collecting the specimen

   b. Packaging the specimen

   c. Labelling the specimen

   d. None of the above

2. *Read the following questions. Tick on the correct options given below. There could be more than one correct answer.*

   In case, the specimen is infectious in nature then what precaution should be taken?

   a. Label saying "Danger of infection" must be attached to the specimen

   b. The packaging should be certified and carry certification number

   c. Instruction saying "Not to be opened if found" must be attached to the specimen

   d. None of the above

Notes

Care of the Dying and Care of a Dead Body

At the end of this module, you will be able to:

- define death.
- list down the purpose of the procedure.
- understand the needs of a dying patient and how to care them.
- list the articles required for dead body packing.
- perform the procedure of dead body packing.

Session Plan	
1	Session Overview
2	Definition of Death
3	Purpose of the Procedure
4	Care of Dying Patients
5	Care of a Body after Death
6	Procedure for Care of a Body after Death
7	Key Learnings
8	Worksheet

Session Overview

Birth and death are two aspects of life, which will happen to everyone. Dying and death are painful and personal experiences for those that are dying and for the loved ones caring for them. Death affects each person involved in multiple ways, including physically, psychologically, emotionally, spiritually, and financially. Whether the death is sudden and unexpected, or ongoing and expected, there is information and help available to address the impact of dying and death.

Definition of Death

Death is defined as:

1. “Cessation of heart-lung function, or of whole brain function, or of higher brain function.”
2. “Either irreversible cessation of circulatory and respiratory functions or irreversible cessation of all functions of the entire brain, including the brain stem” (The President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioural Research, US, 1983).

Purpose of the Procedure

The purpose of the procedure is to:

1. assist the patient in having a comfortable and peaceful death.
2. prevent injury to the body tissues after death.
3. prevent contamination from drainages while the body is being transferred.
4. prevent physical deformities of the body.
5. relieve mental tension of relatives.
6. console distressed relatives.
7. prevent the other patients in the ward from having traumatic experiences.

Care of Dying Patients

Dying patients exhibit signs of approaching death. These signs can be seen in the form of changes in:

Facial appearance:

Facial muscle relaxes, cheeks become flaccid, facial structure may change. Loss of muscle tone and anaemia.

Sight, speech and hearing:

Sight gradually fails; the pupils fail to react to light. Eyes are sunken and half closed and a film appears over the eyes.

Speech becomes difficult, confused, unintelligent and finally impossible. **Hearing is thought to be retained longer.**

The respiratory system:

Respiration becomes irregular, chyne-stokes rapid and shallow or very slow, and stertorous due to the presence of secretions.

The circulatory system:

Circulatory changes cause alterations in the temperature, pulse and respiration.

Radial pulse gradually fails.

The gastro-intestinal system:

Hiccoughs, nausea, vomiting, abdominal distension are seen. The gag reflex disappears; the patient feels the inability to swallow.

The genitor-urinary system:

Retention of urine, distention of the bladder, incontinence of urine and stool due to loss of sphincter control.

The skin and musculo-skeletal system:

The skin may become pale, cool and sweat profusely. Ears and nose are cold to touch: skin is pale and mottled due to congestion of blood in the veins as a result of circulatory failure.

The central nervous system:

Reflexes and pain are gradually lost. Patient may be restless due to lack of oxygen and due to raised body temperature, although the body surface is cool.

Care of a patient approaching death:

Psychological support:

There are 5 psychological stages that dying persons pass through. These are:

- Denial
- Anger
- Bargaining
- Depression
- Acceptance

The psychological needs of a dying person can be listed as follows:

1. Provide relief from loneliness, fear and depression
2. Maintain security, self confidence and dignity
3. Maintain hope
4. Meet the spiritual needs according to his religious customs
5. Provide a quiet environment
6. Screen the patient's unit to provide privacy
7. If possible, shift the patient to a single room
8. Position the patient on his side or turn his head to the side to prevent aspiration
9. Remove the blanket to reduce the weight on his body
10. Never leave the patient alone
11. Never say anything near the patient which might hurt him because no one knows how long the power of hearing remains
12. Keep the airway clean by clearing the mucous secretions ratting in the oropharynx with the help of suction. Lips and tongue should be moistened with a wet cotton swab. Water should not be poured into the mouth. Perspiration should be wiped away etc.
13. Be sympathetic to the patient's relatives and support them at the time of their emotional outbursts and reassure them.
14. When the patient ceases to breathe, note the time and inform the doctor on duty at once.

Care of a Body after Death

The signs of clinical death are as follows:

- Absence of pulse, heart beat and respirations
- Pupils of the eye becoming fixed and non-reactive to light
- Absence of all reflexes.

- Rigor mortis, a stiffening of the body after death, is due to fixation of the muscles. Rigor mortis generally appears within a few hours.

Once a person has been declared dead, his body should be cared for properly. Caring for a body after death involves:

- Making the body, especially the face, look as natural as possible
- Preventing soiling by body discharge
- Protecting other patients from unpleasant sights
- Handing over the body safely to the mortuary in charge with a complete death notification form
- Keeping all records of the patient with duplicate death notification forms ready and safe for the record section to avoid legal complications

Articles required for caring for a body after death:

The articles required for caring for a body after death are:

- Articles for a bed bath, hair care
- Clean bed sheet
- Adhesive tape (one roll) and scissors
- Mouth gag or tongue depressor
- Perineal pads / diaper
- Patient's clothes
- Cotton pads, bandages
- Big body size double layered polythene bag
- Personal protective equipments

Procedure for Care of a Body After Death

The steps for caring for a body after death are as follows:

- Ascertain that the death is declared and certified by the doctor on duty. Ensure that the necessary forms are filled and signed by the person concerned.
- Close the eyes immediately, straighten the arms laid at the sides. Straighten the legs. Any dentures that have been removed are to be replaced and the mouth is to be closed. Support the chin with a jaw bandage. The head should be elevated on a pillow.
- Keep the body in a normal position. The body should be cared for immediately after death and before rigor mortis develops.
- The body should be cared for with reverence.
- Remove all the appliances used for the patient i.e. Ryle's tubes, urinary catheter oxygen catheters, all comfort devices, blankets, drainage tubes and soiled dressings. Adhesive marks are to be removed.
- Remove ornaments of any type from the dead body: List and entrust it to a closed relative and obtain a receipt for delivery of the same. Any other belongings of the patient that was entrusted at the time of admission should also be checked and entrusted to the relatives.

- The body is bathed, hair combed and dressed in clean clothes. Pack vagina, rectum and nose with gauze or cotton. A perineal pad and diaper is applied to prevent the escape of urine and stool.
- Place three identification labels - first on the left wrist, on the chest and over the packed body with details of the name, age, sex, C. R. No., Ward, Bed No., diagnosis, cause of death, complete address, date and time of death.
- Place hands over the chest and tie the thumbs and wrists together.
- Tie the toe and ankles together.
- Place a clean bed sheet under the body. Fold the top of the sheet over the face and shoulders.
- Hold the bottom end of the sheet over the feet and then cover the body by folding the sheet from the sides and fixing it with tapes and bandages.
- Place the 3rd identification tag over the sheet. Cover with another clean sheet.
- In medico-legal cases the concerned authorities (CMO) should be notified and one extra death certificate is prepared by the doctor and sent to the mortuary / police inspector on duty.
- If the patient was suffering from an infectious disease, the body should be handled with special care to prevent the spread of infection.
- Ensure that the due payment is updated and paid. Send one copy of the death certificate to the mortuary, one to the admission office and one with a case sheet.
- The dead body must be dispatched to the mortuary within half an hour after death through the bed-lift. Enter it in the dispatch book, report book and treatment book.
- After the body is removed from the ward, the unit should be treated as in case of discharge of the patient i.e. fumigation, carbolisation, disinfection, etc.
- Make a detailed written record of all the activities undertaken in the nurse's record of the patient and also in the nurse's report book. Record time of respiration stopped and death declared with red ink. Complete the case sheets and make an entry in the dispatch book.

Special points to remember

- If the relatives want to care for the body, allow them to do so. Be kind, courteous and helpful.
- The body must be transferred from the ward to the mortuary with great care, within an hour after death.
- No dead body should be handed over to the relatives from the wards.
- Inform the relatives that:
  - The body can stay in the mortuary for 48 hours, after which it will be disposed off.
  - Arrangements for bathing the body are provided in the mortuary.
  - Arrangements for a funeral van can be made through the enquiry office on payment.
  - Death certificate can be obtained from the medical record section on written request.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Define death. What is the main purpose of "care of the dying"?

2. List down the articles required for dead body packing.

3. What are the special points to remember while doing dead body packing?

4. List down the 5 psychological stages that dying persons pass through.

Worksheet

1. *Tick the correct answer.*

a. Death can be confirmed when there is cessation of:

i. Brain function

ii. Heart and lung function

iii. Kidney function

iv. All body function

b. While providing care to a terminally ill patient, which of the following would be beneficial to support the patient's spiritual needs?

i. Do nothing

ii. Ask if they want to die

iii. Ask if they want anything special before they die

iv. Provide support, compassion, and love

c. For how many hours can a dead body remain in the mortuary?

i. 24 hours

ii. 48hours

iii. 52 hours

iv. 72 hours

d. Which sense organ functions till the end for a patient approaching death?

i. Ear

ii. Nose

iii. Smell

iv. Sight

Notes

Communication Skills

At the end of this module, you will be able to:

- understand the meaning of communication.
- list the types of communication.
- explain the communication process.
- differentiate between the different levels of communication.
- understand the factors influencing communication.
- list the barriers of communication.

Session Plan	
1	Module Overview
2	Definition of Communication
3	Types of Communication
4	Communication Process
5	Levels of Communication
6	Factors Influencing Communication
7	Barriers of Communication
8	C.L.E.A.R. Healthcare Service Model for Effective Communication
9	Key Learnings
10	Worksheet

Module Overview

Human beings are essentially social beings. Our ultimate happiness and despair is found in our relationships. Satisfaction at work, play and in family life depends largely on the quality of our interpersonal relationships. Interpersonal relationships are social associations, connections or affiliations between two or more people.

Communication is the vehicle for establishing a relationship. It is the means by which people influence the behavior of another individual. Communication is the relationship itself, because without it a relationship is impossible.

Definition of Communication

Communication can be regarded as a two way process of exchanging or shaping feelings, ideas and information that brings changes in human behaviour.

Communication is an interactive system – a series of ever changing, ongoing transactions between individuals in the environment.

Broadly, it refers "to the countless ways that humans have of keeping in touch with one another".

Types of Communication

Verbal Communication:

Verbal communication occurs through words, spoken or written. Verbal communication can take be carried out by:

- Speech
- Face to face communication
- Phone conversation
- Voice chat over internet
- Writing found in newspapers, e-mails, memos, bulletins, handouts

Nonverbal Communication:

Nonverbal communication includes the overall body language of a person. This includes:

- Body movements, postures, gestures and facial expressions.
- It can also be in the form of pictorial representations, signboards, or even photographs, sketches and paintings.

Formal Communication:

Formal communication is straightforward, official, always precise and has a stringent and rigid tone to it. It follows the lines of authority.

Informal Communication:

Informal communication is also known as grape-vine communication. It does not have any rigid rules and guidelines. Informal conversations need not necessarily have boundaries of time, place or even subjects. Examples of informal communication are gossip circles, family, friends etc.

Communication Process

Communication, which is the basis of human interactions, is a complex process. The main components of communication are:

- Sender

- Messages
- Receiver
- Feedback
- Context

There are three elements of the communication process – perception, evaluation and transmission.

- Perception: This occurs by activating the sensory end organs of the receiver. The impulse is then transmitted to the brain.
- Evaluation: When the sensory impulse reaches the brain, evaluation takes place. Personal experience allows for the evaluation of the new experience. Evaluation results in three responses:
  - A cognitive response related to the informational aspect of the message.
  - An effective response related to the emotional aspect of the message.
  - An affective response related to the emotional aspect of the message.
- Transmission: When the evaluation of the message is complete, transmission takes place. This is perceived by the sender as feedback.
- Feedback stimulates perception, evaluation and transmission by the original sender. The cycle continues until the participants agree to end it or one participant physically leaves the setting.

Levels of Communication

Intrapersonal Communication: It is a powerful form of communication that occurs within an individual. This level of communication is also called self-talk, self-verbalisation, self-instruction, inner-thought and inner-dialogue (Balzer-Riley, 1996). Positive self-talk can be used as a tool to improve a person's self esteem.

Self-instruction can provide a mental rehearsal for difficult tasks or situations so that individuals can deal with them more effectively.

Interpersonal Communication: It is a one-to-one interaction between individuals. It is the level most frequently used in nursing situations and lies at the heart of nursing practice. It takes place within a social context and includes all the symbols and cues used to give and receive meaning.

Transpersonal Communication: It is the interaction that occurs within a person's spiritual domain. Brown-Saltzman (1977) found that meditative prayers and prayers of silence are effective approaches the nurse can use in caring for self and others.

Small group Communication: It is the interaction that occurs when a small number of persons meet together. This type of communication is goal directed and requires an understanding of group dynamics. Small groups are more effective if they are of a workable size, have an appropriate meeting place, suitable seating arrangements and cohesiveness and commitment among group members (Hybels & Weaver, 1998)

Darley (2002) suggested two main principles: The first is to respect people as partners and the second is to listen actively to the other people in the group.

Public Communication: It is the interaction with an audience. It requires special adaptations in eye contact, gestures, voice inflection, and the use of media materials to communicate messages effectively.

Therapeutic Communication: It is the face-to-face process of interacting that focuses on advancing the physical and emotional well-being of a patient. It is an intentional communication and the patient feels better after the communication. This requires training. Here the nurse helps or encourages the patient to communicate perceptions, fears and anxieties.

Factors Influencing Communication

Some factors that influence communication are:

- Attitude
- Socio-cultural or ethnic background
- Past experiences
- Knowledge of subject matter
- Ability to relate to others
- Interpersonal perception
- Environmental factors
- Emotional status

Barriers of Communication

Communication may often fail due to these barriers:

- Physiological barriers: Difficulties in hearing, expression.
- Psychological barriers: Perception, distrust, emotion, preconception, past experience.
- Semantic barriers: Jargon, language.
- Environmental barriers: Noise, distance, congestion.
- Socio-cultural background: Age, gender, interest, knowledge.
- Organisational barriers: Unclear planning, structure, information overload, timing technology, status difference.

C.L.E.A.R. Healthcare Service Model for Effective Communication

Sullivan Luallin Group outlines how healthcare professionals can appropriately deliver services. Here are some of the techniques in their C.L.E.A.R. service model:

- Connect:
  - Acknowledge immediately
  - Establish eye contact and smile
  - Use the patient's name

- Use a friendly, helpful voice tone
- Say “please” and “thank you”

◆ **Listen:**

- Maintain eye contact
- Be relaxed
- Don’t interrupt
- Use “active” listening techniques
- Repeat information for accuracy

◆ **Explain:**

- Describe what’s going to happen
- Answer questions with patience
- Let patients know about expected delays
- Speak slowly; repeat as necessary

◆ **Ask:**

- “Were all your questions answered?”
- “Is there anything else I can do…?”
- “Did you understand…”

◆ **Re-connect:**

- Check back frequently with waiting patients
- Direct the patient where to go next
- End with a friendly parting comment

Key Learnings

1. Summarise your understanding of the module. Write your answers in the spaces provided.

1. Define communication

_____

_____

_____

_____

_____

_____

2. Explain the communication process.

3. List down the factors influencing communication.

4. Name the components of the C.L.E.A.R model of communication.

Worksheet

1. *Tick the correct answer.*

a. The following is a daily conversation you might encounter.

You are working in the ward area and your supervisor tells you the following through the telephone:

"I need you to check oral intakes and then transport patients to the dining area for lunch.

Ask Sonu to check the schedule for those scheduled for rehabilitation after lunch. Thanks."

b. Fill in the blanks with the correct matching italicised word from the above paragraph.

i. A place where special exercises and treatments are used to help people get back in good health, or be able to work once again is known as _____.

ii. This is known as _____ , which is food or water taken through the mouth.

iii. This job is called _____ , which means to convey from one place to another.

iv. This is a list of times when certain things must be done and is called a _____.

v. People who live in the facility and are cared for by doctors and nurses are referred to as _____.

Notes

Maintain a Safe, Healthy and Secure Environment

At the end of this module, you will be able to:

- explain the importance of safety measures;
- explain how to promote a safe working environment;
- describe hospital electrical safety measures;
- solve hospital fire safety measures;
- explain patient care environment safety measures;

Session Plan	
1	Module Overview
2	Promoting a Safe Working Environment
3	Hospital Electrical Safety Measures
4	Hospital Fire Safety Measures
5	Patient Care Environment Safety Measures
6	Key Learnings
7	Worksheet
8	Key Learnings
9	Worksheet

Module Overview

One of the most important aspects of patient care is to ensure safety for each patient throughout the day. It is impossible to prevent accidents completely. However, there are ways to limit the potential for accidents that may cause injury to the patient or health care personnel and the unnecessary loss of equipment.

Promoting a Safe Working Environment

In order to promote a safe working environment, you must:

- Make sure that you know your organisation's health, safety and security procedures and follow them while you work.
- Before you begin work always:
  - Check and use any risk assessments.
  - Examine the areas where you work and any equipment you use to make sure that they are safe, and meet your organisation's health and safety policies.
  - Remove, where possible, anything that might pose a health and safety risk.

- Take account of your patient's needs and choices while protecting your own safety and the safety of patients, staff and others when working.
- Work within the limits of your own role and responsibilities in relation to health and safety.
- Get help to sort out health and safety problems where necessary.
- Report health and safety issues to the appropriate people and fill in health, safety and security records in line with the law and your organisation's policies.

Reduce risk:

To reduce risk, you must:

- Work with others to reduce potential risks in your workplace.
- Make sure that your own health and hygiene does not pose a risk to others.
- Make sure that the appropriate people know where you are at all times to make sure you are safe.
- Check for health, safety and security risks while you are working and take appropriate action if an accident or injury or harm is likely.
- Check that people who are in your workplace have a right to be there.
- Use approved procedures when carrying out work that could be dangerous including:
  - Using correct moving and handling techniques.
  - Using appropriate hygiene procedures.
  - Wearing correct protective clothing for the situation, environment and activities.
  - Using and storing equipment and materials and dealing with spillages and getting rid of waste.
- Take immediate and appropriate action to deal with emergencies, including:
  - Fire
  - Security problems
  - Accidents

Use your skills and experience until appropriate help arrives:

You must:

- Call for the appropriate help.
- Continue to provide help until someone who is qualified to deal with the emergency is available.
- Support patients and others including family carers who may be affected by the emergency.
- Record and report incidents and emergencies accurately and fully in line with your organisation's policies.

Hospital Electrical Safety Measures

Follow hospital electrical safety measures by doing the following:

- Use electrical equipment for the intended purpose only.
- Keep television sets, telephones, radios, hair dryers, electric shavers, and all other electrical equipment and appliances away from bathtubs and washbasins.

- Test all small appliances before use to see that they are in good working order. Ensure periodic service checks of all electrical equipment.
- Remove a plug from a wall socket by grasping the plug, not the cord.
- Use plugs and outlets with a ground when possible. Do not overload an electrical outlet.
- Do not kink electric cords; this may cause the fine wires inside the cord to break.
- Never use faulty equipment. If an appliance overheats, produces a shock or gives off an odour while being used, remove the appliance from the area. Follow procedures to have the appliance evaluated by medical maintenance.

NOTE: An electric spark near a high concentration of oxygen or certain anaesthetic gases may cause an instant and serious fire.

Hospital Fire Safety Measures

Hospital fire safety measures are very important and must always be followed. Take a look at some very important hospital fire safety measures:

1. Despite the use of fire retardant material, and compliance with fire regulations, fires still occur. Health care facilities should have regular fire drills so that all personnel know exactly what to do. Health care personnel should be trained and drilled in:
    - Fire prevention.
    - Location and use of fire alarms.
    - Location and use of fire extinguishers.
    - Location of emergency exits.
    - Evacuation procedures.
2. Oxygen supports combustion. Post signs to show that oxygen is in use where applicable. If a patient is receiving oxygen as part of his treatment, be sure that the patient, his roommates, and visitors know that smoking is prohibited.

NOTE: Smoking is prohibited in treatment areas of most health care facilities.

3. If a fire occurs, follow these steps:
    - Activate the fire alarm procedures.
    - Turn off oxygen, lights, and any electrical equipment in the vicinity of the fire.
    - Remove patients who are in immediate danger.
    - Notify the hospital “switchboard” of the location of the fire.
    - Close windows and doors to reduce ventilation.
    - Using the fire extinguisher, attempt to extinguish the fire.
    - Return patients who are not endangered to their rooms.
    - Post a guard to direct the fire department.

Patient Care Environment Safety Measures

Take a look at the environment safety measures to be followed for patient care:

1. Identify patients at risk for injury. Those at special risk include:
   - Elderly or confused patients.
   - Patients with impaired vision or hearing.
   - Patients with impaired mobility (wheelchairs, walkers, and partial paralysis).
   - Patients with a history of falls.
   - Patients with a history of substance abuse.
   - Patients receiving medication that interferes with reasoning or motor functions.
2. Protect the patients at risk for injury.
3. Prevent falls by:
   - Placing the bed in the low position.
   - Keeping the side rails up when the patient is not receiving bedside care.
   - Advising the patient to wear low-heeled shoes that fit well when walking.
   - Ensuring that non-skid strips or mats are affixed to the bottom of bathtubs and shower floors.
   - Ensuring that bathtubs have sturdy handrails and shower stools are in place when needed.
   - Warning patients and visitors when floors are wet and slippery. Also see that signs are posted.
4. Prevent scalds and burns by:
   - Placing coffee, tea, and other hot liquids where the patient can reach them easily and safely.
   - Assisting the patient if there is any doubt about whether he can safely regulate the temperature of water in tubs or showers.
   - Carefully following policy when using hot-water bags or heating pads. Because of the danger of burning patients, many health care facilities do not allow their use.
5. Prevent the spread of infection:

A health care facility may adopt its own infection control policies and practices. However, the procedures generally follow the recommendations from the Centers for Disease Control (CDC). This is a federal agency that studies pathogens, outbreaks of contagious diseases, and methods used to control these outbreaks.

Keep in mind that:

- Preventing disease, including infections, is a high priority in health care. Nurses should use techniques that prevent microorganisms from living, growing, and spreading.
- Two methods are used to reduce or eliminate the presence of microorganisms and thus prevent infections. These two methods are called surgical asepsis and medical asepsis.
  - Surgical asepsis refers to the practice that eliminates the presence of all microorganisms (bacteria, viruses, fungi, yeasts, molds, rickettsia, and protozoa). This practice is sterilisation.

- Medical asepsis refers to practices that help reduce the number and inhibit the growth of microorganisms, especially pathogens (those that cause infections or contagious diseases). Medical asepsis, also called 'clean technique' includes the use of antimicrobial agents, hand washing, cleaning supplies and equipment, and disinfection.

◆ Infections and infectious diseases begin in a reservoir and move full circle to a susceptible host.

- **Reservoir:** This is the place on which or in which organisms grow and reproduce. Examples include man and animals.
- **Exit from reservoir**: Escape routes for organisms include the nose, throat, mouth, ear, eye, intestinal tract, urinary tract, and wounds.
- **Vehicle of transmission**: The means by which organisms are carried about include hands, equipment, instruments, china and silverware, linens, and droplets.
- **Portal of entry**: The part of the body where organisms enter include any break in skin or mucous membrane, the mouth, nose, and genitourinary tract.
- **Susceptible host**: A person who cannot fight off the organism once it enters his body and therefore, becomes ill.

◆ It is important that the nurse teach patients facts and practices about surgical and medical asepsis. When teaching a patient you should:

- Observe the patient to identify areas where instruction would be helpful in controlling the spread of infection.
- Act as a model by using sound practices of asepsis when giving care.
- Provide guidance to the patient who must give himself care at home, in the proper way to handle sterile equipment and supplies and in how to sterilise reusable items.

◆ Report infections. Health care workers must report any infection that occurs. The Infection Control Committee will investigate any case of infection to determine the cause. If a break in nursing technique is identified, the committee will propose different procedures to eliminate the problem.

Conclusion:

Maslow states that our safety and security needs are second only to our need for food, air, and water. The daily responsibility for protecting patients from additional injury or illness rests with the nursing team. A skillful and knowledgeable nurse can be just as dangerous as the incompetent one if safety measures are not applied in the health care environment.

Key Learnings

Summarise your understanding of the module. Write your answers in the spaces provided.

1. Describe what all you will check before starting your work.

2. Explain electrical safety measures.

3. Explain all the things to be done to maintain hospital fire safety measures.

4. Explain hospital environment safety measures.

Worksheet

1. *Fill in the blank.*

   a. If a patient is receiving oxygen as part of his treatment, be sure that he, his roommates, and visitors know that _____ is prohibited.

   b. If a fire occurs, hospital personnel should turn off _____, _____, and _____ in the vicinity of the fire.

c. Two methods are used to reduce or eliminate the presence of microorganisms and thus prevent infections. These two methods are:

i. _____

ii. _____

Notes

Soft Skills

Health and Hygiene

Self Improvement

What have you done to improve yourself?

Have you sharpened your axe?

- Past achievements don't count.
- You have to **constantly sharpen your skills** to become more productive.
- Milk has its own qualities. But these qualities get enhanced when sugar is added to it.

Attitude

Is the glass half full or half empty?

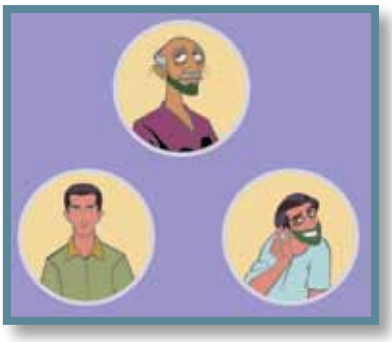
You can be a positive person.

- **Be nice** to people – they will enjoy your company.
- They will be happy to be with you.
- They will be happy to work with you.
- If things are difficult – face them. **Come out stronger**.
- **Don't leave everything to luck and fate** – you will lose hope.
- **Believe** in yourself.
- Learn to **like** your work

Motivation

Who learnt the right lesson?

You wish to improve yourself and reach your goal? Then you have to act positively.



- Things are difficult at home or at work? – **Learn to face them**.
- **Gain** from your difficulties. Don't let them pull you down.
- Drinking is bad – **so give up this bad habit**.
- **Don't let fear change you.** Once the fear is gone you will be back to your old ways.
- The change in you must come **from within you**.
- No one can improve you. You have to **improve yourself**.

Time Management

Do you wish the day was longer?

You can relax and work – if you manage your time.

- Are you always rushing about? **Divide** your tasks.
- **Do not** try to do everything at the same time.
- What must be done immediately? – **Do it first** and by yourself.
- What can wait? – **Let it wait** for sometime. Do them **in between** the important jobs.
- **Finish** your tasks on time. You will have **more time** for your family and friends.

Discipline

Ghutka the mouth freshener that kills

Can I, a ghutka addict, quit ghutka?

- Something is bad. You know it. **Why can't you give it up? That means you cannot stop yourself**.
- If you can stop yourself from chewing ghutka, you can give up the habit. **You just need to make up your mind**.
- You want to do something good? **Then make sure you do it**!
- Discipline yourself.
- Self discipline is like a muscle – the more you train it **the stronger it becomes**.

Honesty

Will he remain on top for long?

Does honesty win in the end? Yes it does!

- If you are dishonest you may win at first – **but it won't last long**.
- **Honesty is for ever** – you won't lose.
- Speak the truth and **sleep peacefully**.
- **No one trusts** a dishonest person.
- Gandhiji said, "**Truth is my God**". He reached the top because he was honest.
- So you will be at the top if you **follow what Gandhiji had said**.

Anger Management

Climbing up is hard, sliding down is easy

Do you know why anger is like a snake? If you do not control anger, it will swallow you. Here are tips to control anger.

- Try your best to **remain calm**.
- **Count ten** before you speak if you are not happy about something.
- **Say a prayer** if you are upset.
- **Forgive** – yourself and others.
- **Forget** the past – if it made you upset or angry.
- **Admit** your mistakes politely.
- Do not let your anger grow within you. **Kill it.**

Team Dynamics

Group or Team?

- Does your group **work together**?
- When **you are together** no one can defeat you. Do you agree?
- In a cricket team, **each player is important**. But they can win only if they play together as a team.
- A bee works very hard. But a single bee alone cannot make honey. The bees work together and make honey.
- Think!!! Your **group is a team** if you work like the bees.
- Understand!!! You are a team if you are **united** like the cricket players.

Inter-personal Skills

Golden Rules

- **Smile** whenever you can.
- Say **good** things.
- **Praise** the other person.
- When you listen, **pay attention**.
- If others find fault in you, **do not** get angry.
- **Think** before you find faults in others.
- If you follow these rules, people **will like you**.

Work Etiquette

Do you have these?

- Is your work **boring**? Then find new ways to do your work.
- Do you **rest** when you are working? Then you better be careful. Too much rest and you may be out of work.
- You enjoy **working**? Is that what you feel? You are doing right!
- If you think work will help you to **grow**, you will be successful.
- Follow the five rules of work ethics – you'll be a winner always.

Social Grace

Do you include all?

Want to grow? Want to be a winner?

- Then **do not push** anyone away.
- **Do not look down** on anyone.
- Try and **feel for everyone**.
- **Treat everyone** the same way.
- Both men and women are **equally valuable** to society and country.

Personal Hygiene

Tips! Tips to good health!

Wouldn't you like to be healthy? You can do it. It is no big secret. Here's how...

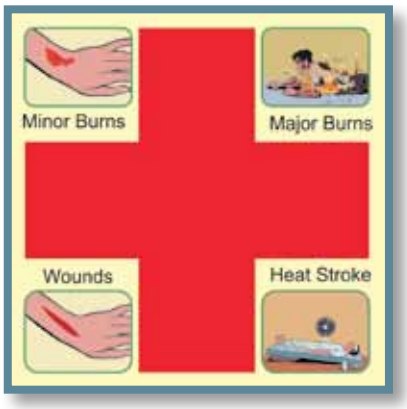
- **Brush** your teeth everyday.
- **Clean** your hands and feet.
- **Bathe** daily.
- **Cut** your nails once a week.
- **Wear** clean clothes.
- **Don't chew** ghutka, or smoke or drink.
- **Keep** your room and toilet clean.

First Aid

Help please! Give first aid

Give first aid, and then call the doctor. Anyone can give first aid.

- **For fire** – put it out, keep the burnt part cool.
- **For heat stroke** – keep the victim cool; give lots of water to drink
- **For small cuts** – wash it; stop the bleeding and put medicine.
- **For big cuts** – wash it, stop bleeding by pressing and wrap the cut with clean cloth.



AIDS Awareness

Condom Bindaas Bol!

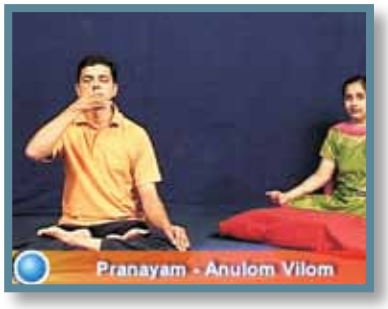
Who's afraid of AIDS?

- **Use** a condom – stop AIDS.
- **Stay** faithful – stop AIDS.
- **Fight** AIDS – do not run away from it.
- **Cure** AIDS – it is only a disease.
- **Help** AIDS victims – take them to the doctor, treat them well.
- **Go** for a checkup – if you are having fever, feel tired all the time and coughing and sneezing.

Yoga

Stressed out? Feeling tense all the time? Practise Yoga

- Yoga exercises keep your **breathing under control**.
- Yoga **keeps the body fit**; so you won't fall ill.
- Since your body is not tense your **mind is also relaxed**.
- You will be able to learn better and **perform better**.
- A person who is able to fight stress and relax is a **happy person**.



Personal Finance

Self help is the best help

Take care of the money you earn. It is easy!

- Do **not waste** money.
- **Earn more** than you spend.
- **Save** as much as you can.
- **Borrow** if you need but only from the **right sources**.
- **Borrow** what **you can pay back**.

Answers: Hospital Structure and Services

1. *Match the following.*
   a = iii, b = iv , c = i, d = ii
2. *Read the following question. Tick on the correct option.*
   Laboratory and diagnostics facilities
3. *Read the following question. Tick on the correct option.*
   Nurse station
4. *Fill in the blanks.*
   a. Reception desk
   b. Pharmacy
   c. Intensive Care Unit (ICU)
5. *Identify the picture.*
   Operation Theatre

Answers: Roles and Responsibilities

1. *Read the following question. Tick on the correct option.*
   Prescribe medicine to the patient.
2. *Read the following question. Tick on the correct option.*
   Knowing how to handle hospital equipments.
3. *Read the following question. Tick on the correct option.*
   Report to the attending nurse or doctor.

Answers: Rules to be Followed

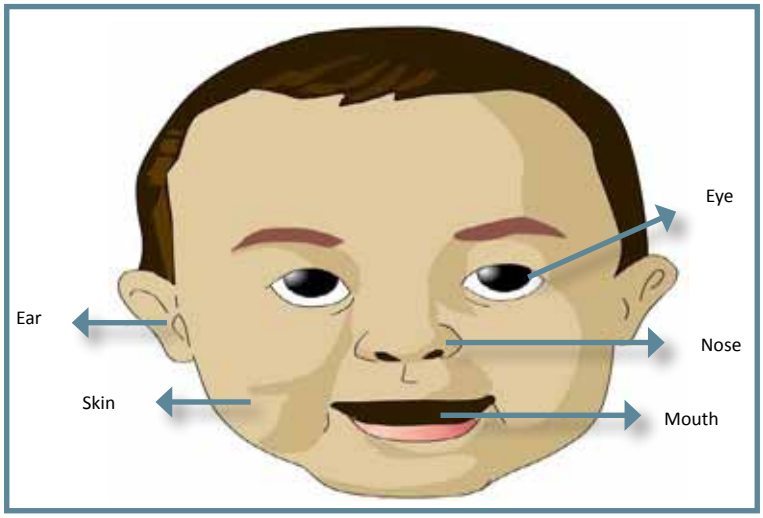
1. *Read the following question. Tick on the correct option given below.*
   Right to refusal to treatment
2. *Read the following question. Tick on the correct option given below.*
   Right to transfer
3. *Read the following question. Tick on the correct option given below.*
   Offer explanation for your action.
   Take necessary corrective action that will satisfy the patient.
   Be cautious in the future to ensure such incidents do not recur.
   (all 3 are correct)
4. *Match the columns.*
   a = iv, b = iii, c = i, d = ii

Answers: Practice the Code of Conduct While Performing Dutiesv

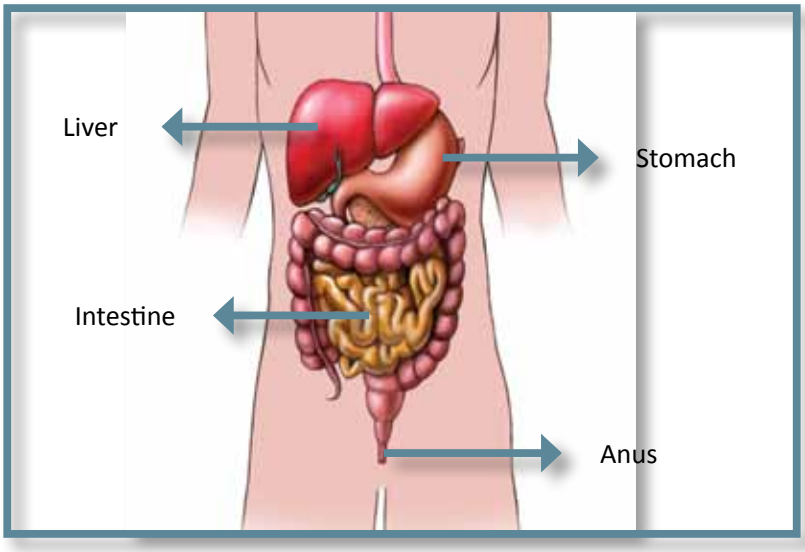
1. *Read the following question. Tick on the correct option given below.*
   a. i
   b. iii
   c. i
   d. ii

Answers: Understanding the Human Body

1. *Label the different parts of the head.*



2. *Label the different parts of the abdomen.*



3. *Match the following.*

   a = iii, b = iv, c = i, d = ii,e =v

4. *Read the following question. Tick on the correct option.*

   Heart

5. *Read the following question. Tick on the correct option.*

   Stomach, reproductive organs, kidneys

Answers: Human Physiologic Systems

1. *Read the following question. Tick on the correct option given below.*

   Digestive system

2. *Read the following question. Tick on the correct option given below.*
   Circulatory system
3. *Read the following question. Tick on the correct option given below.*
   Excretory system
4. *Read the following question. Tick on the correct option given below.*
   Endocrine system
5. *Read the following question. Tick on the correct option given below.*
   Nervous system
6. *Match the following.*
   a = iii, b = iv, c = i, d = ii,e = vi,f = v
7. *Match the following.*
   a = iii, b = v, c = iv, d = i,e = ii

Answers: Branches of Medicine

1. *Read the following question. Tick on the correct option given below.*
   Surgeon
2. *Read the following question. Tick on the correct option given below.*
   The heart
3. *Read the following question. Tick on the correct option given below.*
   Pathology
4. *Read the following question. Tick on the correct option given below.*
   Prescription
5. *Read the following question. Tick on the correct option given below.*
   Trauma surgery
6. *Match the following.*
   a = v, b = vii, c = i, d = iii, e = vi, f = viii, g = ii, h = iv

Answers: Malaria, TB and other Endemic Diseases

1. *Read the following question. Tick on the correct option.*
   Typhoid
2. *Read the following question. Tick on the correct option.*
   Endemic
3. *Match the following.*
   a = iii, b = i, c = ii

Answers: Hepatitis and other Viral Diseases

1. *Read the following question. Tick on the correct option given below.*
   Malaria
2. *Read the following question. Tick on the correct option given below.*
   Chikungunia
3. *Read the following question. Tick on the correct option given below.*
   Give the patient diet prescribed by the dietician
   Provide the patient with ample amount of fluids

Answers: HIV and AIDS

1. *Read the following question. Tick on the correct option given below.*
   Human Immunodeficiency Virus
2. *Read the following question. Tick on the correct option given below.*
   Immune system
3. *Read the following question. Tick on the correct option given below.*
   Through touch
4. *Read the following question. Tick on the correct option given below.*
   Elisa
5. *Answer true or false.*
   a. False
   b. True
   c. False
   d. True
   e. True

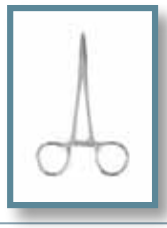
Answers: Infection and the Control of Infection

1. *Read the following question. Tick on the correct option given below.*
   a. ii
   b. iv
   c. iv

Answers: Common Hospital Equipment

1. *Identify the different equipments. Write their names.*

Equipment	Name of the Equipment
	Stethoscope

	Hemostat
	Syringes
	Blood pressure apparaters
	Ligature needles

3. *Match the following.*

   a = v, b = vii, c = ix, d = i, e = ii, f = iii, g = vi, h = iv, i = viii

Answers: Personal Protective Measures

1. *Read the following question. Tick on the correct option given below.*

   AIDS

2. *Read the following question. Tick on the correct option given below.*

   Booster dose

3. *Read the following question. Tick on the correct option given below.*

   Diphtheria, whooping cough, tetanus

4. *Fill in the blanks.*

   a. antibiotics
   b. antigens
   c. immunity
   d. infection
   e. blood, bodily fluids

5. *State true or false.*
   a. True
   b. True
   c. False
   d. False

Answers: Personal Protective Equipment

1. *Match the following.*
   a = iii, b = iv, c = v, d = i,e =ii
2. *Read the following questions. Tick on the correct option given below.*
   Plastic gown
3. *Read the following questions. Tick on the correct option given below.*
   Both a and b
4. *State true and false.*
   a. False
   b. False
   c. True
   d. True
   e. True

Answers: Waste Management

1. *Read the following question. Tick on the correct option given below.*
   Radioactive wastes
2. *Read the following question. Tick on the correct option given below.*
   Hazardous waste
3. *Classify the following according to their type.*
   a. Infectious waste
   b. Hazardous waste
   c. Infectious waste
   d. Radioactive waste
   e. General waste

Answers: Bio-Medical Waste Management

1. *Fill in the blank.*
   a. Blue
   b. Yellow
   c. Black
   d. Puncture proof container
   e. Black
   f. Black
   g. Puncture proof container
2. *Read the following question. Tick on the correct option.*
   a. i
   b. iii

Answers: Common Sterilization Tasks

1. *Read the following question. Tick on the correct option.*

   Killing germs

2. *Read the following question. Tick on the correct option.*

   None of the above

3. *Read the following question. Tick on the correct option.*

   Moist sterilization

4. *Fill in the blanks.*

   a. detergent
   b. sterile filtrate
   c. 20
   d. chemicals

Answers: Clean Medical Equipment Under Supervision

1. *Read the following question. Tick on the correct option.*

   a. i
   b. iv
   c. ii
   d. i
   e. iii

Answers: Classification of Beds

1. *Read the following question. Tick on the correct option.*

   A bed with patient

2. *Read the following question. Tick on the correct option.*

   Rod for medication

3. *Match the following.*

   a = iii, b = v, c = iv, d= i, e = ii, f = vi

Answers: Bed Making Procedure

1. *Match the following.*

   a = iii, b = iv, c= v, d= ii, e= i

Answers: Transporting Patients from Ambulance to Hospital Ward

1. *Arrange the steps in sequence.*

   b. With the help of the ambulance team, align the wheelchair with the ambulance bed.
   d. Assist the patient in moving from the ambulance bed.
   a. Carefully transfer the patient to the wheelchair. Ensure that patient is comfortably seated in the wheelchair.
   f. Transfer the dip attached to the patient during the transfer.
   e. While transferring the patient on the wheelchair, lock the wheels of the chair.
   c. Transfer the patient smoothly without any jerks while moving the wheelchair. Do not rush

the patient into the ward.

2. *Arrange the steps in sequence.*

   c. Align the stretcher with the ambulance bed with the help of the ambulance team and General Duty Assistants.

   f. Move the patient to the side of the bed by rolling him or her towards you.

   d. Support the patient at the shoulders and buttocks area, to transfer from the ambulance bed to a stretcher.

   a. Ensure that the attachments to the ambulance bed are also smoothly transferred along with the patient from the ambulance to the ward.

   b. Carefully guide the stretcher towards the appointed ward.

   e. Hand over the belongings and the patient medical charts, if any, to the nurse once you enter the ward.

Answers: Transporting Patients from Stretcher to Bed

1. *Read the following question. Tick on the correct option given below.*

   Side rails

2. *Arrange the following in sequence.*

   c. Ensure that there are at least two other General Duty Assistants to help you when the patient is transferred from the bed to the stretcher.

   e. Place the stretcher close to the side of the bed.

   a. Ensure that both the bed and the stretchers are stabilized or locked before moving the patient.

   b. Lower side rails if present.

   d. Roll the patient gently to a side and place a sheet on the bed. Roll back the patient onto the sheet

   h. Get on to the patient's bed and hold the sheet from one side. Ask the other assistants to hold the sheet from the sides

   f. Gently lift the patient with the sheet and shift the patient onto the stretcher. Get down from the bed.

   g. Place the patient comfortably on the stretcher.

3. *Fill in the blanks.*

   a. Stretcher

   b. Handle bar

   c. Wheel lock

   d. stretcher bed

4. *State true or false.*

   a. True

   b. False

   c. False

   d. True

   e. True

Answers: Transporting Patients from Wheelchair to Bed

1. *Arrange the following in sequence.*
   - d. Consult the doctor about the transfer procedure.
   - f. Roll the patient to one side and place a belt around the patient.
   - b. Hold the patient with the help of the belt and move the patient close to your body.
   - h. Now get into a standing position with the patient and gently move the patient close to you.
   - a. Place the patient on the edge of the seat on the wheelchair and rock the patient into the chair.
   - c. Place the feet of the patient on the foot rest of the wheelchair.
   - e. Remove the wheel locks of the wheelchair and move the wheelchair gently to the ward that the patient has to be moved to.
   - g. Place the medical records on the patient while moving the wheelchair.
2. *Read the following question. Tick on the correct option given below.*

   Metal skirt
3. *Match the Following.*

   a = ii, b = iv, c = vii, d = iii, e = i, f = v, g = vi

Answers: Precautions While Transportation

1. *Read the following question. Tick on the correct options given below. There could be more than one correct option.*

   a. Ensure wheels are locked.

   c. Move the wheelchair or stretcher without a jerk.
2. *Read the following question. Tick on the correct options given below. There could be more than one correct option.*

   b. Be sensitive to the pain area of the patient.

   a. Hold the patient as closely as possible to your body. Do not let the patient slip or roll away.

Answers: Appropriate Positioning of the Patient

1. *Look at the pictures. Identify the positions.*

	Supine position
	Trendelenberg position
	Right lateral recumbent

	Prone
	Left lateral recumbent

2. *Match the columns.*

a = vi, b = iv, c = i, d = v, e = iii, f = ii

Answers: Prevention of Bed Sores

1. *Read the following question. Tick on the correct option.*

Lack of blood supply

2. *Read the following question. Tick on the correct option.*

corroded area of the skin

3. *Fill in the blanks.*

a. alcohol
b. 2
c. Position padding
d. pressure sores

Answers: Pressure Sores

1. *Read the following question. Tick on the correct option.*

a. ii
b. iv
c. i
d. iv
e. iii

Answers: Back Care

1. *Read the following question. Tick on the correct option.*

a. ii
b. ii
c. iv
d. ii
e. i
f. ii

Answers: Bathing

1. *Read the following question. Tick on the correct option given below.*
   Tub bath
2. *Read the following question. Tick on the correct option given below.*
   Complete bed bath
3. *Read the following question. Tick on the correct option given below.*
   Preventing blood loss

Answers: Assisting the Nurse in Bathing the Patient

1. *Fill in the blanks*
   a. Lotion
   b. In charge Nurse
   c. 110 to 115
   d. Kidney
   e. Poor circulation
   f. Privacy
2. *Read the following question. Tick on the correct option given below.*
   a. i
   b. i

Answers: Oral Care

1. *Read the following question. Tick on the correct option given below.*
   Bacteria build up on tongue
2. *Read the following question. Tick on the correct option given below.*
   Throat pain
3. *Read the following question. Tick on the correct option given below.*
   Soft and circular motion
4. *Read the following question. Tick on the correct option given below.*
   Stops bleeding of gums
5. *Fill in the blanks.*
   a. oral hygiene
   b. water, mouthwash
   c. dental floss
   d. 3 months

Answers: Oral Care of an Unconscious Patient

1. *Read the following question. Tick on the correct option given below.*
   a. i

Answers: Hair Care

1. *Fill in the blanks.*
   a. Shampoo
   b. wide - tooth
   c. scalp
   d. parting
2. *State true or false.*
   a. True
   b. False
   c. False
   d. False
   e. False
3. *Read the following question. Tick on the correct option given below.*
   Scalp

Answers: Assisting the Nurse in Grooming the Patient - Hair Care

1. *Read the following question. Tick on the correct option given below.*
   a. i

Answers: Nail Care

1. *Arrange the steps in correct sequence.*
   f. Wash hands, and arrange supplies within easy reach.
   c. Position patient in chair, place disposable mat under patient's feet if possible, and provide patient with privacy.
   d. Fill the basin with warm water.
   a. Soak the feet for 5 to 10 minutes.
   g. Trim nails straight across.
   b. Round the fingernails to be smooth, without any jagged edges using a filer.
   e. Remove gloves and dispose them properly.

Answers: Clothing

1. *Read the following questions. Tick on the correct options given below. There could be more than one correct option.*
   a. Change the clothing if soiled.
   d. Washing of each patient's clothes separately.
   e. Change patient's undergarment regularly.
2. *Read the following questions. Tick on the correct options given below. There could be more than one correct option.*
   a. Draw the curtain before the patient starts changing clothes.
   b. Close the door of the bath room in case the patient is changing inside.
   e. The patient should wear hole free clothes.
3. *Match the following.*
   a = iii, b = iv, c = i, d = ii

Answers: Assist a Nurse in Grooming Patients With pecific Health Needs

1. *Read the following question. Choose the correct options.*
   a. i
   b. iii
   c. i

Answers: Types of Feeding

1. *Read the following question. Choose the correct options.*
   Tube feeding
2. *Read the following question. Choose the correct options.*
   Intravenous feeding
3. *Fill in the blanks.*
   a. Feeding or eating
   b. numb
   c. hollow needle
   d. ryle's tube
   e. Oral feeding

Answers: Assisting in Feeding Patients in Different Medical Conditions

1. *Read the following question. Tick on the correct option given below.*
   Intravenous feeding
2. *Read the following question. Tick on the correct option given below.*
   2-3 hours
3. *Fill in the blanks.*
   a. serious
   b. temperature,consistency
   c. oral feeding
4. *State True and false.*
   a. True
   b. True
   c. False
   d. False
   e. False

Answers: Serving Food and Assistance While Eating

1. *Read the following question. Tick on the correct options given below. There could be more than one correct option.*
   c. Tell the benefits of the food items being served.
   e. Ensure cups and plates are not banged loudly.
   g. If the patient chokes and is unable to cough, immediately call for help.

Answers: Methods of Drug Administration

1. *Read the following question. Choose the correct options.*

   Enteral route

2. *Read the following question. Choose the correct options.*

   Mucosal route

3. *Match the following.*

   a = v, b = i, c = vi, d = ii, e = iii, f = iv

Answers: Responding to a Patient's Call

1. *Read the following question. Choose the correct options.*

   a. i

Answers: Role in Drug Administration

1. *Match the following.*

   a = v, b = iv, c = i, d = ii, e = iii

2. *Read the following questions. Tick on the correct options given below. There could be more than one correct option.*

   b. The right medicine is given to the right person.

   c. Adverse reaction of the medicine like rashes or sneezing must be immediately reported to the doctor.

Answers: Using the Bed Pan

1. *Match the following.*

   a = ii, b = iv, c = iii, d = i

2. *Read the following question. Tick on the correct options given below. There could be more than one correct option.*

   a. Elevate the person's head on the bed slightly into more of a sitting position.

   d. Wash the genital area of the patient after the patient has excreted the waste.

   e. Wear gloves while helping the patient use the bed pan.

Answers: Care of an Indwelling Catheter

1. *Read the following question. Tick on the correct option given below.*

   a. iii

   b. iv

   c. iv

Answers: Administration of an Enema

1. *Read the following question. Tick on the correct option given below.*

   a. iii

   b. iv

   c. i

   d. ii

   e. i

Answers: Perineal Care

1. *Read the following question. Tick on the correct option given below.*
   a. iii
   b. ii
   c. ii
   d. iii
   e. i

Answers: Proper Disposal of Urinary Wastes

1. *Read the following question. Tick on the correct option given below.*
   b. Collect the urine in a measuring cup
2. *Read the following question. Tick on the correct option given below.*
   c. Urinary Catheters

Answers: Importance of Vital Signs and Measuring Radial Pulse

1. *Read the following question. Tick on the correct option.*
   a. Number of heart beats per minute
2. *Read the following question. Tick on the correct option.*
   c. Body temperature
3. *Read the following question. Tick on the correct option.*
   a. 60.100 beats per minute
4. *Read the following question. Tick on the correct option.*
   d. 1 minute

Answers: Body Temperature

1. *Read the following question. Tick on the correct option given below.*
   b. 98.6 ^{0} F
2. *Read the following question. Tick on the correct option given below.*
   c. Taking temperature under armpit
3. *Read the following question. Tick on the correct option given below.*
   d. Mercury
4. *Match the following.*
   a = iv, b = iii, c= i, d= ii

Answers: Blood Pressure

1. *Read the following question. Tick on the correct option given below.*
   b. Sphygmomanometers
2. *Read the following question. Tick on the correct option given below.*
   c. Hearing drum
3. *Read the following question. Tick on the correct option given below.*
   c. 180/60

4. *Read the following question. Tick on the correct option given below.*

   a. 110/65 - 140/90

Answers: Measuring Breathing Rate

1. *Read the following question. Tick on the correct option given below.*

   a. 12 to 20

2. *Read the following question. Tick on the correct option given below.*

   b. Number of breaths in 1 minute

3. *Read the following question. Tick on the correct option given below.*

   b. The air we breath out

Answers: Measuring the Height and Weight of a Patient

1. *Read the following question. Tick on the correct option given below.*

   a. iv

   b. i

   c. ii

Answers: Perineal Care

1. *Read the following question. Tick on the correct option given below.*

   a. ii

   b. iii

2. *Mark the statements 'true' or 'false' after reading.*

   a. False

   b. True

   c. False

Answers: Understanding Medical Lab Testing Procedures

1. *Read the following question. Choose the correct options. There could be more than one correct answer.*

   b. Pricking the finger

2. *Read the following question. Choose the correct options. There could be more than one correct answer.*

   a. Specimen should be collected at right time.

   b. Specimen should be collected in the method.

3. *Read the following question. Choose the correct options. There could be more than one correct answer.*

   b. Specimen collection tube must be labelled with patient's name

   c. Before collecting the sample confirm the name of the patient

Answers: Transportation of Specimens

1. *Read the following questions. Tick on the correct options given below. There could be more than one correct answer.*

   b. Packaging the specimen

   c. Labeling the specimen

2. *Read the following questions. Tick on the correct options given below. There could be more than one correct answer.*

a. Label saying "Danger of infection" must be attached to the specimen

c. Instruction saying "Not to be open if found" must be to the specimen

Answers: Care of the Dying and Care of a Dead Body

1. *Read the following question. Tick on the correct option given below.*

a. i

b. iv

c. ii

d. i

Answers: Communication Skills

1. *Fill in the blanks*

a. Rehabi

b. litation

c. Oral intake

d. Transport

e. Schedule

f. Patient

Answers: Maintain a Safe, Healthy and Secure Environment

1. *Fill in the blanks*

a. Smoking

b. Oxygen, light and electrical equipment

c. i. Surgical asepsis, ii. medical asepsis

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