

Program Name :- D. Pharm

Course Name :- Hospital and Clinical Pharmacy

Session :- 2020 - 2021

Topic :- Hospital Equipment & Health Accessories.

Sub Topic :-
→ Pharmacy and Therapeutics Committee
→ Hospital Formulary
→ Drug Information and Drug
Information Bulletin.

Hospital and Clinical Pharmacy* Hospital Equipment and Health Accessories :-

→ The health accessory department deals with a wide variety of surgical supplies, Convalescent Aids, and Home healthcare equipment.

→ The pharmacist is now required to train, select, assemble and instruct the patients on the use of these equipment.

- Ambulatory Aids

(i) Wheelchairs :- There are several types of wheelchairs that are available for use. The patient's disability, life style, strength and endurance, Age and infirmity are some of the principle considerations in selecting the most appropriate chair for his needs.

(ii) Walkers :- These are light weight devices made of Metal tubing and having four widely placed legs. Various Walkers are available -

- Wheeled Walker.
- Side Walker.
- Child's Adjustable Walker
- Adjustable walker.

- **Cranes** :- These are simple walking devices and serves two important functions namely (a) Weight transfer and (b) Maintain balance while walking.
- **Crutches** :- These device are useful for Patients with sprains or fractures.
 - Auxiliary Crutches.
 - Quad Crutch
 - Shepherd Cook Crutch.
- **Hospital beds and Accessories** :- Hospital beds may be manually or electrically operated with Adjustable head and foot sections and bed rails to prevent the patient from falling.
- **Orthopaedic braces and Surgical Fittings.**
 Spinal braces and Orthopaedic garments are useful to limit the motion of the spine in cases of various spinal disorders.
- **Ostomy Appliances** :- Ostomy is a surgical procedure in which a portion of the intestinal and/or urinary tract is removed. The remaining end is brought to the exterior of the abdominal wall and an opening created to allow passage of faeces or urine.

• Urology and Incontinence Supplies

(i) Urinals: These are containers employed to collect Urine and differ in shape According to Male or Female use.

Male Catheters and Female external Catheters are designed to be worn.

(ii) Urinary Catheters: These are useful devices which allow the removal of Urine from the bladder in patients who cannot void naturally.

(iii) Rectal tubes: These tubes are of larger diameter meant for rectal use. These are used in patients with Colostomies and are also referred to as Colon tube.

* Respiratory Equipments:-

(i) Oxygen therapy.

Apnoea Monitors:- Pneumographs.

(ii) Respiratory therapy
Vaporisers.

Aerosol therapy.

(iii) Breathing Machines.

* Hypodermic Equipments:-

Hypodermic Syringes are utilized for injecting the Medicine subcutaneously (Under the skin), Intradermally, intravenously or intramuscularly.

(i) Needles.

(ii) Bulb Syringes.

(iii) Thermometers.

* Pharmacy and Therapeutics Committee

The Pharmacy and Therapeutics Committee of the Hospital is an instrument, which ensures rational and effective use of drugs in the hospital.

The Committee Short-lists the number of drugs to a few which are safe, effective and available at a lower cost to the patient. It is also involved in developing suitable training programmes for the staff on proper use of drugs.

* Objective of the PTC

The two main objectives of the PTC are advisory and educational.

* An Advisory role on all matters relating to safe and effective use of drugs in the hospital.

* PTC also assists in the development of programmes to cater to the needs of the professionals involved in Patient Care.

* Functions of the PTC :-

- (i) PTC has an advisory role in all matters relating to rational and safe use of drug in a hospital.
- (ii) It reviews the safety/efficacy profile of drugs.
- (iii) Establishes procedures for the cost effective drug therapy.
- (iv) Develops training programmes for the staff on drug use.

(6)

(v) Participate in the developing of standard Treatment Guidelines.

* Role of PTC in Drug Safety

Inappropriate use of drugs leads to serious health care problems resulting in increased Morbidity, Mortality, Costs and emergence of Anti-microbial resistance.

* PTC and Monitoring of Adverse Drug reactions :-

* PTC should issue guidelines for prompt reporting of any ADR either to the Clinical Pharmacologist Or to the Chairperson of the PTC.

* The PTC should also devise systems for checking Medication errors and inappropriate prescribing.

* All ADR should be recorded on the Medical record as a diagnosis.

* Hospital Formulary

- * It is a compilation of selected drugs which should be available in the hospital.
- * It needs to be periodically reviewed.
- * Drugs are listed as per their generic Name.
- * Formulary is sponsored by the Medical Staff and has the approval of the hospital administration.
- * It has to be widely circulated amongst the Medical and nursing staff.
- * It permits flexibility with respect to newer or investigational drugs.
- * Drugs incorporated are those which are cheap but of proven efficacy, safety and usefulness with low toxicity.

* Drug Information and Drug Information Bulletin

* Drug Information :-

- The hospital pharmacist today faces a stupendous task of providing drug related information to medical, nursing and Para-Medical staff of the Hospital.
- It is also required to respond to the queries of the Patient in the Out-patient Pharmacy.

* Classification of the Source of Information

- (i) Primary source
- (ii) Primary literature
- (iii) Secondary source
- (iv) Secondary literature
- (v) Tertiary source.

* Classification of Reference type:-

- (i) Product Oriented reference.
- (ii) Drug Oriented reference
- (iii) Therapeutic Oriented reference.
- (iv) Poison references.
- (v) Dispensing Oriented reference.
- (vi) Adverse effects reference
- (vii) ~~Parental~~ Parenteral Drug reference.
- (viii) Pharmacokinetic Reference.

* Classification of Questions Types:-

1. Identification
 - (a) Product Content : OTC, Prescription drugs.
 - (b) Physical Product.
2. Availability.
3. Pharmacokinetics
 - (a) Absorption Characteristics.
 - (b) Distribution Characteristics.
 - (c) Metabolism Characteristics.

(d) Elimination Characteristics.

4. Dosage.

(a) Adult.

(b) Neonatal.

(c) Paediatric.

(d) Geriatric.

5. Drug - Interactions.

6. Adverse effects.

7. Pregnancy / Nursing.

(a) Drugs which may be used during pregnancy.

(b) Drugs which should not be used during pregnancy.

(c) Drugs which can be used by nursing Mothers.

(d) Teratogenic Potential.

(e) Effect on the new born.

8. Therapeutic use and effectiveness :-

Drug of choice in various conditions and relative efficacy of other drugs.

9. Stability / Compatibility.

(11)

10. Poisoning / toxicity.

* Drug Information Bulletin

- * It is responsibility of the Clinical Pharmacist to provide information about the drugs relevant to patient care to all members of the patient care team.
- * A regular publication of the bulletin will update the knowledge of the patient care staff on the latest development in their area of specialization.

* Reference :- (i) Dandya P.C, Mathur Mukul "A text book of Hospital and Clinical Pharmacy"
Published by Vallabh Prakashan, Edition 4th 2005
Pages - 67 - 85.