

#### **Distribution of drugs to in- patients–**

**In- patients-** in- patients are those patients who get hospitalized for the purpose of treatment, cure of disease, surgery or rehabilitation.

#### **Method of drug distribution for in-patients-**

1. Individual prescription order method.
2. Floor stock method.
3. Unit dose drug distribution method.
4. Drug basket method.

## IN – PATIENT SERVICES

- The drug distribution to the inpatient department can be carried out from the outpatient dispensing area.
- The staff involved in dispensing the drugs for outpatient can dispense drugs for inpatients too.
- If the work load seems to be heavy then additional personnel can be employed.



### 1. Individual prescription order method-

- This system is mainly adopted in very small hospitals having a bed size of 2 to 5 and private clinics.
- The medicine is dispensed either by the pharmacist or under his direction.
- The dispensed medicine is labelled with individual patients name with related instructions after receiving the prescription sheet from the pharmacy.

### Advantages-

1. Medication error can be eliminated.
2. All prescriptions are directly checked by the pharmacist.

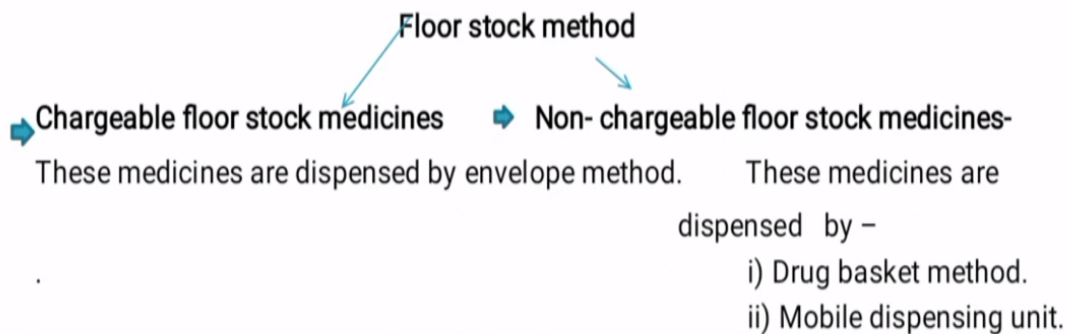
3. Less man power is required.
4. Better control of inventory is possible.
5. It facilitates interaction between the pharmacist, doctors and the nurses.

#### **Disadvantages-**

1. This system can not be used in big hospitals.
2. Difficulty of dispensing of medicine in absence of pharmacist.
3. Medicine cost may increase to the patient.
4. Increase in workload to the pharmacist.

#### **2. Floor stock method.**

- ▶ In this system both nursing and pharmacy department are responsible for drug distribution.



### **Charge Floor Stock Drugs :**

- ▶ Charge Floor Stock Drugs Can Be Defined as Those Medications Which Are Stocked at The Nursing Station all The Times and are Charged to the patient's account after their administration.
- ▶ In this system the medicine is charged to the patient due to high cost, quantity used or frequency. such medications are mainly injectables, infusions etc.
- ▶ The injectables generally include class of—
  - (a) **Antibiotics-** (i) Penicillin G Potassium 20 Million Units (ii) Streptomycin Sulphate 1 Mg/2 ML.
  - (b) **Antiallergic-** (i) Diphenhydramine HCL 10Mg /ML (ii) Hydrocortisone Sodium Succinat 100 Mg.
  - (c) **Anticoagulants-** Heparin 10,000 Units/ML

### **Non – Charge Floor Stock Drugs :**

- ▶ These are the drugs which are kept at the nursing station for the use of all patients of the wards.
- ▶ In this case the cost of the medicine, is not directly added to patients billing.
- ▶ The medicines cost may be calculated as per the day expenses of the hospital room.

Dispensing Of Non – Charge Floor Stock Drugs-

**1. Drug Basket Method:** This method is very commonly used in the hospitals. the night duty nurse checks the drug stock against a master list given by the pharmacy. the nurse puts a check mark on the number needed for each drug on the requisition for floor stock supplies. then the duty nurse puts the empty bottles and containers along with requisition slip in the basket .this basket is sent to the pharmacy staff. collects such drug basket and dispensed each requisition slip accordingly. finally the basket is delivered to the floor.

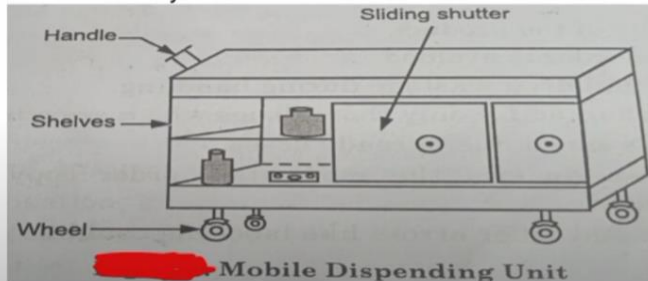
It is a type of floor drug distribution method , in this method , nurses verify the availability of medicines in all rooms and refrigerators with the help of master list of pharmacy , then fill demand form for the delivery of drugs to floors .

\* If they found any empty container , they put it in the drug basket .

\* after completing the round in all rooms , they send the demand form and container to the pharmacy .

## 2. Mobile Dispensing Unit:

- It is a stainless steel specially designed cupboard or trolley with facility to carry all sizes of containers. In this system the night duty nurse need not check the drug stock. The pharmacy inspects the drug cabinet and refills empty containers. The carbon copy of the requisition for floor stock supplies is left at the nursing station as a record of delivery.



### Advantages Of Complete Floor Stock System:

- Required drugs are especially available.
- Minimizes return of medicine to pharmacy.
- Reduction In Patient Prescription Orders.
- Less number of pharmacy staff is required.

### Disadvantages Of Complete Floor Stock System:

- Chances Of Increase In Medication Error Due To Reduced Overview Of Medication Order.
- It increases drug inventory.
- Increases hazards due to drug deterioration.
- Wastage of drugs due to insufficient storage facility.

**Unit Dose Dispensing:**

- ▶ Unit dose medications are those which are ordered, packaged, handled, administered in single or multiple units containing predetermined amount of drug.
- ▶ In this system a bulk is repacked in a single dose quantity in an individual pack. all the activities are carried out under the strict control of a pharmacist.
- ▶ This system could be followed by two ways:
  - (a) Centralized Unit Dose Drug Distribution System (CUDDS).
  - (b) De- Centralized Unit Dose Drug Distribution System (DCUDDS).

**(a) Centralized unit dose dispensing:**

The total medicine is stored in the central area of the pharmacy from where it is distributed to the patients through medication carts and dumb waiters against the physicians medication order received to the pharmacy.

**(b) De-centralized unit dose dispensing :**

This system is used in hospitals with separate buildings by following satellite pharmacies situated on each floor of the buildings .all activities are conducted in the satellite pharmacy and the medicine is distributed through the medication carts.

**Advantages:**

- (i) Better stability of the product.
- (ii) Duplication of order is avoided.
- (iii) Avoids losses and drug wastage during handling.
- (iv) Patients are charged for only those drugs which are administered.
- (v) Nursing time is saved due to ready doses.
- (vi) The pharmacist reviews the medication order copy and thus reduces medication error.
- (vii) Contamination and other errors like labeling could be reduced.

**Disadvantages:**

- (i) It is a time consuming activity.
- (ii) The cost of the medicine may increase.
- (iii) Need more staff to prepare unit dosage.
- (iv) Extra space and facilities are required.

## **1. CENTRALISED UNIT DOSE DRUG DISTRIBUTION SYSTEM**

- All in-patient drugs are dispensed in unit doses and all the drugs are stored in central area of the pharmacy and dispensed at the time the dose is to be given to the patient
- To operate the system, delivery devices such as medication carts or pneumatic tubes are required

## **2. DECENTRALISED UNIT DOSE DRUG DISTRIBUTION SYSTEM**

- This operates through small satellite pharmacies located on each floor of the hospital
- The main pharmacy is for procurement, storage, manufacturing and packing

### **PROCEDURE:**

- Patient profile card is prepared upon admission to the hospital
- Prescriptions are sent directly to the pharmacists



- Pharmacists checks the medication orders
- Junior pharmacists picks medication order and place drugs in cart
- Pharmacist check cart prior to release
- The nurse administers the drugs and make the entry in their records
- Upon return to the pharmacy the cart is rechecked

## Drug Distribution to Out patients

In this type of drug distribution , drugs are provided to the patients are not admitted in hospital and are given general or emergency treatment .

### Steps for dispensing drugs to out-patients

- \* The patient name is registered by registration staff and patient is send to the physician with registration form .
- \* the Physician Checks the patient and write a prescription .
- \* The patient takes the prescription to the pharmacy .
- \* The pharmacist reviews the prescription carefully and records the prescription and provides the drugs.

## DISPENSING OF CONTROLLED DRUGS:

- These drugs should kept under lock and key
- A separate register should be maintained to register them

### PROCEDURE:

- Medical superintendent is overall responsible for handling of controlled drugs.
- Chief pharmacist procures, stores and dispense the drugs



- Prescription of narcotic drugs under Narcotics and psychotropic substances act 1985 must include following information

- a) Patients full name
- b) Address
- c) Date
- d) Name and strength of drug
- e) Quantity of drug
- f) Signature of prescriber
- g) Dose and route of administration



- If the required drug is not in the stock the complete controlled drug prescription must be written on hospital prescription blank form by registered medical practitioner and signed
- Delivery of narcotic drugs from pharmacy to wards should be carried out by reliable person
- After dispensing, nurses resume responsibility for administration, control and auditing of the inventory
- If patient refuse or doctor cancels any dose , nurse should destroy the drug in to sink and record “Refused by patient” or “Cancelled by doctor”