

UNIT III**3.1 DIFFERENT DEPARTMENT****3.1.1 X-ray Department**

The main function of this department is to assist clinicians in the diagnosis of diseases through radiography, ultra sonography, computerized axial tomography, magnetic resonance imaging, etc.

While deciding the number of employees in an x-ray department, the following tasks should be taken into consideration:

1. Reception of patients
2. Recording the history of a patients, as concerned with x-ray
3. Prepare necessary paper, the slip to be pasted on the x-ray request entry in the register
4. Taking film from stock, putting the same in the x-ray cassette
5. Explaining to the patients about x-ray procedure and taking the x-ray
6. Processing film
7. Sorting film
8. Reporting to the radiologist
9. Typing of report
10. Charting report or dispatching report

One senior X-ray supervisor is required for 7 X-ray technicians, to supervise and execute radiographic work, to maintain efficiency and high quality of work.

Also required are one receptionist-cum-typist to take care of reception, clerical and typing work and also one X-ray aide to fetch up to 25 patients from the wards during the day.

3.1.2 Physiotherapy Department

The main objectives of physical therapy is as follows:

1. To minimize physical disability through exercises
2. To assist each patient so that he may reach maximum functional level
3. To contribute to the comfort and well-being of the patient
4. To re-train him in activities of daily living
5. To accelerate the patient's recovery and decrease his length of stay in the hospital.

The main function of this department are to rehabilitate or activate various limbs/parts of human body which might have become inactive due to accident/disease/ageing process etc. The department is generally directed and supervised by a chief physiotherapist. He is assisted by a number of

physiotherapists depending upon the work load. One or more receptionists for receiving patients, their scheduling and clerical duties.

Therefore, the following are the main functions of the physiotherapy department:

1. To speed up recovery of patients
2. To prevent and minimize residual physical disabilities
3. To restore physical functions of the body
4. To make an individual return to his optimum way of living

In designing the physical therapy department, hospital planners should pay attention to six major functional areas. They are:

1. Treatment area consisting of cubicles
2. Gymnasium
3. Hydrotherapy area
4. Space for office where clerical and administrative work can be carried out
5. Sufficient changing rooms
6. Sufficient number of toilets

The department is generally directed and supervised by a Chief Physiotherapist.

One physiotherapist can treat about 25 patients in a day during his 8 hours duty. Before giving treatment to patients, he has to do some preparatory work:

1. Examination of the patients
2. Entry into register:
 - Name, age, sex
 - Present history of illness
 - Past history of illness
 - Family history if any
 - Diagnosis
3. Aim of treatment
4. Planning of treatment
5. Progress report

One Chief Physiotherapist is required for 7 physiotherapists to supervise their working and to maintain a high standard.

3.1.2.1 Medical Laboratory

The primary function of medical laboratory is to perform laboratory tests in the eight main fields of hematology, parasitology, urinalysis, histopathology, serology, biochemistry, bacteriology, cytology, etc. to assist medical staff in making or confirming diagnosis.

In all hospitals, a pathologist is in charge of the laboratory. At the middle level there is a chief laboratory technician who looks after the section heads of various sections of the laboratory.

Each section head has a number of laboratory technicians, laboratory aides and bottle washers, but secretarial staff can be common for all the section.

One medical laboratory technician can do approximately 35 tests per day. If he does less than 35 tests, it means that his performance is below average. If he does more than 35 tests, the accuracy of his results should be questioned.

In one day, one technician can do: 45 hematology tests; or 50 urine analysis tests; or 50 parasitology tests; or 20 blood-bank tests; or 40 serology tests; or 30 biochemistry tests; or 20 histopathology tests.

Also required are one section head over 7 laboratory technicians, clerical staff and bottle-washers, keeping in view the workload and technology used in the department.

3.1.2.2 Pharmacy

To run the pharmacy of a hospital, the head of the hospital requires qualified pharmacists, organization structure, cooperation of the medical and nursing staff of the hospital.

The number of pharmacists to be employed in a hospital depends upon the policy of the hospital.

It has been observed that one pharmacist can dispense medicines to 150 patients per day. One pharmacist can dispense one prescription of a patient, whether an out or an in-patient in approximately 2 minutes.

Thus, one pharmacist who works 8 hours a day can take care of 100 out-patients as well as 50 in-patients.

If the number of pharmacists in a hospital exceeds 7, the Chief Pharmacist should employ one senior pharmacist to assist him in supervision so that the efficiency of the department may be maintained.

1.1 Laundry

The following lists show the space and equipment required in a hospital laundry:

1. Clean cloth processing area
2. Drying area
3. Folding area
4. Pressing area
5. Material storage area

6. Laundry supervisor area
7. Laundry personnel's rest room
8. Solution preparation and storage room
9. Boiler area

List of equipment for laundry:

1. Washing machines
2. Hydro extractors
3. Iron for pressing clothes
4. Dryers
5. Sewing machines
6. Boiler

The number of personnel required in the laundry department depends upon the frequency of changing cloths in the wards, the quality of cloths, as well as upon its laundry equipment.

However, one laundry operator can wash the cloths of 25 to 30 beds and one laundry orderly can assist in washing the cloths of 50 to 60 beds.

One shift supervisor, one laundry mechanic and one laundry clerk are required in each shift. Some staffing norms based on the workload being followed at various hospitals are:

One washerman can take care of	:	150 to 200 kg cloths per day. Each
operation in Operation theatre	:	7 to 8 kg of soiled cloths Each
delivery in Labour Room	:	7 to 8 kg of soiled cloths Each
ward patient	:	5 to 6 kg of bed cloths

1.2 Food Service

The food service department receives a substantial amount of supplies. Therefore, it requires large enough area for handling supplies.

The storekeeper of the food service department should also be present so that he can check the quantity and quality of the supplies.

The food service department in most of the hospitals is divided into:

- i. Supply receiving area
- ii. dry storage area
- iii. refrigerated storage area
- iv. cooking area:
 - a) for vegetarian cooking

- b) for non-vegetarian cooking
- c) for western cooking
- d) for special diet cooking
- v. for employees cooking
- vi. patients serving rooms
- vii. food service manager office
- viii. dietician office
- ix. dishwashing area
- x. peeling of vegetables area
- xi. visitor's canteen
- xii. pot washing area

It is difficult to generalize on the size of staff required in the food-service department of a hospital.

The staff strength depends upon the number of medicated diets required, the education programme, research work, and the type of equipment used in the department.

However, one dietary staff member is required for approximately 15 to 20 patients. Generally, in the food-service department of a hospital, the dietician, food storekeeper, cook, cook helpers, bearer and dish washer work in close co-ordination.

One dietician can look after upto 200 beds. If the bed strength exceeds 200 beds, another dietician should be appointed.

One cook, one cook helper, one bearer and one dishwasher are sufficient to prepare and serve meals for 20 patients/staff members.

1.3 Sanitation and Housekeeping

The housekeeping department deals with hospital hygiene. The sanitation in-charge should know the simple facts about bacteriology. He should also be able to train his employees in cleaning techniques.

The following functions are carried out by personnel of the housekeeping department:

1. They sweep and mop floors, dust furniture, clean walls, windows and bathrooms.
2. They scrub and wax floors.
3. They collect garbage and dump it near the burning site.
4. They prevent spread of infection.

A sweeper should be allocated a work-area of 1,200 to 1,500 square feet keeping in view the work policies of the institution, the degree of cleanliness required, and the electrical cleaning equipment used.

One supervisor to supervise 10 sweepers is recommended. For a 300-bed hospital, there should be one

sanitation incharge, four supervisors and 40 sweepers (30 sweepers for the daily requirement and 10 sweepers as leave reserve).

1.4 Security

The security of any hospital is becoming more and more problematic. The visitors may violates the rules and regulations of the hospital.

Similarly, employees of the hospital try to break hospital discipline.

The security personnel of a hospital have a dual role to play that of watching and controlling both visitors and the staff.

Keeping in view the rising trend of thefts and the tendency of visitors to violate the rules and regulations, it is necessary to engage sufficient security force.

The staff strength required depends upon several factors;

- The area of the hospital,
- The location of the hospital (city, town, village),
- The construction of the hospital building

However, the norm is that one security guard is required for every 10 beds of a hospital and one security supervisor is required in every shift to take decisions on the spot in case of any untoward incident such as theft, fight between the hospital staff and the public or amongst the hospital employees.

1.5 Central Sterilization and Supply Department

The primary activities of the department are sterilizing, storing and distributing the dressings, instrument packs, gloves, catheters, sterile cloths packs, treatment trays, etc.

The main objectives of the central sterilization and supply department are:

1. To prevent infection by sterilizing equipment and materials
2. To sterilize equipments and materials
3. To achieve higher efficiency in the areas where sterilized equipment and materials are used
4. To reduce the length of stay of patients by providing proper sterilized equipment
5. To reduce the cost of maintenance of the hospital.

Mostly the functions of the central sterilization and supply department are:

1. Receiving the used equipment and materials
2. Deciding whether any of the equipment and materials are required to be discarded
3. To disinfect prior to sterilization
4. Assembling equipment sets, cloths packs and treatment trays
5. Packing equipment sets, cloths packs and treatment trays

6. Sterilizing
7. Labelling and dating
8. Storing equipment packs, cloths packs and treatment trays
9. Issuing

Generally, in the central sterilization and supply department, there is a supervisor who may be a nurse and the remaining staff consists of technicians and aides who are trained on the job.

One person in the central sterile supply department can take care of 25 to 30 beds. This excludes the supervisory staff but includes a 30 percent leave reserve.

1.6 ECG Department

The staffing norms for ECG technicians depend upon the type of hospital, size of the hospital and number of patients visiting the Outpatient department.

The staffing norms for ECG technicians can be formulated on the basis of number of ECGs taken in one shift (lasting 8 hours).

One ECG technician can take about 20 ECGs in one shift.

1.7 Admitting Department

The functions of the admitting department generally consist of giving information, admitting, transfer and discharge of patients.

At the time of admission, the admission desk collects data during the admission process. Once the admission formalities are over, one person from the admitting department accompanies the patient to the ward and hands over the admitting papers of the patient to the ward incharge concerned.

The main functions of the admitting department are:

1. Admission of patients, transfer from one place to another because of the condition of patients and discharge of patients from the hospital.
2. Collecting information from patients at the time of admission.
3. Generating appropriate patient's records to pass on to the department concerned
4. Collecting advance from patients at the time of admission as per the policy of the hospital, if any.
5. Booking patients for planned surgeries and deliveries on the basis of written instructions by the doctors concerned.
6. Maintaining a bed index showing current occupy of beds ward wise in order to assign beds for other patients.
7. Arranging some one to take the patient and his family members to the patient's room where

he has been allotted a bed.

8. Providing information about the hospital and its doctors to patients.

1.8 Medical Records Department

The medical records department maintains records and document relating to patient care. Its main functions are filing, indexing and retrieving medical records by

- i. Developing a procedure for the proper flow or records,
- ii. Developing a statistical reporting systems
- iii. Preparing births, deaths and communicable diseases reports
- iv. Preparing statistical reports in relation to admission, discharge, coding all diagnosis.

1.9 Public Relations Department

The major responsibilities of the Public Relations Officer are:

1. To keep good relations with all kinds of media personnel.
2. To develop communication material such as website of the hospital.
3. To bring the virus of the public to the knowledge of the management.
4. To tell beforehand the impact of any change in the hospital policy.
5. To improve communication between the public and the management.
6. To organize camps for blood donation, fund raising, etc.