CHAPTER - III

PUBLIC HOSPITAL SERVICES IN ORISSA
3.1 INTRODUCTION

In this chapter, efforts have been made to enumerate the types and mode of services rendered by public hospitals in our state. Efforts have also been made to cover as many services as could be learnt on personal investigation. However, the researcher experiences non-cooperation from the busy Medical Officers in some cases while listing the services offered by public hospitals in Orissa. There has been a constraint to limit the study only on some important ones. Different managerial aspects of the services have been studied in this chapter. The researcher has all along attempted to refer to the standards of services of public hospitals across the state. Thereby, he unveils the scope to review the efficiency of public hospitals in managing such services of different types of public hospitals in our state. The types of services have been presented here from the secondary sources such as medical journals, books, lectures, Govt. of Orissa Health and Family Welfare Department’s publications.

Health and Family Welfare services cover a wide spectrum of personal and community services for treatment of diseases, prevention of illness and promotion of health. The purpose of health services is to improve the health status of population by making them reach the social periphery in an equitable manner and accessible by all at a cost which the country and the community can afford (Tabish, 2005). Health services can also be seen as essential for social and economic development. The public hospitals play a major role in maintaining and restoring the health of the community (Verma, 1982). However, the primary functions of public hospitals are outlined as under:

- Care of the sick and injured.
- Education of physicians, nurses, paramedical and other personnel.
- Public health, i.e., disease prevention and health information.
- Research.
The importance of the above-stated functions is better realized in view of their necessity in managing various hospital services which have been discussed below:

3.2 OUT-PATIENT SERVICES (OPD)

Good outpatient services constitute one of the most important elements of a good hospital. This is the first place where the sick and their relatives come in direct contact with the hospital and its staff (Nobel, 1989). The care and attention provided to them go a long way in building up confidence of the people in the hospital. The staff working here should be aware of the difficulties and limitations of their hospital and politely explain to the patients the reasons for minor delays and discomforts that are bound to arise.

3.2.1 Functions

The functions of outpatient services are to provide diagnostic, curative, preventive and rehabilitative services on an ambulatory basis to the community. The main functions of OPDs are:

- Early diagnosis, using the best possible modern medical techniques, including prophylactic examinations for the detection of undiagnosed diseases.
- Ambulatory and domiciliary treatment of all cases which can be treated at the clinic or at home.
- Admission or referral to the hospital of those patients who need it.
- After-care and medical rehabilitation after discharge from hospital.
- Promotion of health through health education.
- Use of outpatient facilities for the training of medical and nursing students.
- Record-keeping and collection of data for epidemiological and social research and periodic assessment of medical work (medical audit).

Continuity of care is of utmost importance and there should be an easy transition from hospital care to ambulatory and domiciliary care and back.
3.2.2 Planning and Organization of the OPD

Care of the ambulatory patient is the main consideration in the OPD. For maximum efficiency, there must be perfect coordination with the inpatient department (IPD) and the diagnostic facilities of the hospital. The main considerations are:

- Within the OPD, the physical facilities should be placed such that smooth flow of operation and easy and quick inter-communication are maintained.
- Services common to both the inpatient and outpatient departments (radiology, laboratory, blood bank) should be readily and easily accessible from the OPD and should not involve undue effort or movement.
- Compilation of a programme for clinics on a weekly basis or other suitable basis.
- Provision of sufficient doctors and nurses and other necessary staff, with arrangements for holidays, sick leave and other contingencies.
- Provision of adequate auxiliary departments and facilities on a scale which permits efficient handling of the load.
- Installation and review of an appointment system based on the doctors' hours of working.
- Detailed review of amenities for patients.

3.2.3 Workload

The number of patients visiting the OPD will depend upon the

- Location of the hospital
- Population and their needs, programme and resources, season of the year, and traffic and transport facilities

3.2.4 Reasons for overcrowding in OPDs

OPDs in government hospitals are often overcrowded due to the following reasons.
• Restricted registration time.
• Absence of appointment system.
• Shortage of medical staff.

3.2.5 Problems faced in management of OPDs

In managing OPDs, the following problems are seen in public hospitals:

• Prolonged waiting time.
• Rude behavior of staff.
• Inadequacy of resources.
• Inadequate physical facilities particularly recreational and comfort facilities for patients and visitors.
• Non-availability of medicines.
• Lack of co-ordination among various specialist and sub-specialists at the OPDs.
• Delay in reporting at the Path-Lab and Radio-Diagnosis Dept.
• Perceived dissatisfaction among patients and staff.

Hospital clinics generally function for about 5-6 hours a day (3 to 4 hours in the morning and 1 to 2 hours in the afternoon). In some hospitals, a doctor in charge of a clinic examines about 25-40 patients per hour. This is considered to be excessive as a doctor should not be expected to attend to more than about 10 patients (new and old) per hour. Owing to the shortage of medical personnel, this number has to be exceeded. However, no doctor should be expected to attend to more than twenty patients (old and new) per hour. Other connected facilities should be determined on this basis.

The OPD is the show case of any hospital. It should have an independent approach at the entrance of the hospital and should be on the ground floor for easy access. It should be segregated from the IPD so that the OPD patients need not pass through in-patient areas. Some treatment facilities like radiology, pathology, blood bank etc. should be interposed between the OPD and IPD.
3.3 INPATIENT SERVICES (IPD)

Inpatient services are very important in the hospital-based health care delivery system. They account for approximately 0-50 percent of the hospital complex and form the largest single component of the hospital. Inpatient hospital services are under constant pressure of increasing demand and their capital and operational costs are very high which directly affect the hospital (Finch, 1999). Hospital administrators should be fully aware of cost-intensive nature of inpatient services and insist on effective planning and efficient utilization.

The prime objective of inpatient services is to provide accommodation for patients at that point of illness when dependence on others is the highest. Because of this, they are (with the emergency department) the only areas in continuous operation (day and night) for patient-related activities. The inpatient care area, (ward or nursing unit) would thus include a nursing station, the beds it serves and the necessary work, storage and public areas needed to carry out nursing care.

3.3.1 Inpatient care units

Various IPD services are provided through the in-patient care units given as under:

- General Wards
- Specialty Ward.
- Intensive Care Units.

3.3.2 Functions

Every inpatient nursing unit should be designed in such a way that it can be built and operated at the lowest possible cost and at the same time achieve the functional goals of the unit which are to:

- Provide the highest possible quality of medical and nursing-care to patients.
- Provide necessary equipment, essential drugs and all other requirements for patient-care in an organized manner in the ward, furnish the most desirable environment for patients, accommodating all their basic needs.
- Provide facilities for visitors and attendants.
• Provide the highest degree of job satisfaction for the nursing and medical staff and the opportunity for training and research.

3.3.3 Planning and Organizing Inpatient services

While planning an IPD, the aim should be to minimize the work of the nursing staff and provide basic amenities to the patients so that his/her stay is made as comfortable as possible. The distance to be traveled by a nurse from the bed areas to the treatment room, pantry, etc. should be kept to a minimum.

The following factors should be considered:

a. Policy of the hospital.
b. Physical facilities - Location and area, size, shape/design, ancillary accommodation, supply of water and electricity and air-conditioning, auxiliary accommodation.
c. Staff – Medical, Nursing, Supportive.

3.4 INTENSIVE CARE UNIT (ICU) SERVICES

Intensive care is one of the important aspects of critical care. It includes resuscitation, emergency care for life-threatening conditions and intensive nursing care. In hospitals, such care is provided in Intensive Care Units (ICUs). The ICUs usually accommodate a limited number of patients who are either in a critical state or require specialized care and equipment for observation, signaling, recording and measuring physiological functions.

The aim of the ICU is to first give life support to a patient or prevent threat to life and then treat the underlying cause with high standard of nursing care and treatment.

ICU is a facility with more space, staff and equipment for patient care that cannot be provided in ordinary wards. A service that provides continuous observation of the vital functions and can support these functions more promptly and efficiently than could be done elsewhere in hospital.
3.4.1 Staffing

The ICU is usually under the charge of a physician with special training, experience and competence in a specialty related to the care provided in the unit. He should be responsible for implementing policies established by the medical staff of the ICU and ensure that the quality, safety and appropriateness of patient-care services provided are reviewed and evaluated regularly. Owing to their expertise in respiratory and resuscitation therapy, anaesthetists / anaesthesiologists have been traditionally administering the ICU.

This committee is responsible for development and approval of ICU policies, structural changes, equipment purchases and infection control measures. The medical staff should meet the intensive care requirements of patients in the ICU. The role of house staff should also be defined. Expert nursing is the most important element of intensive care. It is therefore essential that the nursing staff at ICU be specially trained above the level of average competence, knowledgeable about the emotional and rehabilitative aspects of the ICU patients, and capable of applying appropriate therapeutic intervention. The recommended nurse patient ratio is 1:1 though in practice it is usually 1:2.

<table>
<thead>
<tr>
<th>Shift</th>
<th>Nurse-patient ratio</th>
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<tr>
<td>Morning shift</td>
<td>1:1</td>
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<tr>
<td>Evening shift</td>
<td>1:2</td>
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<tr>
<td>Night shift</td>
<td>1:3</td>
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The nursing staff of the ICU should be trained on a regular basis regarding recognition, interpretation and recording of signs and symptoms of patients. They should also be trained about safe use of electrical and electronic equipments, control of infection and counselling of patients and their families.

ICUs are cost and labour-intensive. Therefore, their effective and efficient utilization is more desirable. It is primarily meant for the patient in a critical stage of illness and for all seriously ill patients. The admission and discharge policies should be based on these criteria. Endeavour should be there to keep its occupancy not more than 80-85 percent at any point of time to accommodate emergencies.

3.5 EMERGENCY MEDICAL SERVICES (EMS)

Medical emergency is a situation in which a patient requires urgent and high quality medical care. Due to increase in vehicular traffic and rapid industrialization, the number of accidents and emergency situations is fast increasing. Emergency Medical Services (EMS) is, therefore, an important aspect of acute medical care provided by the emergency (casualty) department of the hospital. It serves the community 24 hours a day throughout the year.

In large hospitals there should be a separate independent department providing EMS as the dependent population is larger and concentrated.

3.5.1 Features of EMS

Emergency Medical Services have the following features:

- Speedy transportation of the victim to the emergency centre
- Pre-hospital therapy in the form of immediate first aid and registration, starting from the site of accident.
- Prompt and quick service with an efficient and foolproof communication system.
- Adequate physical facilities, equipment and stores.
- Alert, well-trained and sympathetic staff that can render immediate and appropriate life-saving treatment and also meet the emotional requirements of the patient and his attendants.
3.5.2 Functions of EMS

The various functions of EMS are listed as under:

- Collection of casualties.
- Information centre to render advice on telephone or in person for simple medical queries.
- Establish a reception centre in case of a disaster.
- Liaison with policy in medico-legal cases.
- Education, training and research activities.

3.5.3 Staffing

The staffing of the emergency department depends upon its size, workload, category of hospital and resources available. Emergency care is a team work. Therefore, it is better to maintain a similar staffing pattern throughout the day. Depending upon the scope of emergency services provided, the following personnel are considered essential to man the emergency department:

1. Surgeon and medical specialist.
2. Anesthesiologist (on call).
3. Other doctors (house surgeons).
4. Nursing staff including OT nurses.
5. X-ray technicians.
6. Laboratory technicians.
7. ECG technicians.
8. Hematology technicians.
10. Drivers.
11. Sweepers.

The staff of the emergency department are provided continuous on-the-job training.
3.6 HOSPITAL SECURITY SERVICES

Prior to 1970s, hospitals were threatened by relatively little crime and destructive behaviour. Because of their roles, hospitals were spared of the effects of the anti-social behaviour that had plagued the Indian community in a greater or lesser degree. Such restraint no longer exists in to-day’s hospitals. Thefts have become common in such places punctuated by crimes of serious nature like criminal assault of body lifting. Nowhere is our society more vulnerable than our hospitals, It is mainly because of the nature of services performed or the open access and freedom of movement that characterize the hospital environment. The other reasons may be lack of awareness and concern on the part of hospital management. Every worker in a hospital must try to prevent any breach of security and minimizing such incidents should become the aim of the hospital security plan. A system of safeguards is usually designed to protect the physical property of the facility and to achieve relative safety for all individuals interacting within the hospitals and its environment.

3.6.1 Rationale for Hospital Security

The following points justify the need of security in public hospitals:

- Minimize the possibility of loss of property or injury to personnel inside the hospital premises.
- Legal responsibility towards patients, visitors and improvement property.
- Compliance with the standing security regulations.
- Enhancement of economic health of the hospital by loss prevention.

3.6.2 Principles of Hospital Security (4Ds)

Effective hospital security should the following principles:

- Detect – the potential intruder.
- Deter – the intruder by initiating appropriate response mechanism.
- Delay – the intruder, so that he cannot achieve his objectives.
- Deny – further access into the facility by the intruder.

The scope of hospital security covers its area, information, office building, materials etc.
3.6.3 **Common problems inviting security attention**

The attention of hospital security is required to prevent the following problems:

- Pick pocketing
- Loss of hospital property from Indoor Wards/OPD.
- Loss of valuables in the casualty dept/indoor wards.
- Baby lifting.
- Dog/Car/Monkey access to interiors of hospitals, particularly labour room.
- Impersonation.
- Theft of vehicle from parking areas.
- Petty pilferage from medical stores/QM store.

Hospital security will always remain a difficult job because of peculiarities of functioning of hospitals as has been highlighted in preceding discussions. The perception of a well-protected facility will itself become a deterrent. The security training will have to start from the design phase and will have to be continuously reviewed and updated to face various contingencies. The facility in which management, physical design and operations communicate a sense of control will have a major positive impact on the behavior of those within.

3.7 **LABORATORY SERVICES**

The hospital laboratory is the basic source of analytical information concerning the patient. Although the term laboratory has been in popular use, it is called the Department of Pathology in most hospitals. It provides all possible help to the physicians, especially in solving difficult clinical problems.

Pathology is that branch of medicine which employs methods and instruments of precision for the examination of secretions and excretions of the human body and its functions are to:

- Diagnose disease.
- Follow its course.
- Aid in its treatment.
• Ascertain the cause of death and the result of treatment by means of autopsies, and.
• Help advance the science of medicine by means of research.

Some authors classify laboratory functions into two groups:
a. Anatomic pathology which includes the study of tissues of the human body.
b. Clinical pathology

3.7.1 Planning

The following procedure for planning a pathology department are given below:
i) Determine the services to be provided.
ii) Determine space requirement for personnel and equipment in the administrative, technical and auxiliary areas.
iii) Divide technical areas into functions or units and keep open areas in small laboratories, but provide segregated areas in large laboratories. Determine procedures to be performed in each area and the equipment required, both portable and fixed.
iv) Determine the volume of work to be performed for each work unit or function.
v) Determine functional arrangements such as location of the lobby at the entrance to the department and centralize the reception area.
vi) Mark future expansion areas.
vii) List articles and special building requirements of equipment to be installed.
viii) List environmental requirements, such as light, ventilation, air-conditioners and isolation of equipment.

3.7.2 Organization and Staffing

Pathology services include those personally performed by the pathologist and those performed under his responsibility and supervision by the medical technologist. In the clinical division, the pathologist establishes the methodology and instrumentation for the various procedures, conducts quality control programmes, supervises special procedures and reviews all unusual and abnormal results.
3.8 PHARMACY SERVICES

Pharmacy services play an important role in patient-care in a hospital. This department ensures constant supply of standard drugs at an economical price for the treatment of the sick. The pharmacy counter is generally the last place visited by OPD patients. On reaching the counter, the patients are in a tired state and expect quick service. Therefore, efficient and effective functioning of the pharmacy can result in increased efficiency in patient care and reduced need for admission.

3.8.1 Functions

Pharmacy services are also responsible for:

- Monitoring, evaluation and assurance of the quality of drugs. (These functions are carried out in cooperation with other departments and programmes of the hospital);
- Estimating demand according to formulary system and establishing specifications for drug procurement in the absence of such system.
- Compounding and manufacturing sterile and non-sterile products;
- Quality control of drugs purchased and those compounded/manufactured in the pharmacy;
- Supplying drugs to inpatients;
- Dispensing drugs to outpatients;
- Maintaining the formulary system and implementing the decisions of the pharmacy and therapeutic committees; and
- In-service and job service training, teaching and research.

3.8.2 Planning

No action plan can be undertaken without forecasting. It involves the estimation of:

- the number of patients to be supplied with drugs, and
- the approximate number of items per prescription, basing on physical facilities, manpower facilities and resource allocation.
The data required for such forecasting are outpatient attendance, number of prescriptions and their items, etc. Such data can help estimate the number of staff and space required.

Planning and organization follow forecasting. They prescribe the course of action and lay down priority. Planning and organization involve consideration of physical facilities, and monitoring and supervision.

3.9 OTHER ALLIED SERVICES

Discussion on hospital services will remain incomplete with some more areas like diet, transport, housekeeping, laundry, waste disposal, etc are not considered. Hence the researcher has tried to discuss some more services given below under the head “Allied Services”.

3.9.1 Dietary Services

The dietary service department of a hospital has the responsibility of preparing nutritionally adequate meals for patients at a cost consistent with the policies of the hospital. As dietary services account for one-fifth of the total cost of hospital maintenance, serious consideration should be given to.

- Proper planning of facilities, organization, staffing under competent supervision.
- Orientation and training of food workers about cleanliness and service;
- Acceptable methods of food purchase, handling, preparation and quality.

The objective of the dietary services should be to provide optimum nutrition in a scientific, sanitary and aesthetic manner at minimum cost.

3.9.2 Ambulance and Other Transport Services

Transporting the sick/injured to a correct and comfortable position after providing some medical aid helps in reducing the mortality rate. Studies have shown that a properly equipped ambulance with emergency aids such as oxygen, ECG and other monitoring systems can save lives in case of accidents and myocardial infarctions.
The basic objective of an efficient ambulance service is to transport the sick/injured to the nearest medical-aid post or hospital in minimum possible time. In many public undertakings and medical care programmes, such as railways and defence, the ambulance service is also considered as a welfare activity besides an aid to the health-care delivery system.

3.9.3 Hospital Housekeeping Services

Hospital housekeeping service plays an important role in prevention and control of hospital infection and therefore, directly affects the health, comfort and morale of patients, doctors, visitors and other hospital personnel. Hence, good housekeeping reduces the average duration of patient-stay and drug cost and minimizes suffering.

3.9.4 Hospital Linens and Laundry Services

The term ‘hospital linens’ covers all textiles of the hospital including mattresses, pillows, blankets, sheets and towels. Cotton is the most frequently used material as it is cheap and comfortable.

Classification of Hospital Linen

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<thead>
<tr>
<th>A. Patient linen</th>
<th>B. Laundry linen</th>
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<tbody>
<tr>
<td>Bed linen</td>
<td>Contaminated/infected linen</td>
</tr>
<tr>
<td>Body linen</td>
<td>soiled linen</td>
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<tr>
<td>OT linen</td>
<td>Foul linen</td>
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<tr>
<td>Staff linen</td>
<td>Radioactive linen</td>
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<td>Department/service linen</td>
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3.9.5 Hospital Waste Disposal Services

The term ‘hospital waste’ refers to all discarded material (biological or non-biological) that is not intended for further use (e.g. administrative, dietary and medical wastes). According to the World Health Organization (WHO), the responsibilities of hospitals and health care establishments include proper disposal of aqueous and other liquid wastes.
Considering the various categories of wastes generated in the hospitals, it is clear that a policy for management of hospital waste is essential to deal with this potentially serious problem. The process can be divided into the following steps:

(i) Segregation of different categories of wastes at the point of generation or at source;

(ii) Collection of refuse;

(iii) Packaging, labeling and record keeping;

(iv) Transportation of refuse from sources to zonal points of collection;

(v) Disposal/recycling.

REFERENCES


