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## REVIEW ON HOSPITAL PHARMACY

**Authors: Akash B.Wankhede<sup>1</sup> Swapnil S.Kawarkhe<sup>2</sup> Dr.Swati P.Deshmukh<sup>3</sup> Girish R.Ghatol<sup>4</sup>  
Vinod J.Kanade<sup>5</sup>**

1,4,5 Student of B. Pharm Shraddha institute of Pharmacy Kondala Zambre, Washim 444505

2 Assistant Professor Department of Pharmacology, Shraddha institute of Pharmacy Kondala Zambre, Washim .

3 Professor, Department of Pharmacology, Shraddha Institute of Pharmacy Kondala Zambre, Washim 444505

### ABSTRACT

Hospital pharmacy is an healthcare services which comprise the work like preparations storing compounding dispensing Now-a-days Hospital pharmacy is highly developed. Hospital pharmacy is an major part of healthcare service This concept of hospital pharmacy is widely present in large or multispecialty hospitals. It improves the facilities to the patient and also improves the ease of Hospital working. Proper storage, manufacturing and dispensing as well as compounding is performed with Proper manner in Hospital pharmacy. The need of is Hospital pharmacist also becomes crucial. He is the major part of the system for their advice which is needed. The Hospital pharmacist helps in pharmacotherapy monitoring and reporting of drug-related complications to physician or doctor.

**Keywords:** Hospital pharmacy, pharmacotherapy monitoring.

### INTRODUCTION:

Hospitals pharmacy has emerged as one of the latest branches of pharmacy in 21st Century. It is the place where pharmacist deal with various aspects of patient care, dispensing and compounding of drugs and advising patients on rational and safe use of drugs. The Hospital pharmacist plans Important role in Proper working of Hospital. Hospital pharmacist provides patient care that observes the use of prescribed medication and promotes health as well as illness prevention. Hospital pharmacy helps in monitoring of ADRs and other medication side effects. Hospital pharmacy plays crucial role in recommendation, consultation as well as counselling of patient. It keep the details history of patient.(1) The Hospital pharmacy system should assure the integrity of the medicine supply. Chain to assure the value of medicines which are used for the prevention of disease and the treatment of patients. According to survey 33.6% peoples dies in a year due to lack of prescription understanding.and wrong medication Managing the cost of medicines is an challenging task to minimize the use of raw resources. Public health safety is the major motto of Hospital pharmacy.

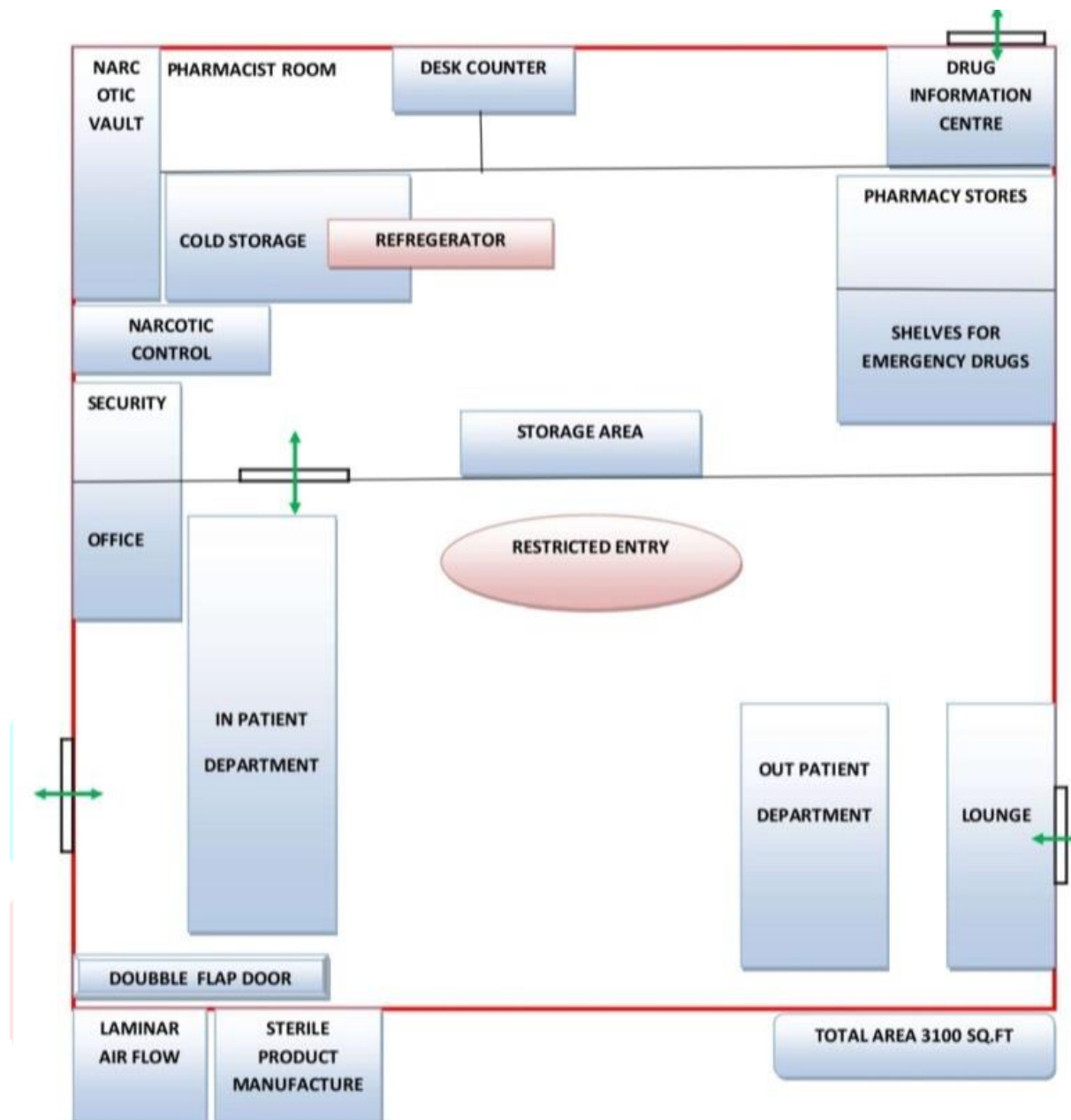


Fig 01) Operating Structure of a Hospital Pharmacy

### The role of hospital pharmacy:

- 1) Dispensing and compounding of prescription to in-patient and out-patient.
- 2) Maintaining the information regarding cost, and supply channel, quality and medicine distribution.
- 3) Maintenance of the drug according to the international guidelines and the pharmacist in Hospital pharmacy should have adequate knowledge and should be well trained and skilled.
- 4) The potency and any adverse effect occur to the patient must be observed and disclosed.(2).
- 5) Hospital pharmacist has responsibility to provide education and counselling to patients on safety and effective use of medicines.
- 6) Pharmacists also plays important role in providing education materials to patients to obtain better knowledge on drug therapy.
- 7) Hospital pharmacists also manages patient counselling clinics for chronic kidney diseases ,cancer chemotherapy, asthma and chronic obstructive lung disease in many countries.

8) Hospital pharmacists takes responsibility of adverse drug reactions reporting and management.

9)Hospital pharmacists plays major role in primary care services like medication history interview, patient counselling, drug therapy review.

10)Hospitals provide training programme for health care practitioners Such programmes run under diverse faculty of physicians, nurses and pharmacists.

11)Hospital pharmacists are responsible for patient follow up and improved transition of patient care.(3)

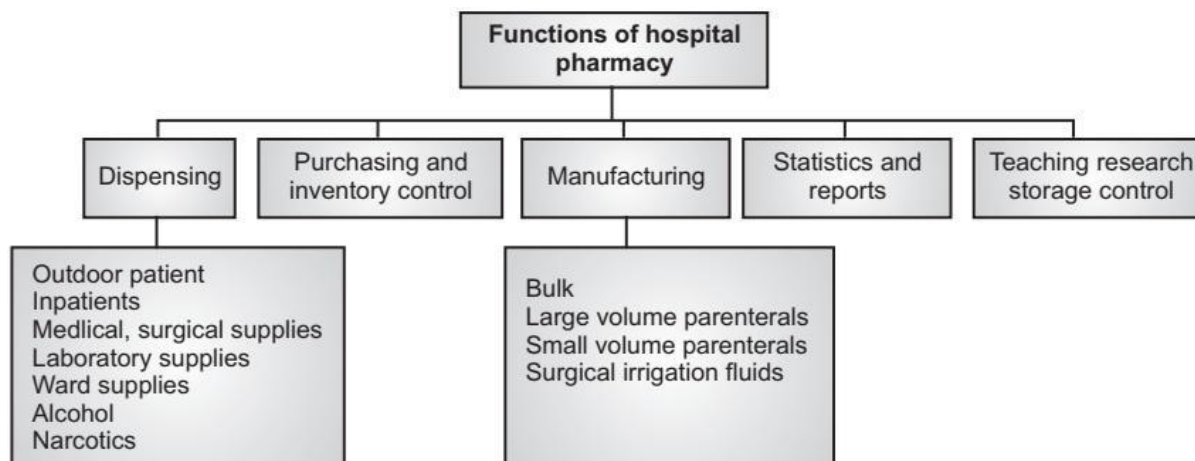


Fig 2) Functions of Hospital Pharmacy

## Drug & Therapeutics Committee:

a. In India there are some DTCs which work by the requirements of the National Accreditation Board for Hospitals & Healthcare Providers (NABH). DTC plays vital role in the improvement of drugs use as well as to maintain the cost affordable to patient and reduce cost in hospitals. The DTC is normally present in every hospitals especially in teaching hospital. The DTC works as an advisory group for recommendation of policies related to drug therapy to the medical board. As early as 1935, The first DTC was founded in USA in the earlier period of 1935. The main aim of the DTC is to provide best and affordable services to the patient as well as ensure the best possible cost to the patient. DTC improves the treatment and facilities to the patient by providing quality essential medicines and adverse drug reaction monitoring.

## Structure and Organization :

The Committee contains representative from all the departments. It is made up of three major departments as given below:

1) Clinical departments

- a) pharmacologist
- b) a nurse
- c) microbiologist

2) Administration

- a) Hospital director

3) Pharmacy

- a) Pharmacists (Secretary of DTC) (4)

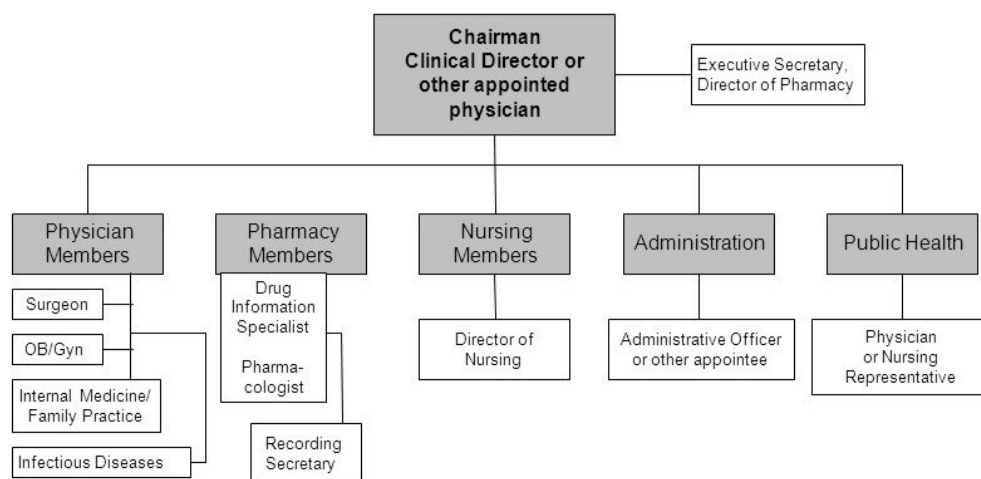


Fig 03) Structure and Organization of DTC

## Adverse Drug Reaction Monitoring :

ADR monitoring is the important step to reduce rate of side effects and to gather information about adverse effect of drugs and their efficacy. This helps physicians for acceptance and declination of particular drug from market. In Present an Pharmacovigilance system has been established in India for the purpose of ADR monitoring and reporting. In India there are 2 Zonal canter have been established at Mumbai and Delhi and there are 5 regional centres established at New Delhi, Mumbai ,Kolkata, , Nagpur, and Pondicherry. As we know that physicians in our country are always busy, and are unable to give more attention and time to each and every patient. Sometimes a patient needs to get an appointment to report a complaint after taking a medicines. and thus many patient avoid for the reporting of ADRs to the physician. Therefore pharmacists plays major role in ADRs reporting and monitoring as pharmacists are most easily accessible health care professionals for the patient. (5) In studies conducted among the pharmacists, the proportion of awareness about the ADR was found to be nearly 95% but only 57% were aware of the pharmacovigilance system. All pharmacists knows that they have responsibility of ADRs reporting but only half of of them know what type of ADRs should be reported. Whereas 70%, 33% and 37% of awareness was found among resident doctors, physiotherapists and pharmacists. A study revealed that only two-thirds of the practitioners could define an ADR properly only one-third of them could correctly define pharmacovigilance Thus focussing specifically on the future healthcare practitioners, the medical post graduate students are knowledged and being aware by meant of programmes of pharmacovigilance and ADRs.(6)

## Hospital Formulary:

A Hospital Formulary is a list of drugs or manuals of pharmaceutical preparations and medication that is specific to every hospital which reflects the current use of drugs and medication in hospitals. It contains detailed information about each drug used in treatment and therapies in the hospital. A Hospital Formulary system is process by which a health care organization or hospitals develops policies and regulations for the use of drugs, therapies, and other medication, etc. Hospital formulary plays major role in identifying the most medically appropriate and cost-effective medication to serve the best health services. There are number of problems which exist in most pharmaceutical system such as low drug budgets, wide range of therapeutic alternatives, presence of unsafe and non-efficacious drugs and improper use of medications, drugs with low efficacy and low quality, etc. A hospital formulary provides detailed information to the hospital staff about drug products approved for their use in hospital by the Pharmacy and Therapeutic Committee. Hospital formulary helps in effective use of medicines in hospitals. Hospital formulary helps in monitoring the use of each and every drugs that are utilized in hospital for the treatment of patients. Hospital formulary simplifies the use of drugs having variability and multiplicity for the treatment of diseases. The first edition of the WHO Model Formulary

was released in 2002 by WHO with vision to provide safe and cost-effective medication to the patients. This formulary contains detailed information about 325 generic drugs.( 7)

### **Hospital Formulary Development:**

Every hospital has its own DTC which is a decision-making committee in a hospital DTC plays a vital role in preparing a hospital formulary by developing a formulary committee which has a member and a secretary. This committee carefully performed assessment and evaluation of the availability of selected drugs required for patient diagnoses and treatment. The Committee developed, discusses and co-ordinately work with all clinical departments on drugs required by them and by taking their recommendation under priority develops a hospital formulary.(8).

### **Patient Medication History Interview**

Patient medication history interview is termed as the gathering and recording of data and detailed information by reviewing or interviewing of patient about his or her past and present medication used. Interviewing a patient is simply collecting the data of medical history and is termed as medication history interview. Medication history interview is the most influential step in medication reconciliation. This history is generally obtained by physicians, nurses, nurse practitioners, and pharmacists, but the pharmacist plays a major role in medication history interviewing. The main aim of the medication history interviewing is to obtain and maintain accurate and complete medication information of a patient and to use this information to provide and maintain the safe and effective use of medications. In 2007, Lubowski and colleagues explained the role of student pharmacists in obtaining medication histories. These students obtained lists of newly admitted patients, and they interviewed each patient properly and collecting their information. Then they compared the data obtained from interviewing with history documented in the medical record and recorded any discrepancies found. Discrepancies like omissions, therapeutic substitutions, wrong dose, were found.( 9)

### **Aim of Patient medication history interview:**

The main aim of medication history interview is to gather and obtain information related to drug use that may involve in total care of patient. The information gathered can be utilized in different ways as given below:

- 1) In the investigation of discrepancies found.
- 2) To estimate patient medication compliance.
- 3) To estimate the evidence of drug abuse.
- 4) To Examine the needs for medication aids.
- 5) To estimate the rationale for prescribed drug.

### **Recorded Information In Medication History Interview:**

- Continuous or present medication of patient.
- OTC medication.
- Vaccination details if vaccinated
- Use of traditional medicines
- Information about allergic reaction of medicines.
- Medicines found to be ineffective.(10)



## CONCLUSION:

In hospitals to provide better and effective healthcare services hospital pharmacist perform a vital role under multidisciplinary responsibility that includes selection and formulary management, storage of medication and their distribution within hospitals. The hospital pharmacists give their complete performance in patient care by collaborating with physicians or health care systems. This allows hospital pharmacists to perform therapy decision-making activities as an active member of patient's health care team, Hospital pharmacists are an asset for the health care workers and patients. The DTC is responsible for making policies and procedures to improve Medicine use. Hospital pharmacy plays important role in. bulk Compounding and Dispensing, Propagating unbiased information to all professionals of the health care team as well as the general public Hospital pharmacy performs effective work in Adverse Drugs Reaction (ADR) Monitoring, Drug distribution system, Hospital formulary, Therapeutics Drug Monitoring, Patient Medications History Interview and other hospital related work. Hospital pharmacists give their complete work in patient care services.

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