

## **CATEGORIES AMBULATORY SERVICES**

### **EMERGENCY OUTPATIENTS**

For emergency outpatient 24 hrs services given who required immediate care for survival.

### **REFERRED OUTPATIENTS**

These patients are referred to the hospital for a specific purpose due to lack of facilities available with patient need extra care.

### **SPECIAL OUTPATIENTS**

After completion of general check up, the patients are asked to go for accurate diagnosis by clinical, pathological examination. After

Receiving the test report of examination medicine is given to him.

### **GENREAL OUTPATIENTS**

These patient are come for general check up and medication are prescribed to him. They may be either undertaken minor surgery, superficial surgery or dressing at hospital.

## **DISPENSING OF CONTROLLED DRUGS**

### **HOSPITAL CONTROLLED PROCEDURE:**

- 1.Responsibilities for controlled substance in the hospital.
- 2.Ordering ward stock of the controlled Substance from Pharmacy.
- 3.Doctors orders for administration of Controlled drugs.

### **RESPONSILITIES FOR CONTROLLED SUBSTANCES**

The administrative head of the hospital is responsible for the proper safeguarding and the handling of controlled substance within the hospital.

### **ORDERING WARD STOCK OF THE CONTROLLED SUBSTANCES FROM THE PHARMACY:**

A requisition for ward stock controlled substances is completed by insertion a check mark opposite the name, strength from of controlled substance desired.

Before any new controlled substances are issued to a ward

## **REQUISITION FROM FORWARD STOCK CONTROLLED SUBSTANCES:**

Regulation 23(4) of the misuse of drugs regulation states that all requisition from must include the following : The name, address and profession/occupation of the recipient the purpose for which the drug is required e.g for practice use the total quantity of drug to be supplied The signature of the recipient .

## **SATELLITE PHARMACY:**

A Satellite Pharmacy refers to a decentralised operating unit which has similar function with the central inpatient pharmacy. Both provides specialised medication distribution services for hospitalised patients.

## **ADVNTAGES :**

1.Efficiently drugs can be distributed

2.Time of drug distribution could

3.Errors in drug distribution could be stop

## **DISADVANTAGES:**

Effect on the financial statement of hospital

Additional manpower is required

Long shift hours

## **BED SIDE PHARMACY:**

At the bedside, they prepare drug for medical situation. They Compute precise medicine dosages. They Make medication recommendations based on guidelines and protocols.

## **ROLE OF PHARMACIST IN BED SIDE PHARMACY:**

- 1.The quality of medicines supplied to patients.
- 2.Ensuring that the supply of medicines is within the law.
- 3.Ensuring that the medicines prescribed to patients are suitable.
- 4.Advising patients about medicines, including how to take them, what reactions may occur and answering patients' questions.

## **PROCEDURE FOR DISPENSING OF CONTROLLED SUBSTANCES FOR IN-PATIENTS:**

Doctor's order for administration

Ordering of ward stock from pharmacy

Narcotics delivery to the ward

Narcotics and controlled drug on wards by nurse

Charge for narcotics to the patients.

## **ORDERING NON-WARD SUBSTANCES FROM PHARMACY :**

Drug which are not need to be stocked in the nursing station may be ordered from pharmacy unite on the written prescription only

The prescription must have following details:-

- 1)Date
- 2)details of patients
- 3)patient's hospital number
- 4)amount of drug ordered
- 5)Strength
- 6)Name of the prescriber and their signature

## **PRESCRIBING OF CONTROL DRUGS IN OUT-PATIENT DEPARTMENT:**

Dispensing of controlled drugs for outpatient from pharmacy must be made on the prescription only by clearly mentioning the strength and the quantity with duly sign of doctor. The information includes:-

- 1)Date
- 2)details of patients
- 3)patient's hospital number
- 4)amount of drug ordered.
- 5)Strength
- 6)name of the prescriber and their signature

## **DISPENSING OF CONTROL DRUGS FOR HOUSE USE WHEN PHARMACY IS CLOSED:**

When the patients are discharge from hospital or emergency ward at the time of closed of pharmacy. Occasionally such patients require drugs for use at home in such cases.



# DRUG DISTRIBUTION SYSTEM IN HOSPITAL

**CONTENT:** Hospital pharmacy, functions, types of drug distribution system, charging policy and labelling, dispensing of drug ambulatory patients and dispensing of controlled drugs.

## HOSPITAL PHARMACY:

Hospital pharmacy may be defined as that department of the hospital which deals with procurement, storage, compounding, dispensing, manufacturing, testing, packing and distribution of drugs.

## FUNCTIONS:

1. Providing specifications for the purchase of drugs, chemicals.
2. Proper storing of drugs.
3. Manufacturing & distribution of medicaments such as parenteral products, tablets, ointment, stock mix

## IN- PATIENTS:



FIG NO. 1 IN PATIENT

In patients are those patients who required hospitalization that is get themselves admitted in hospital, stay there for treatment till they are discharged.

They are four system in general use for dispensing drugs for Inpatients.

1. Individual prescription order
2. complete floor stock system
3. combination of individual floor stock system
4. Unit dose system

## INDIVIDUAL PRESCRIPTION ORDER

It is the type of prescription system where the physician writes the prescription for individual patients who obtain the drug prescribed from any medical store or hospital dispensary by paying own charges.

### ADVANTAGES

1. All medication orders are directly reviewed by pharmacist.
2. It provides the interactions of pharmacist, doctor, nurse and the patient.
3. It provides clear control of inventory.

## COMPLETE FLOOR STOCK SYSTEM

Under this system, the drugs are given to the patient through the nursing station and pharmacy supplies from the drug store of the hospital.

According to system, the drugs are stored at the nursing station and administered by nurse according to order physician. Commonly used drugs in significant quantity are stored on the floor stock.

The drug nursing station is divided into two

## CHARGE FLOOR STOCK DRUG

## NON CHARGE FLOOR STOCK DRUG

### Charge floor stock drug

1. The charges are made into the patient's account after they have been administered.
2. Every dose of the drug administered to the patient is charged.
3. Only the dose of drug charged which is expensive and rarely used.
4. Floor stock list is prepared which is sent to make the drugs available at all the nursing stations.

### Non charge floor stock drug

1. The drugs are not made into the account directly even after the drug has been administered.
2. Charges are made indirectly to the patient.
3. The cost of the drugs is not as high as the drugs used are tablets and capsules.
4. A pre-determined list is prescribed by the nursing station.

It is divided into two methods

- a. drug basket method
- b. mobile dispensary method

## COMBINATION OF INDIVIDUAL AND FLOOR STOCK SYSTEM:

This system is followed in the government and also in the private hospital who run on the basis of no profit and no loss.

Requirement of drugs or surgical items are given to the patients who purchase and deposit these items in hospital wards or rooms under supervision of registered nurse.

## UNIT DOSE SYSTEM:

Doctor – order medication through the system

Pharmacy – check drug and approve

System – allow dispensing

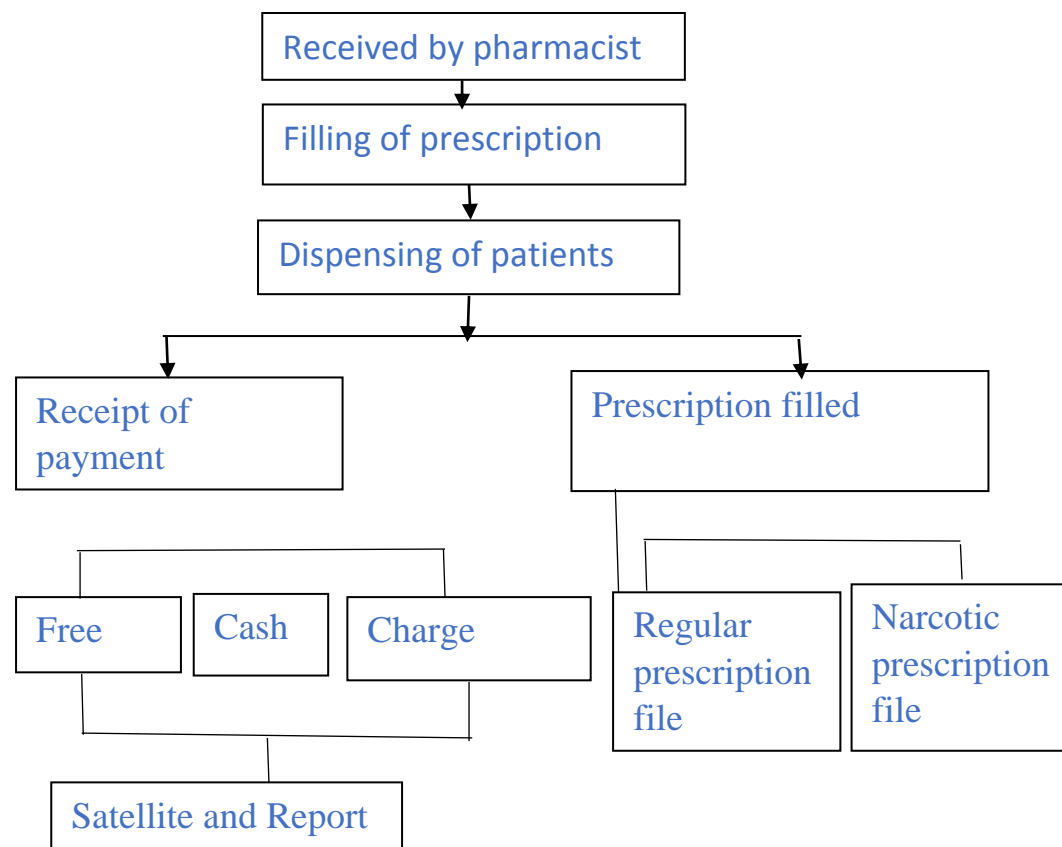
Nurse – delivery drug with finger print

System- update patients profile

Those medication which are ordered, packaged, handled, administered and charged in multiple of single dose unit.

## DISPENSING OF DRUG OUT-PATIENT/AMBULATORY PATIENTS:

### ROUTINE DISPENSING OF OUTPATIENTS



# HOSPITAL FORMULARY



FIG NO.2 HOSPITAL FORMULARY

**DEFINATION :-**The hospital formulary is a list of pharmaceutical agents with its important information which reflects the current clinical views of the medical staffs.

The hospital formulary system is a method whereby the medical staff of a hospital with the help of pharmacy and therapeutic committee selects and evaluate medical agents and their dosage form which are considered to be most useful in the patient care. The hospital formulary system provides the information for procuring, prescribing, dispensing and administering of drugs under non-proprietary or proprietary (brands) names in instances where drugs have both names.

## CONTENTS OF HOSPITAL FORMULARY :-

### A. INTRODUCTION

- List of abbreviation
- List of drugs used in the formulary

### B. Basic information on each drug

- Efficiency for the treatment of specific conditions
- Safety profile of the items
- Interaction profile
- Adverse effects
- Pharmacokinetic profile
- Availability of the items
- Acceptability to patients
- Cost

### C. Supplementary information on each drug

- Storage guidelines
- Patient counseling information
- Labeling information
- Brand names and prices

### D. Prescribing and dispensing guidelines

- Principles of prescription writing
- Reporting of ADR
- Prevention of ADR



E. General drug use and advice  
-Use of IV drugs  
-Special situations like pregnancy, breast feeding, liver/kidney disease  
-Poisoning information and antidotes  
Treatment of snakebite and insect bites

F. Miscellaneous section  
-Children's dose  
-Renal adjustment  
-Metric units.

## Hospital Formulary

List of drugs stocked in the hospital and selected based on therapeutic factors as well as cost.

The Pharmacy and Therapeutics Committee (P&T committee) adds, removes, and evaluates medications on the formulary.

**Closed formulary** Requires physicians to order only medications in the formulary.

**Non-formulary drugs** - Medications not on the formulary list and not regularly stocked.

**Therapeutic interchange**- Allows pharmacist to change certain non-formulary medication orders to equivalent formulary medications.

## DIFFERENTIATION OF HOSPITAL FORMULARY AND DRUG LIST :-

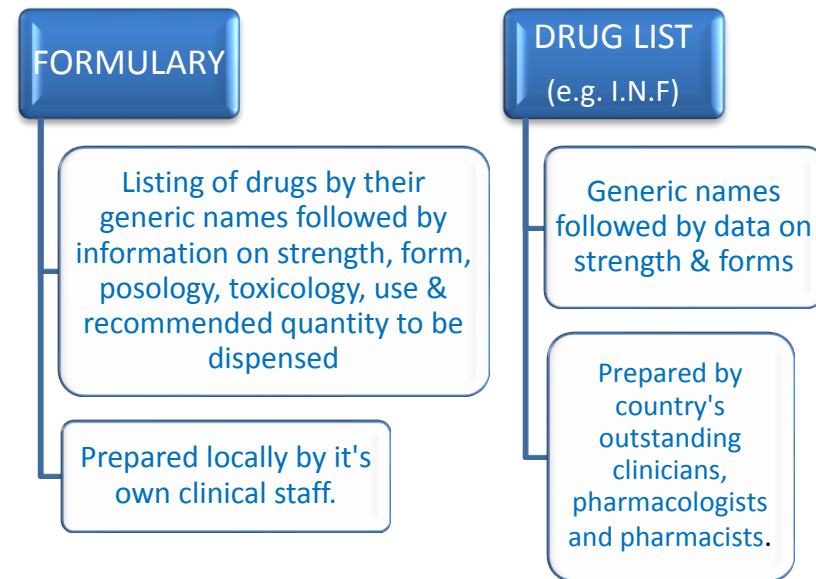


FIG NO.3 DRUG LIST

## PREPARATION AND REVISION :-

### STEPS INVOLVED IN THE PREPARATION OF HOSPITAL FORMULARY

Identify the most common diseases being treated in the hospital by consulting all medical departments. For each disease, an appropriate first choice of treatment should be identified using standard treatment guidelines

An expert committee can be brought together to identify the appropriate treatment for each of the common health problems. The alternative method is reviewing the WHO model list of essential medicines may also be used as a starting point

A draft of the list must be prepared and must be given to each department to comment on the list

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FIG NO. 4 STEPS PREPARATION OF HOSPITAL FORMULARY

**REVISION OF HOSPITAL FORMULARY** -In the formulary, entry of the new drug is very complex procedure. There is needed to take help from various experts for the inclusion of the new drugs in the list.

-Reference books such as Indian Pharmacopeia, United State of Pharmacopoeia and National Formulary are used while preparation of drug list for entry of new drugs.

-If there is no any information or whole formula is not disclosed in the official Pharmacopoeia then the entry of new drug is not made in formulary.

### MANAGING A FORMULARY LIST (ADDITION AND DELETION OF DRUGS) :-

For addition of new drug into hospital formulary, the hospital and therapeutic committee should consider therapeutic potency and equivalency to existing drugs in terms of it's safety , efficacy or suitability of administration.

For the addition and deletion of drugs in the formulary, there is need to consider and compare the total cost for a course of the treatment with new medicine with the existing listed medicines.

FIG NO.5 FORMULARY LIST

# **THERAPEUTIC DRUG MONITORING**

## **THERAPEUTIC DRUG MONITORING:**

Therapeutic drug monitoring (TDM) is generally define as the clinical laboratory measurement of a chemical parameter that, with appropriate medical interpretation, will directly influence drug prescription procedures.

## **BASIC PRINCIPAL OF THERAPEUTIC DRUG MONITORING:**

TDM is based on the principal that for some drug there is a close relationship between the plasma level of the drug and its clinical effects.

If such a relationship does not exist TDM is of little value.

The clinical value of plasma level monitoring depends on how precisely the treatment outcome can be defined

When precise therapeutic end point is difficult to define ,monitoring of drug level may be of considerable therapeutic assistance .

## **NEED OF THERAPEUTIC DRUG MONITORING:**

1. There is indication of TDM if the consequences of overdosing and underdosing are serious .

2. TDM is indicated if there is a small difference between a therapeutic and toxic dose range .

3. TDM is indicated because of drug interaction in such cases where the patient is on more than two drug .

4. TDM is indicated if there is a certain changes in physiologic state of patient that may unpredictable influence the circulating drug concentration.

5. There is need of TDM when there is unexpected lack of efficacy or toxicity.

6. There is need of TDM to establish therapeutics regimen in several physiological condition like ;pregnancy, neonate ,children, elderly :and pathological conditions. Such as renal disease ,hepatic disease, etc

7. TDM help to patient compliances .

## **FACTORS AFFECTING THE THERAPEUTIC DRUG MONITORING:**

### **PHARMACOKINETIC VARIABILITY:**

There is lack of patient compliance leads to insufficient plasma drug concentration to achieve There is influence of different ages such as; neonates, children and elderly on various pharmacokinetics parameter which results into alteration in the therapeutic response as well as plasma drug concentration.

### **TESTING METHODOLOGY:**

THERE is need to use proper analytical method for estimating the TDM.

Time of sampling :

Drug therapy can be optimized by using therapeutic drug monitoring by applying optimum sampling strategies.

Type of sample :

There is need to give additional consideration to

the type of sample tested because use of some anticoagulants may affect the TDM of particular drug.

**PROTEIN BINDING:** There is alteration in the protein binding capacity of drug in various pathological conditions and during drug interaction which resulted into change in concentration of bound and unbound drug.

### **INDIAN SCENARIO OF TDM**

The use of drug measurements in biological fluids as an aid to the management of patients receiving drug therapy for the alleviation or prevention of disease.

### **SCENARIOS FOR USE OF TDM:**

Suspected drug-drug or drug-food interaction.

pathophysiologic states that may impair hepatic or renal function.

Pregnancy

Concentration dependent toxicities.



# MEDICATION ADHERENCE

## INTRODUCTION:-

“The extent to which patient take medication as prescribed by the health care providers.”

It is defined as the exact or extent to which a patient medication taking behavior conforms with the intention of the health advice he/she has been given.

- 1) Medication adherence is the one of the most important factors that determines the therapeutic outcomes, especially in a patient suffering from chronic illness/disease.
- 2) The word ‘compliance’ can imply an authentication attitude on the part of health care professionals and may suggest yielding and submission by the patient.
- 3) ‘Non-compliance’ is the failure or refusal to comply with advice and can be imply disobedience on the part of patient.
- 4) Medication adherence richly deserves attention and much impetus is needed to develop new ideas and theories to improve it.

## BENEFITS OF MEDICATION ADHERENCE:-

- Enhance patient safety.
- Decreases health care cost.
- Improves long-term therapies and outcomes.
- Good investment for tackling chronic conditions.

## MEDICATION NON ADHERENCE

### Intentional medication non adherence

- "Active process whereby the patient chooses to deviate from the treatment regimen".

### Unintentional medication non adherence

- "Passive process in which the patient may be careless or forgetful about adhering to treatment regimen".

FIG NO. 6 MEDICATION ADHERENCE

## MEDICATION BARRIER

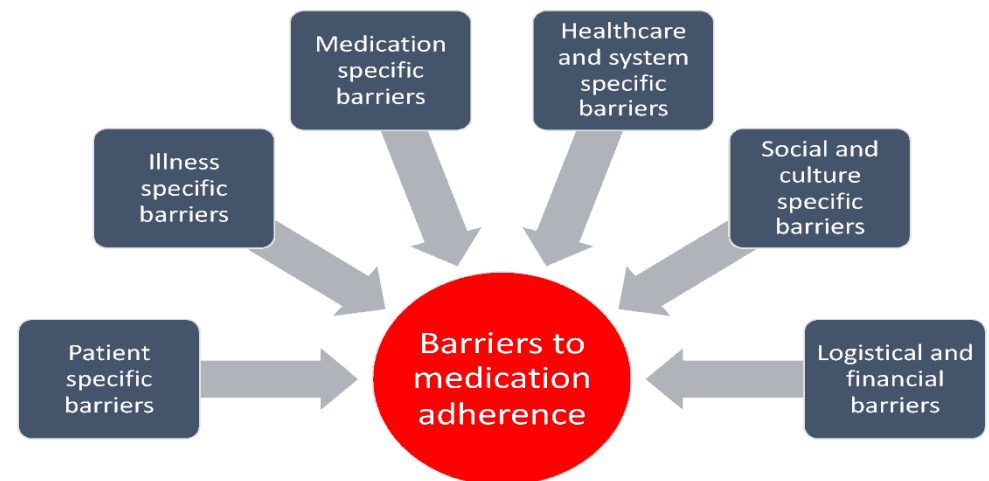


FIG NO. 7 MEDICATION BARRIER

## CAUSES OF MEDICATION NON ADHERENCE:-

### + Causes of Non Adherence

- **Lack of knowledge:**
  - Unsure how or when to take the medication
- **Health State**
  - Fear of side effects
  - "I feel good, therefore I don't need the medication"
- **Lack of support**
  - No one to prompt or assist
- **Illiteracy**
  - Cannot read or understand the instructions
- **Access**
  - No access to pharmacy for refills
  - Cost

#### Types of Non-Adherence

PRIMARY	SECONDARY	TERTIARY
<b>Non-Fulfillment</b>	<b>Non-Persistence</b>	<b>Non-Conforming</b>
Prescription is never filled or initiated.	Patients stop taking medication after taking it.  Rarely Intentional - Usually arises from miscommunication or resource/capacity limitations.	Medication is not taken as prescribed.  Missed doses, incorrect doses, dose taken at wrong time.

Source: Jimmy, Beena and Jimmy Jose. "Patient Medication Adherence: Measures in Daily Practice" Oman Medical Journal, May 2011, 155-159

FIG NO.8 CAUSES OF MEDICATION ADHERENCE

### CAUSES:-

1. Omitting a dose or doses.
2. Prematurely discontinuing medication.

3. Taking doses at the wrong time.
4. Taking doses with prohibited foods or liquids or other medications.
5. Increased hospital readmission.
6. Increased diseased progression and complications.
7. Increased health care cost.
8. Decreased quality of life.
9. Patient death.

## SRATERGIES TO ENHANCE MEDICATION ADHERENCE

### TABLE Strategies to enhance medication adherence

1. Assume that taking medication will be a challenge
2. Conceptualize specific difficulties that a patient may have when taking medication
3. Emphasize both benefits and adverse effects to promote desired behaviors
4. Remember the power of written information: education is critical
5. Use behavioral techniques to ensure habit formation
6. Restructure interfering beliefs about medication

FIG NO.9 STRATERGIES TO ENHANCE MEDICATION ADHERENCE



## **PHARMACIST ROLE IN THE MEDICATION ADHERENCE:-**

- ❖ Pharmacists improve the medication adherence because they can actually show the medication to the patient and relate any information to the medication itself.
- ❖ Pharmacists often provide verbal education and written individualized information for the patient.
- ❖ The information that patients need to know which pharmacists can impart includes
  - ✓ Name and purpose of drug.
  - ✓ When and how to take medication.
  - ✓ Possible side effects.
  - ✓ Precautions.
  - ✓ Interaction with food or other drugs.
  - ✓ Duration of therapy.
  - ✓ Action to take if a dose is missed.
- ❖ A pharmacist may contribute towards improving medication adherence by other means including advice to prescribers on the simplification of drug regimen, providing patient with medication cards or medication aids such as dosette.
- ❖ In hospitals, clinical pharmacists have many opportunities to assess factors which may assist the patient's medication adherence.
- ❖ Through patient interviews, the pharmacists can assess the patient's knowledge of their drug therapy and usual medication habits.

- ❖ The pharmacist is also able to identify if the patient has any specific problems with the medication, such as problem swallowing large tablets, or difficulty opening childproof containers.
- ❖ The pharmacist can also assess the patient's ability to comprehend and recall information, and if any adverse drug reaction may discourage medication adherence.
- ❖ Strategies to improve pharmacist-patient relationship:
  - ✓ Be friendly and approachable to the patient.
  - ✓ Improve communication skills.
  - ✓ Improving patient education.
  - ✓ Give clear explanation.
  - ✓ Check the patient understanding.
  - ✓ Simplify the therapeutic regimen.
  - ✓ Monitor the side effects.
  - ✓ Monitor the beneficial effects.
  - ✓ Speak the same language of patient.

## **MONITORING OF PATIENT MEDICATION ADHERENCE:-**

- 1) Medication Event Monitoring System(MEMS)
- 2) Pharmacist database or refill rates.
- 3) Pill counts.
- 4) Patient self-reports is easiest method when adherence is being assessed, open-ended questions should be asked.



- 5) Blood levels which also employed in research are more feasible option for clinical practice.
- 6) Morisky's Medication Adherence Scale(MMAS)

Table 1. Morisky's Medication Adherence Scale	
1.	Do you sometimes forget to take your high-BP pills?
2.	Over the past 2 weeks, were there any days that you did not take your high-BP medication?
3.	Have you ever cut back or stopped taking your medication without telling your doctor because you felt worse when you took it?
4.	When you travel or leave home, do you sometimes forget to bring your medication?
5.	Did you take your high-BP medication yesterday?
6.	When you feel that your BP is under control, do you sometimes stop taking your medication?
7.	Taking medication every day is a real inconvenience for some people. Do you ever feel hassled about sticking to your BP treatment plan?
8.	How often do you have difficulty remembering to take your BP medication?

BP: blood pressure.  
Source: Reference 9.

FIG NO.10 MORISKY'S MEDICATION ADHERENCE SCALE



FIG NO.11 MEDICATION ADHERENCE

# PATIENT MEDICATION HISTORY INTERVIEW

## INTRODUCTION:-



Fig no.9 Patient Medication

A medication history is a detailed, accurate and complete account of all prescribed and non-prescribed medication that a patient had taken or is currently taking prior to a newly initiated institutionalized or ambulatory care.

**DEFINATION:** - It is defined as complete account of all prescribed and non-prescribed medications that a patient had taken or is currently taking prior to a newly initiated institutionalized or ambulatory care. Interviewing a patient in collecting the data medical history is called medication history interview.

## THE GOAL OF MEDICATION HISTORY INTERVIEW :-

-To obtain information on aspect of drug use that may assist in over all care of patient.

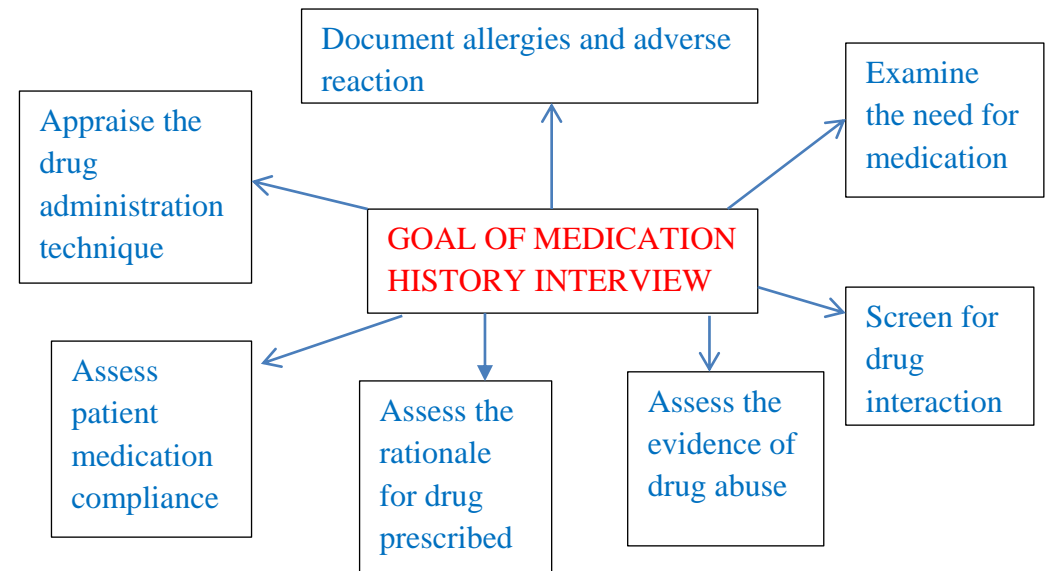


Fig no.10 Goal of Medication History Interview

## NEED FOR PATIENT MEDICATION HISTORY INTERVIEW:-

Important in preventing prescription errors and consequent risks to patients.

Apart from preventing prescription errors, accurate medication histories are also useful in detecting drug-related pathology or change in clinical signs that may be the result of drug therapy.

A full medication history  
-Identifies patient's need.  
-Explore patient's perspective of illness & treatment

Fig no.11 Need Patient Medication History

## OVERVIEW OF MEDICATION RECONCILIATION:-

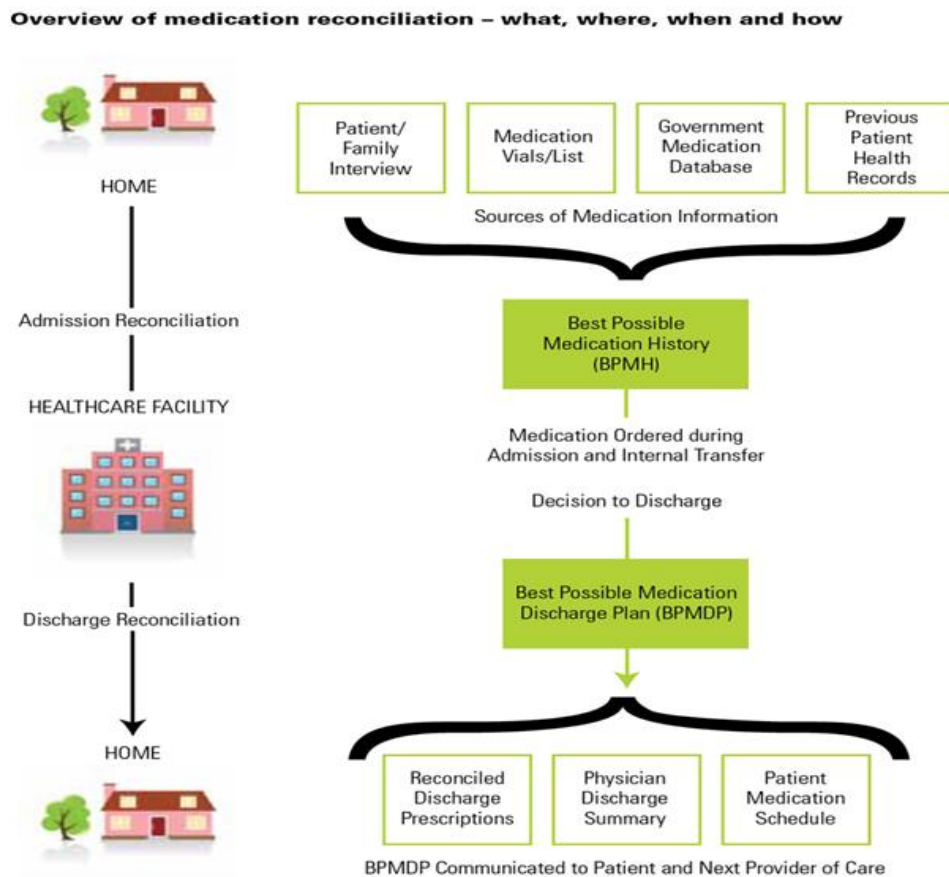


Fig no. 12 Medication Reconciliation

## POINTS COVER IN PATIENT HISTORY INTERVIEW:-

A medical interview usually follows the same couple key areas of questioning. These areas are covered below.

**Chief Complaint:** ask about the main reason the patient came in today and then use the OPQRST-AAA approach to find out details about the symptom.

**History of Presenting Illness:** This is where you ask about the details of the chief complaint, all in all, its histories. perform a detailed review of the system in question and come up with any related symptoms within the system.

**Systemic Review:** review any other symptoms that might be bothering the patient outside the system involved in the chief complaint. I like to put this part after the HPI because you could catch symptoms that the patient might not associate with their complaint but might be of key importance to the rest of the interview, guiding you to a specific diagnosis.

**Past medical History:** ask about any other previous or chronic illnesses, previous hospitalizations or surgeries, and a history of blood transfusions.

**Medication History:** ask about what medications the patient is taking and if they have any known allergies.

**Family History:** ask about the history of any similar conditions in the family, chronic illnesses in the family, and cause of death in the parents if applicable.

**Personal and Social History:** this is where you ask about any smoking or drinking history, the use of any drugs, and finally the patient's occupational, social, and educational background.

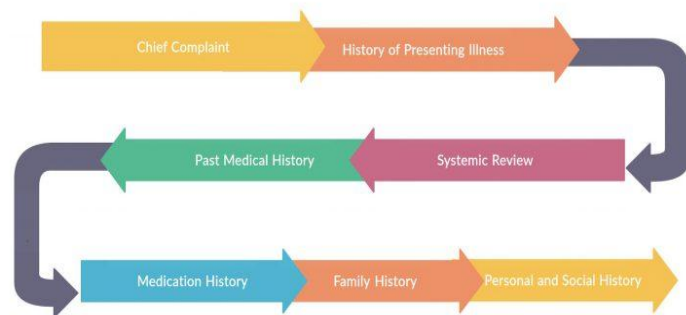


Fig no. 13

## QUESTIONS ASK IN PATIENT MEDICATION HISTORY INTERVIEW:-

### QUESTIONS to ASK

- Which community pharmacy do you use?
- Any allergies to medications and what was the reaction?
- Which medications are you currently taking:
  - The name of the medication
  - The dosage form
  - The amount (specifically the dose)
  - How are they taking it (by which route)
  - How many times a day
  - Any specific times
  - For what reason (if not known or obvious)



Brought to you by:  
Nursing Hi Nursing

Fig no.14 Question to ASK

## COMPREHENSIVE PATIENT HISTORY FORM:-

**Patient Medication History Form** This form can also be found at [www.cemedicationist.org](http://www.cemedicationist.org)

The medicines you take are part of your health information. Please fill out this form (or have your caregiver complete it) and discuss it with your medical provider. If you need more space to list your medicines, ask for another form. Please do not write on the back of this form.

Patient Name: \_\_\_\_\_ Page #: \_\_\_\_\_

**■ Allergies**

Name of Substance (drug or food)	Type of Reaction
<input type="checkbox"/> Check if none	

Do you react to latex or rubber (gloves, balloons, etc) with a rash, wheezing, etc? ☐ Yes ☐ No  
 For female patients ONLY: Are you currently pregnant? ☐ Yes ☐ No  
 Are you considering becoming pregnant? ☐ Yes ☐ No  
 Are you currently breastfeeding? ☐ Yes ☐ No

**■ Current Medications**

Prescription Drugs (such as Aleve, eye drops, creams)	Strength (such as 50 mg)	Directions (such as 2 tablets in the a.m.) Check box if taken only as needed	Prescribed by (such as John Doe, MD)
<input type="checkbox"/> Check if none			

Over-the-Counter Medications (such as aspirin) ☐ Check if none

Strength	Directions (such as for headaches, when needed)

Herbs, Vitamins, Minerals, Etc. (such as St. John's Wort) ☐ Check if none

Strength	Directions (such as one tablet each day)

Pharmacy Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

☐ Medication list reviewed prior to any changes/medication by licensed provider  
☐ Yes - Pre-Surgery (Yellow) Packet or Return clinic visit within one week?

**UW Medicine**  
 Harborview Medical Center - UW Medical Center  
 Harborview Hospital & Medical Center - University of Washington Physicians  
 Seattle, Washington

**PATIENT MEDICATION HISTORY**

**DO NOT THIN on FLOOR, SCAN or FILE IN MED RECORD**

WHITE - OUTPAT: PATIENT COPY  
 CANARY - PHARMACY  
 WHITE - INPAT: PRE-SURG PKT

UHQ311 REV DEC 10

Fig no.15 Patient Medication History Interview form



# COMMUNITY PHARMACY MANAGEMENT

**COMMUNITY PHARMACY** :-Community pharmacy is a pharmacy service center established in a community set up catering to the needs of the society for their drug products , health care items & related materials . Community pharmacy in INDIA is known as retail pharmacy or a medical store or simply a drug store.

## FINANCIAL MANAGEMENT

It involves capital investment which is expenditures made during a particular period to acquire or improve long-term assets such as a building, delivery van or dispensing equipment.

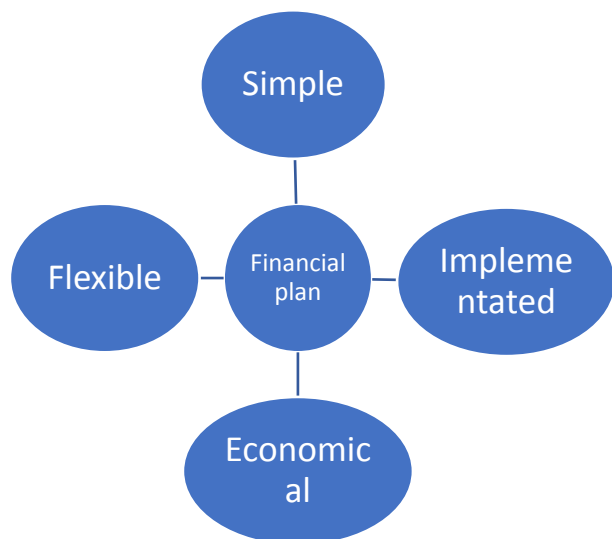


Fig no. 16 Financial Plan

### Importance of Financial Management :-

Helps in successful development of business.

Helps in forecast of future funds.

Gives an efficient direction of business.

Helpful in making economy in operating activities.

## Material Management

It can be defined as the function responsible for the coordination of the planning , sourcing, purchasing, moving, storing & control material in optimum manner so as to provide a pre-decided service to customer at a minimum cost.

### Objective of material management

#### Primary

- Right price
- High turnover
- Low procurement & storage cost
- Continuity of supply
- Consistency in quality
- Good supplier relations
- Development of personnel
- Good information system

#### Secondary

- Forecasting
- Inter-departmental harmony
- Product improvement
- Standardization
- Make or buy decision
- New materials & products
- Favorable reciprocal relationships



## Functions of Materials Management

- **Materials Planning :** Estimating requirements – preparing MRP – Forecasting inventories – scheduling of orders – monitoring production
- **Materials Sourcing :** Identifying suppliers – choosing the right supplier - Planning supply chain systems – estimating transportation costs – scheduling – follow up
- **Inventory Control:** Planning of control systems - Exercise control through control systems – maintain the inventory levels
- **Budgeting:** Estimating working capital requirements
- **Stores Management:** Physical control of materials – stores maintenance – minimize obsolescence – disposal of waste – maintenance of records – stock control

## Staff Management

-Pharmacy business is not only trade but also profession.

All the medicines should be dispensed under the supervision of a qualified person as per the drugs and pharmacy act.

In Indian context, A B.pharm graduate with 150hours of practical training is also eligible to register in state pharmacy council as a pharmacist.

## Infrastructure Management

**Defination:** Infrastructure management is the planning, design, delivery and control of the basic facilities, structures, equipment, services and information technologies that serve as a foundation for economic activity.

For an organization's information technology, infrastructure management (IM) is the management of essential operation components, such as policies, processes, equipment, data, human resources, and external contacts, for overall effectiveness.

### REFERENCE:

Dr. A.V. Yadav

<https://www.slideshare.net/mobile/aishuanju/cpm-ppt-62330335>

William E Hassan. Hospital pharmacy, 5<sup>th</sup> Edi.

A textbook of pharmacy practice, Nirali Prakashan

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**SUBJECT:** Pharmacy Practice

**DEPARTMENT:** Pharmacology

**ACADEMIC YEAR:** 2021-22.