

# Hospital Management System

#### Introduction

Many factors, such as food, housing, clothing, hygiene and sanitation, lifestyle, pollution, climate, etc., can affect the health of an individual and population. Health care includes all services provided to a person or population by various health and related agencies. These are delivered by the health care system, which includes the management of the health sector and its organisational structure.

This unit imparts knowledge about India's students health care system, personal hygiene practices and codes of conduct to be followed by a General Duty Assistant (GDA). It explains the role of a GDA and supporting departments in the functioning of a hospital, reflecting the changing concept of hospitals, role of a hospital administrator, functions the hospital management and hospital services. With advancement in technology, the management of a hospital



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Fig. 1.1 A hospital

is designed using various software, which coordinate all aspects of hospital operations. From front office management to most extensive procedures — all are performed in a hospital. It is, thus, interlinked to make the functioning easier for patients.

Session 1 deals with the service network of primary, private and community health centres in India.

The GDA assists doctors, nurses and other support staff while working in a hospital set up. Being informed about the duties, role and limitations, s/he benefits more by focusing on quality work. Securing personnel rights or understanding the codes of conduct related to a job role is expected to bring efficiency towards work commitment that ultimately improves patient care standards. The GDA's duty is to ensure patients' comfort, assist doctors and nurses, and maintain a clean and hygienic environment in the hospital.

The second and third sessions give an insight into the role, qualities and functions of a GDA.

Session 4 enumerates the importance of hygiene, hand washing and personal grooming for a GDA. Personal hygiene supplements good health. Neglect of cleanliness may cause many infectious diseases. Therefore, improvement in hygiene standards can prevent many epidemics. The contribution of every individual in maintaining personal and environmental hygiene influences the health standard index of the society. We follow a set sequence of oral hygiene, bathing, dressing, etc., which inculcates in us the habit of keeping our body clean. By understanding the contents in the unit, you will learn about how to wash hands and personal grooming, and how these help in maintaining a healthy life.

#### Session 1: Health Care Delivery System

# Health care systems

According to the World Health Organization (WHO), "A health system consists of all organizations, people and actions, whose primary intent is to promote, restore or maintain health. This includes efforts to influence



determinants of health, as well as, more direct health improving activities. A health system is, therefore, more than the pyramid of publicly owned facilities that deliver personal health services. It includes, for example, a mother caring for her sick child at home, private providers, behavior change programs, vector-control campaigns, health insurance organizations, occupational health and safety legislation. It includes inter-sectoral action by health staff, for example, encouraging the ministry of education to promote female education, a well-known determinant of better health."

Health care in India is a State issue. It is delivered by institutions owned by the Central and State governments, and local bodies. The Centre is responsible for developing and monitoring national standards and regulations, linking the States with funding agencies, and sponsoring schemes for the effective implementation of health programmes. Most health care services in India are provided by the private sector. The government and the private sector help in making health care accessible in all areas of India — both rural and urban.

The health care system or models in India can be categorised under the following sectors or programmes:

## Public health sector

### Primary health care

- Village-level accredited social health activist
- Village-level Auxiliary Nurse Midwife (ANM), a village-level health worker, who is the first contact person between the community and health services
- Sub-centres
- Primary Health Centre

# Hospitals or health centres

- Community Health Centres
- Rural hospitals
- District hospitals or health centres
- Specialty hospitals
- Teaching hospitals

# Give it a thought...

Even though most of the Indian population lives in villages or rural areas, there are more hospitals in urban areas. Why? Give reasons.



#### Private sector

- Private hospitals, polyclinics, nursing homes and dispensaries
- General practitioners and clinics

#### Levels of medical care

Health care services are, generally, categorised at four levels, viz., primary, secondary, tertiary and quaternary. These levels represent different types of care, involving varied degrees of complexity.

# Primary care level

Primary care providers may be doctors, nurses or physician assistants. It is the first level of contact with individuals, family and community, where primary health care (essential health care) is provided. Most of the health problems of people can be addressed at this level. It is at this level that health care will be the most effective. In the Indian context, primary health care is provided by Primary Health Centres (PHCs) and their sub-centres through multipurpose health workers, village health guides and trained health care workers. Besides providing primary health care, village health care centres bridge cultural and communication gaps between rural people and the organised health sector.

# Secondary care level

The next level is secondary (intermediate) health care. At this level, more complex problems are dealt with. In India, this kind of care is, generally, provided by district hospitals and community health care centres, which also serve as the first referral point. Secondary care means a patient will be taken care of by specialists. These specialists focus either on a specific body system/ part or a specific disease or condition. For example, if someone has a heart problem, the person needs to consult a cardiologist. If someone is suffering from problems related to hormones and diseases, like diabetes or thyroid, then s/he must consult an endocrinologist.



## Tertiary care level

The tertiary level is more specialised than secondary care level. It requires specific facilities and attention of highly specialised health workers. It is provided by regional or central level institutions. For example, highly specialised equipment and expertise is required to treat coronary artery bypass surgery.

# Think, learn and discuss...

Find out the different health care delivery systems or models followed across the world and discuss their pros and cons in class.

# Quaternary care

It is an extension of tertiary care, and is more specialised and highly unusual. All hospitals or medical centres cannot provide quaternary care. It includes experimental medicines and procedures.

# Meaning of hospital

According to the World Health Organization (WHO), a hospital is an integral part of social and medical organisation, the function of which is to provide complete health care — both preventive and curative — to the population. The outpatient services of a hospital reach out to communities in an area. The hospital also serves as a centre for the training of health workers and carries out bio-social researches.

# Hospital set up

A hospital is a system with various components that are integrated by a common purpose of achieving a set of objectives. The various systems and subsystems of a hospital has been represented in Fig. 1.2.

The performance of all these services is dependent on the cooperation and coordination

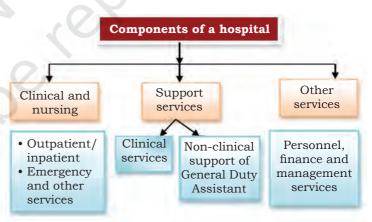


Fig. 1.2 Components of a hospital

of various components within the system. Individual sub-systems have independent goals for providing the best patient care. It can be inferred that hospitals are highly complex, social, economic and scientific organisations whose function is to provide comprehensive health care services.



#### Search and learn...

Find out about health care systems near your area and categorise them according to the functions they perform.

This explains the need for the sound management of a hospital. It is the management that helps in managing the functioning of the hospital or a health unit. It integrates various departments of a health care unit, like clinical, non-clinical and supporting departments. Health care services must be comprehensive, preventive, curative and rehabilitative. These services are provided through a network of various primary, private and community health centres in India.

# Functions of a hospital

The purpose of health care services is to effectively meet all the health needs of a community. Hospitals play a major role in maintaining and restoring the health of the community. The main functions of hospitals are as follows:

- restorative
- preventive
- training and research in health and medicine

#### Restorative functions

The various restorative functions of a hospital include the following:

Diagnostic activity

It includes inpatient services, involving medical, surgical and other specialties, and specific diagnostic procedures.

Curative activity

It involves the treatment of all ailments or diseases.

Rehabilitative activity

It includes physical, mental and social rehabilitation.

Emergency services

It comprises providing emergency services required for dealing with accidents, natural disasters, epidemics, etc.

# Preventive functions

Hospitals also carry out various preventive functions, which include the following:

- supervision of pregnancies and childbirth
- supervision of normal growth and development of children



· control of communicable diseases

- prevention of prolonged illness
- provision of health education services
- occupational health services
- preventive health check-up

#### Training and research activities

Training activities of a hospital, generally, refer to the training of medical, paramedical and other support staff (clinical or non-clinical) required and working in the facility. Training is, generally, provided to:

- medical undergraduates
- · nurses and midwives
- · specialists and postgraduates
- medical social workers
- paramedical staff

The research activities carried out by hospitals are for the enhancement of medical technology and services in the following areas:

- physical, psychological and social aspects of health and diseases
- · clinical medicine
- · hospital practices and administration

# Classification of hospitals

Hospitals have been classified on the basis of different criteria, which include size or bed capacity, ownership or control, and objectives.

## Size or bed capacity

The size of a hospital is determined by the number of beds it has, based on which, hospitals can be categorised as follows:

Small hospital: 100 or less beds

Medium-size hospital: 101 to 300 beds

Large hospital: 301 to 1000 beds

The bed strength of different types of hospitals is as follows:

Teaching and referral hospital: 200 to 300

District hospital: 50 to 200 *Taluka* hospital: 50 to 200

Community Health Centre: 30 to 50 Primary Health Centre: 6 to 10

HOSPITAL MANAGEMENT SYSTEM



# Role of General Duty Assistant in various supporting departments in a hospital

#### Outpatient department

The advantage of an outpatient department or an OPD is that most of the investigations and treatments can be done here without admitting a patient, thus bringing down the cost of medical expenditure. The scope of an OPD includes the following:

- · consultation and investigation
- preventive and promotive health care
- rehabilitation services
- health education
- counselling

An OPD is, usually, located at the entrance of a hospital. It must be separate from the inpatient area connected to it. It should have an easy access to the Medical Record Department (MRD), X-ray room, laboratory, pharmacy and billing counter. It must be easily accessible to the casualty but separated from it too.

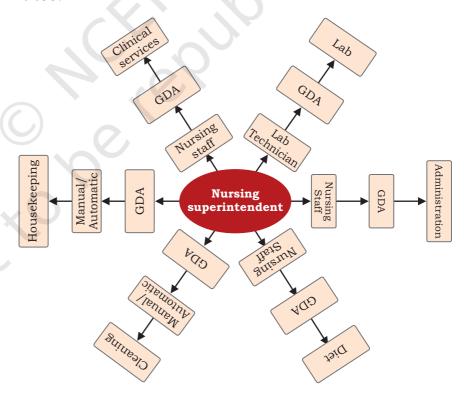


Fig. 1.3 Flowchart depicting the role of a General Duty Assistant in various departments of a hospital



#### Laboratories

The following laboratories are, usually, found in a hospital:

#### Bacteriology laboratory

It conducts tests related to bacteria and toxins produced by them.

### Clinical biochemistry laboratory

It conducts tests and researches on the biochemical basis of diseases and clinical trials of new drugs.

### Haematology laboratory

It is responsible for conducting blood-related investigations, haemoglobin determinations, coagulation time studies, red and white blood cell counts and special blood pathology studies for anaemia, leukaemia, etc.

### Parasitology laboratory

It involves the study of the presence of parasites, cyst and ova of parasites found in faeces.

#### Blood bank

It is here that blood is collected and tested for diseases, if any, and then, transfused into patients admitted in the hospital

Laboratory services must be easily available to outpatients and function round-the-clock. Laboratories must be located on the ground floor.

# Kitchen or dietary department

The dietary department is responsible for ensuring quality food service to patients according to their needs and as prescribed by doctors. It guides patients about the diet they must take after discharge. One dietary staff member is required for 15 to 20 patients. Dietician, food storekeeper, cook, cook helpers and dish washer are engaged in this department. One dietician can look after up to 200 beds. One cook,



Fig. 1.4 Laboratory in a hospital



Fig. 1.5 Kitchen or dietary department in a hospital



one cook helper, one bearer and one dishwasher are sufficient to prepare meals for 20 patients and staff members. The food service department functions round the year.

#### Cleaning and laundry department

The cleaning and laundry department takes care of the entire linen used in the hospital. It has the following functions:

- washing dirty linen
- repairing torn linen
- replacing condemned linen

One laundry operator can wash linen of 25–30 beds. One laundry orderly can assist in washing the linen of 50–



Fig. 1.6 Store of a laundry department in a hospital

60 beds. The appointment of laundry supervisor, mechanic and clerk, and the number of staff employed depends upon the size of a hospital. One supervisor, one laundry mechanic and one laundry clerk are required in each shift. One washerman can take care of 150–200 kg linen per day. Each operation in an Operation Theatre produces 7–8 kg of soiled linen. Each delivery in a labour room produces 7–8 kg of soiled linen. Each ward patient produces about 5–6 kg of bed linen.

### Housekeeping

The housekeeping department's main function is to keep the hospital clean. A sanitation in-charge must be able to train her/his employees in cleaning techniques that prevent the spread of diseases as cleaning is meant to remove organic matter, in which bacteria and viruses are harboured.

A sanitary attendant must be allotted a work area of 1200–1500 sq ft, keeping in view the policies of the hospital, the degree of cleanliness required, and electrical cleaning equipment used, such as scrubbing machine, vacuum cleaner, etc. For a nursing unit, one sanitary



attendant is recommended for managing 10 beds. In the Intensive Care Unit (ICU) and Critical Care Unit (CCU) of a hospital, a higher degree of cleanliness is required. Hence, more sanitary attendants are provided there. Generally, one supervisor is appointed to supervise 10 sanitary attendants. For 300-bed hospital, а should be one sanitation in-charge, four supervisors and 40 sanitary attendants (30 sanitary attendants to meet the daily requirement and 10 as leave reserve).



Fig. 1.7 Staff of a hospital's housekeeping department at work

#### Administration

The administration of the entire hospital cannot be vested on the administrator alone. It is the collective responsibility of medical professionals and supporting staff. The administrative staff, depending upon the size of a hospital, comprises the administrator, assistant administrator, business manager and departmental heads.

#### Purchasing department

The purchasing department has the responsibility of purchasing all supplies, (excluding food), and equipment for the hospital.

#### Finance and accounts department

The finance and accounts department has the responsibility of collecting money, paying for the supplies and equipment, handling all records pertaining to hospital finance, keeping records of assets and liabilities, and assist in budget preparation. The business manager is responsible for the functions of the department and the accountants help the business manager. A GDA serves as the missing link between all supporting departments, in addition to her/his main duty of patient care.



# **Practical Exercise**

Visit a hospital and write the functions of its following departments.

S. No.	Name of Department	Functions
1.	Dietary	
2.	Laundry	
3.	OPD	
4.	Laboratory	
5.	Administration	

#### Activity

List the names of various specimens that will be sent to different laboratories for investigation, like routine blood test, food poisoning, etc.

# Check Your Progress

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8. The department has the responsibility of purchasing all supplies and equipment for a hospital			
Multiple Choice Questions			
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- 2. Control of communicable diseases is \_\_\_\_\_ function.
  - (a) restorative
  - (b) preventive
  - (c) training
  - (d) creation
- 3. \_\_\_\_\_ services are involved in dealing with accidents, natural disasters and epidemics.
  - (a) Emergency
  - (b) Research
  - (c) Training
  - (d) Non-clinical

#### C. Short Answer Questions

- 1. Define the following:
  - (a) health care
  - (b) health care delivery system
  - (c) hospital
- 2. State the functions of a hospital system.
- 3. Describe the various components of a hospital system.
- 4. Enlist two health care delivery models followed in India.
- 5. Which is the most widely used health care model in India?
- 6. Who has the primary responsibility of providing health care to the population in our country?
- 7. Write a note on hospital housekeeping.
- 8. Describe two services provided by the Outpatient Department.
- 9. Suppose you are a General Duty Assistant. A patient approaches you to direct him to the laboratory for blood test. What will you do?

# Session 2: Qualities of a General Duty Assistant

This session throws an insight into the role and responsibilities of a General Duty Assistant in patient care.

A GDA provides nursing care to patients under the supervision of nurses in a hospital. S/he might spend more time with patients than other health care providers in a hospital. GDAs must be empathetic, and have good communication and nursing skills.



Fig. 1.8 A General Duty Assistant assisting in patient care



## Essential duties and responsibilities

The essential duties of a GDA include the following:

- 1. Assist professional health care staff in performing physical examinations and related procedures, which include measuring and recording vital signs, and physiological input and output assessment
  - Patient data, such as vital signs and measurement of water intake and urination, etc., are taken and recorded according to the policies and procedures of a hospital.
  - Changes and abnormal findings in a patient's data are communicated timely to the registered nurse and other team members.
  - The patient is assisted with personal hygiene.
  - S/he is given assistance with ADLs (Activities of Daily Living), exercise and ambulation as directed by therapists and health care staff.
  - Personal care and patient-related services are provided in the patient's home or hospital as needed.
- 2. Help in maintaining the safety of patients
  - The patient's environment, including her/his room, examination room or treatment area is kept neat and clean.
  - Meal preparation and slight housekeeping duties may be necessary in the home setting to maintain a safe environment.
  - Equipment maintenance and safety checks are completed according to the policies and procedures followed by a hospital.
  - Events and incidents are reported promptly to those concerned using the health system's reporting process, which includes computer and various software.
- 3. Perform administrative support functions
  - Medical record duties, including file maintenance and record-keeping, are completed when necessary.
  - Orders related to purchases and supply of inventory are completed according to the hospital guidelines.



- Duties, including scheduling diagnostic procedures, meeting and greeting patients, or delivering specific supplies and pharmaceuticals, are performed efficiently.
- 4. Master necessary skills and competencies
  - Competency in the use of new equipment (i.e., lifting and moving patients) is achieved and maintained.
  - Opportunities for professional development are identified and goals for self-improvement are set.
  - The education and development of others is fostered by sharing information learned through individual professional development.
  - A positive environment for the professional development of co-workers is encouraged.
  - Annual mandatory training activities and regulatory in-service hour requirements are completed within set timeframes.

## Organisational duties

The organisational duties of a GDA include the following:

- 1. Communicate to maintain good interpersonal relationships
  - Positive professional qualities of an employee are reflected in her/his verbal and non-verbal communication.
  - Information about patients and staff is provided in a supportive and timely manner.
  - Interpersonal conflicts are resolved as per organisational policies.
  - Diverse perspectives in personal and social arenas are accommodated to nurture inclusive work environment.
  - Clear communication pattern is followed.
- 2. Service extended to internal and external customers
  - Confidentiality for patient and employee information must be maintained.
  - Appropriate resources are used consistently to meet customer needs.
  - Relationships with staff are fostered to meet internal and external customer needs.



- Positive work relationships with peers, management and customers are maintained at all times.
- Organisational values must be followed with respect, integrity, excellence and must be evident in the GDA's behaviour.
- 3. Participate in performance improvement activities
  - An initiative taken by an employee is demonstrated by trying to resolve problems of the people around.
  - Change is faced with positive and supportive behaviour.

# **Practical Exercise**

- 1. Prepare a presentation on the role and functions of a General Duty Assistant in a hospital.
- 2. Think of ways by which a GDA can enhance the interpersonal relationship standards of a hospital. For example,
  - a) fostering comfortable interpersonal relationship between colleagues
  - b) communicate with patients

# **Check Your Progress**

# A. Fill in the Blanks \_\_\_ provides support to doctors, nurses and other support staff to take personal care of patients. 2. Services extended to customers include \_\_\_\_\_ for patient and employee information. **B.** Multiple Choice Questions 1. Equipment maintenance and supply check \_ (a) General Duty Assistant rules (b) policy-based procedures (c) patient's decisions (d) None of the above \_ enhances interpersonal skills. (a) Positive communication (b) Negative interpersonal skill (c) Unclear speech (d) All of the above



#### 3. Roles and responsibilities of a GDA include

- (a) maintaining patient safety
- (b) assisting health care staff
- (c) good interpersonal skill
- (d) All of the above

#### C. Match the Columns

1.	Patient care procedure	(a)	Good interpersonal skills and managing customers
2.	Administrative support   (b. functions		Maintaining a patient's personal hygiene
3.	Organisational duties	(c)	Productive work habits
4.	Teamwork	(d)	Medical record-keeping and supply of inventory

#### D. Short Answer Questions

- 1. Write two professional duties of a GDA while performing the physical examination of a patient.
- 2. Cite any two core organisational duties of a GDA.
- 3. How can a GDA contribute in enhancing teamwork?

# Session 3: Codes of Conduct for General Duty Assistant

In this session, you will learn about the qualities of a General Duty Assistant. A GDA or a Patient Care Assistant (PCA) works in a range of health care settings and contributes in all areas of the sector. S/he works under the supervision of a nurse in a hospital. As per institutional guidelines, the GDA must follow the codes of conduct of her/his profession.

## **Medical ethics**

Some of the important medical ethics a GDA must follow as per the Indian Medical Standards are discussed in this session.

#### Informed consent

The GDA must tell the truth to a patient and ensure her/his understandability while obtaining her/his consent to carry out a procedure or treatment.



# Confidentiality

The GDA must keep the medical details of patients confidential. Except for professional reasons, the details must not be discussed with others or in public.

#### Communication

Clear communication between the GDA and a patient is essential for successful treatment. Any doubt that the patient has must be dealt with care and resolved at once in a language that s/he understands.

#### Cultural concerns

The GDA must respect the cultural practices of a patient in any circumstance, e.g., allowing the practice of rituals before procedures.

# Communication with patient's family

The GDA must understand the anxiety of the relatives of a patient and inform them from time-to-time about her/his medical conditions.

#### Business related issues

Health care providers must not entertain unethical practices in hospital.

# Informing about illness, medication and side effects of medicines

Telling the truth implies respect for autonomy. Providing the correct information to a patient enables her/him to make reasoned and informed choice(s).

# Follow hospital guidelines

The GDA must follow the guidelines for hygiene, patient care, etc. This helps in preventing patients and staff working in a hospital from catching hospital-induced infections and allergies.

# Accountability

As a professional, the GDA will be accountable for actions and omissions in his/her professional practice and justify the decisions.



## Qualities of a General Duty Assistant

# Empathy

- Ability to identify with and understand the other person's feelings, situation and motives
- Interest in working with people
- Care about others and ability to communicate and work with them
- Understand the needs of people and learn effective communication skills to develop empathy

# Honesty

- Truthfulness and integrity
- · Admit to committing mistakes and correct them

# Dependability

- · Accept the responsibility as required
- Maintain punctuality
- Perform the assigned tasks efficiently and on time

# Willingness to learn

- Ability to learn and adapt to changes that results from inventions and other factors
- Willingness to study further if required

#### Patience

- Must be tolerant
- Learn to deal with workload, frustration and overcome work-related obstacles

# Acceptance of criticism

• Take the criticism of patients, employers and co-workers in a constructive manner so as to improve her/his efficiency

#### Enthusiasm

- Must enjoy work
- Enthusiasm benefits oneself and others in improving the team spirit



#### Self-motivation

- Initiate and acclimatise with a task
- Individually determine work on priority basis and follow them

#### Tact

- Ability to tackle difficult situations with ease
- Avoid being judgemental about other's feelings and show consideration towards them

## Competence

- Capability to perform tasks efficiently
- Follow instructions
- Use approved procedures and try to maintain accuracy
- · Get guidance whenever necessary

#### Discretion

- Information must not be passed on to anyone without authorisation
- A patient is entitled to confidential care
- Be discreet and ensure that the patient's rights are not violated

# Team player

- Learn to work with others
- Each member of a health care team will contribute to provide the patient with quality care
- A team of workers can accomplish the goals faster

# Personal appearance

- Keep yourself well-groomed
- Wear the uniform as per the place of employment
- Wear a photo identity card as issued by the place of employment

# **Professional practices for GDA**

- Politely enquire from the preceptor or instructor about all facets of work rotation.
- Follow laws and regulations that govern the Health Information Patient Privacy Act (HIPPA) and seek clarification when needed.



- Master the routine tasks and specific procedures assigned by the preceptor to focus on competencies and skills specific to the rotation.
- Report to the assigned externship or internship site on time and follow the procedures required to make up for the missed hours.

# Practices to be avoided by GDA

- Advising patients and other health professionals without the preceptor's authority
- Accepting payment, either directly or indirectly, from patient(s)
- Requesting to be placed with someone you are related to
- Requesting for changes and withdrawal after rotation assignments are made

## **Practical Exercise**

- 1. Visit a hospital and observe the services provided by a GDA. Prepare a report based on your observations and submit it to the teacher.
- 2. List the qualities of a GDA.

#### Activity

#### **Debate and discuss:**

As a GDA, following a self-motivated working style is beneficial for professional growth.

# **Check Your Progress**

#### A. Multiple Choice Questions

- 1. A GDA named Manu was transporting a patient suffering from a chronic disease. Manu understood the patient's anxiety and answered his queries satisfactorily. Which ability of Manu, as an ideal GDA, is reflected in this?
  - (a) Distraction
  - (b) Empathy
  - (c) Indifferent
  - (d) None of the above
- 2. A GDA must be able to work together in a \_\_\_\_\_ for the benefit of a patient.
  - (a) individual manner
  - (b) team



- (c) personal way
- (d) All of the above
- 3. Professional, legal or ethical issues are followed and governed by \_\_\_\_\_\_.
  - (a) Health Act
  - (b) Personal Privacy Act
  - (c) Health Information Patient Privacy Act
  - (d) None of the above

#### **B. Short Answer Questions**

- 1. Write any three qualities that a GDA must possess.
- 2. Explain the important medical ethics of a GDA and the need for following them.
- 3. Enumerate the practices to be avoided by a GDA while performing duties.

# Session 4: Personal Hygiene Practices for General Duty Assistant

Personal hygiene reflects good health. Lack of cleanliness may cause many infectious diseases, including epidemics, e.g., plague, dengue, malaria, etc. Contribution of every individual in maintaining personal and environmental hygiene influences the health standard index of a society. Lack of personal hygiene causes dandruff, bad breath, worm infestation, diarrhoea, common cold and many other infections

# Medical hand hygiene practices

This session explains the importance of washing hands for the maintenance of a healthy life. Hygiene is a set of routine personal cleaning practices followed for maintaining a healthy lifestyle. Modern medical sciences follow certain standards of hygiene in different situations. The concept of hygiene varies across regions, cultures, gender groups and individuals. Some regular hygienic practices are considered as good habits by most people in the society, while the lack of these may be treated as disrespectful or even as a threat.

Hand washing is the act of cleaning one's hands with or without the use of water, a soapy liquid or sanitiser, or soap for removing soil, dirt and microorganisms present on the skin. Medical hand hygiene pertains to the practices to be followed while applying medicine or providing other medical services so as to reduce



or minimise the spread of diseases. Washing the hands with soap helps prevent diarrhoea and acute respiratory infections (ARI). The purpose of hand washing is to clean the hands of disease-carrying microorganisms (including bacteria and viruses) and harmful chemicals. This must be followed strictly by all, especially those working in the food preparation industry and medical field. It helps in protecting us from diseases transmitted through faecal-oral routes and direct physical contact (such as impetigo). Alcohol gel is a disinfectant and is helpful in killing bacteria but its effectiveness is disputed as it may lead to antibioticresistant bacterial strains. Hand washing or cleaning is recommended after using the toilet, changing sanitary napkins and diapers, handling animals and touching food. One must wash hands with liquid soap and warm water for at least 10 seconds.

### Why is hand hygiene important?

Hands, normally, have a 'resident' population of microorganisms called 'transient' organisms apart from those accumulated during everyday activities. Most germs present on our hands are harmless but some cause cold, flu, skin infections or diarrhoea. Forgetting to wash hands causes the spread of these germs to other people, besides infecting our eyes, mouths or open cuts. Hand washing prevents the transfer of microorganisms to patients.

# Why is hand hygiene important in health care?

Patients are more vulnerable to catching infections from germs carried on the hands or other hospital staff when brought to a health care environment. Patients, visitors, health care workers, nursing staff and doctors can cut the risk of infections by cleaning their hands at regular intervals.

# Advice to health care staff and patients

All health care staff must wash hands with soap or use alcohol gel:

- before and after direct patient contact.
- after attending to the toilet needs of a patient.
- after carrying out medical procedures.
- before wearing and after removing gloves.

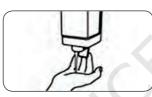


The temperature of hot water used for hand wash is not sufficient to kill bacteria. Bacteria grow much faster at body temperature (37°C). Warm water with soap is more effective than cold water for the removal of microorganisms as flowing water helps dissolve soil and dirt from hands easily. A hand sanitiser or hand antiseptic is a non-water-based hand hygiene agent. Hand sanitisers are effective against bacteria but not for some viruses, which commonly cause contagious gastroenteritis. Avoid touching wound dressings, stitches, catheters or intravenous line, unless unavoidable, as it may lead to the spreading of germs to other parts of the body. Medical hand washing or cleaning must be done for a minimum of 10 seconds, using soap and water or a sanitiser. Let us now practise the steps used for hand washing [Fig. 1.9 (i-xii)].

# Steps for hand washing



(i) Wet your hands with water



(ii) Apply soap to cover the palm surface



(iii) Rub palm-to-palm



(iv) Right palm over the left dorsum with interfaced fingers and vice versa



(v) Palm-to-palm with fingers interfaced



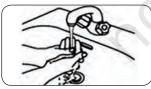
(vi) Backs of fingers to opposing palms with the fingers interlocked



(vii) Rotational rubbing of the left thumb clasped in the right palm and vice versa



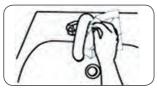
(viii) Rotational rubbing, backward and forward with clasped fingers of the right hand in the left palm and vice versa



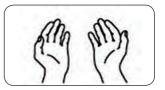
(ix) Wash the hands with water



(x) Dry it with a towel



(xi) Use the towel to turn off the faucet



(xii)...and your hands are clean

Fig. 1.9 (i-xii) Stepwise procedure of hand washing



## Personal grooming practices for GDA

Personal grooming (also called 'titivating' and 'preening') involves cleaning of body, and trimming of nails and hair to improve one's personality and hygiene.

## Importance of personal grooming

Personal grooming encourages a person to maintain a pleasing and attractive appearance, and helps in developing a positive self-image about oneself.

- It makes a person neat and appealing.
- Grooming indicates the readiness of a person for work.

# Basic grooming

Basic grooming involves practices that are followed daily to keep oneself healthy and enhance one's personality. Practices that must be followed regularly are as follows:

- Brush your teeth twice a day
- Take bath daily and wash your hair at regular intervals.
- · Keep your ears and nose clean.
- Take care of your skin by following a healthy diet, water intake and regular exercises.
- Cut and clean your fingernails and toenails.
- Groom your facial hair. Avoid patchy beard and long mustache.
- Apply deodorant.
- Always wear your identity card and a clean uniform.

# Basic dressing

- White socks with dark shoes, and vice versa, must be avoided.
- · Wear well-fitted T-shirts.
- An outfit must not be repeated for two consecutive days or more.
- Avoid wearing faded clothes.
- Do not wear clothes that are overly wrinkled, dirtied or stained.



# Basic appearance

- Comb your hair to enhance its appearance.
- Wear glass frames as per the requirement.
- Maintain fitness by participating in activities, like rock climbing, kick boxing, dancing, etc.

## **Practical Exercise**

Take up the following activities in groups:

- 1. How does hand washing help in preventing the spread of germs? What are the precautions that need to be taken while using various types of soaps or hand sanitisers?
- 2. Practise the steps of hand washing.
- 3. Perform activities for demonstrating grooming habits.
- 4. Develop a project to generate awareness in your community about hand washing.

# Check Your Progress

A.	Fill in the Blanks			
	1.	Personal grooming is also called		
	2.	is a process that makes one look neat and attractive.		
	3. Basic grooming enhances one's			
В.	3. Multiple Choice Questions			
	1.	is a set of practices performed for the preservation of health.  (a) Hygiene (b) Health (c) Environment (d) Habits		
	2.	Health education can  (a) improve community hygiene  (b) prevent illness  (c) inculcate positive health attitude  (d) All of the above		
	3.	is an important measure to prevent the spread of pathogens.  (a) Unclean hands  (b) Washing hands  (c) Rubbing hands  (d) None of the above		



#### C. Match the Columns

1. Hair	(a) Dry and brush the hair
2. Skin	(b) Brush the teeth twice a day
3. Teeth	(c) Wash hands with soap and dry them
4. Hands	(d) Use soap and water while bathing

#### D. Short Answer Questions

- 1. What is hand hygiene?
- 2. Why do we need to practise hand hygiene?
- 3. What is personal grooming?
- 4. Why is grooming important?

#### E. Mark True or False

- 1. Grooming is not an essential part of a GDA's work.
- 2. Clear communication skills are to be followed while conversing with patients and their relatives.
- 3. Personal appearance makes one look neat and appealing.

