

## PHARMACY & THERAPEUTIC COMMITTEE (PTC)

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## **Introduction**

- It is a **policy framing & recommending body** to the medical staff and the administration of the hospital **on matters related to the therapeutic use of drugs.**
- It is **responsible for framing policies and procedures** for selection, procurement, dispensing, labeling, availability, administration, and control of drugs throughout the hospital.
- It encourages rational use of drug in the hospital and also monitors issues relating to drug safety. It serves as the organizational line of communication b/w the medical staff & pharmacy department.
- One of the most important functions of PTC is to prepare and update hospital formulary, which provides information on various drugs to be used in the hospital.
- It is also known as pharmacy committee/Therapeutic committee/Drug committee/Formulary committee.

## **Objectives/Purposes of PTC**

- The PTC has 3 major objectives. These are
- 1. Advisory
- 2. Educational
- 3. Drug safety and adverse drug monitoring

#### 1. Advisory

- The committee assists in the formulation of the broad profession policies regarding evaluation, selection and therapeutic use of drugs in the hospital.
- It makes recommendations concerning the drugs to be stocked in hospital patient care areas. The committee advises the pharmacy in implementation of effective drug distribution and control procedures.

### 2. <u>Educational</u>

- The committee recommends or assists in the formulation of functions, designed to meet the needs of the professional staff, the physicians, nurses, pharmacists and other health care practitioners, for the complete current knowledge of the matters related to drugs and their uses.
- 3. Drug safety and adverse drug monitoring
- As the therapeutic agents are increasing, the scope, knowledge and responsibility of the hospital pharmacist is also increasing.
- The safety aspects are more or less taken for granted by pharmacy, medical and nursing staff. So, one of the main aim of PTC is to improve medication safety and monitoring adverse drug reactions by monitoring, analyzing, reporting ADRs and implementing corrective action.

## **Organization/Composition of PTC**

- The PTC is usually made up of health care professionals from the medical staff (with representatives of the major specialties), pharmacists, nursing personnel and representatives from various departments.
- Ideally, a well-known and respected physician will provide leadership for the committee (chairman), with a pharmacist as co-chair or executive secretary. These individuals should be appointed by the health care organization's administration.

- The PTC consists of:
- 1. The medical superintendent- Chairman
- 2. Chief of pharmacy services- Secretary
- 3. One representative each from
  - Dept. of internal medicine
  - Dept. of surgery
  - Dept. of clinical pharmacology
  - Dept. of microbiology
  - Dept. of nursing
  - Dept. of nutrition

## **Operation of PTC**

- This committee should **meet regularly at least six times in the year** and also as and when necessary.
- The committee can invite its meetings persons within or outside the hospital who can contribute specialized or unique knowledge, skills and judgments.
- The agenda and the supplementary materials should be prepared by the Secretary and furnished to the committee members well in advance so that the members can study them properly before the meeting.

- A typical agenda may consists of the following categories in general:
- i. Minutes of the previous meeting.
- ii. Review of the contents of the Hospital Formulary for purpose of bringing it up to date, and deleting of products not considered necessary for use.
- iii. Information regarding new drugs which may have become commercially available.
- iv. Review of side effects, adverse drug reactions, toxic effects and drug interactions since the last meeting.
- v. Review of drug safety in the hospital.
- vi. Report of various subcommittees.
- vii. Report of medical audit.

## **Roles and Functions of a PTC**

• The PTC's role is to optimize rational use of medicines by evaluating the clinical use of pharmaceuticals, developing the policies for managing medicine use and administration, and managing the formulary system. The committee has broad responsibilities in determining what medicines will be available, at what cost, and how they will be used. The primary functions are—

- 1. Advising medical, administrative, and pharmacy departments on pharmaceutical related issues
- 2. Developing pharmaceutical policies and procedures
- 3. Evaluating and selecting medicines for the formulary and providing for its periodic revision
- 4. Identifying medicine use problems
- 5. Promoting and conducting effective interventions to improve medicine use (including educational, managerial, and regulatory methods)
- 6. Managing ADRs
- 7. Managing medication errors
- 8. Role of PTC in "Emergency drug list"

- 1. Advising medical, administrative, and pharmacy departments on pharmaceutical related issues
- The PTC is a valuable asset to the medical staff, administration, pharmacy, and other departments within the health care organization. The committee provides advisory services to these departments on all aspects of pharmaceutical selection, use, and distribution.
- Typically, the PTC provides recommendations and advice, whereas the executive or medical staff committee takes action on these recommendations and implements approved decisions.

# 2. Developing pharmaceutical policies and procedures

- The PTC is responsible for developing pharmaceutical policies in the health care organization. These policies are necessary to adequately control important aspects of medicine selection, purchase, distribution, use, and administration.
- Besides general policies about medicine use, the following specific policies should be in place—
- ✓ Addition of new medicines
- ✓ Restricted medicines
- ✓ Investigational medicines
- ✓ Standard treatment guidelines (STGs) and other interventions to improve medicine use

- ✓ Automatic stop orders (All Drug Orders for narcotics, sedatives, hypnotic anticoagulants, and antibiotics shall be automatically discontinued after 48 hours unless the order indicates an exact number of doses to be administered, or the attending physician, re-orders the medication).
- ✓ Structured order forms and guidelines
- ✓ Pharmaceutical representatives and promotional literature.
- The development of comprehensive policies and procedures is critical to the success of the PTC. These policies will provide the framework for implementing improvements in medicine selection and use.

#### 3. Evaluating and Selecting Medicines for the Formulary

- One of the most important functions of the PTC is the evaluation and selection of medicines for the health care organization's formulary. Evaluating medicines and consequently approving or rejecting them requires significant expertise and commitment from the committee.
- The evaluation of medicines will require a rigorous approach that looks at documented efficacy, safety, quality, and cost of all medicines requested for the formulary.
- Consistent decision making is necessary in the selection of medicines and involves—
  - Evidenced-based medicine
  - A transparent evaluation process

• Evaluating medicines for the formulary includes the review of generic medicines and other therapeutic equivalents so the most cost-effective formulary for the hospital and primary care clinic can be established. The evaluation process should include review of the primary pharmaceutical literature (especially randomized controlled trials), published STGs, pharmacoeconomic studies, review articles, and reliable textbooks.

#### 4. Identifying Medicine Use Problems

- The PTC is required to assess the quality of care (related to medicine use) in a consistent, ongoing fashion. Several pharmaceutical management areas need to be assessed to identify medicine use problems—
  - ✓ Pharmaceutical procurement and availability
  - ✓ Pharmaceutical distribution
  - ✓ Medicine prescribing
  - ✓ Dispensing
  - ✓ Administration and use
  - ✓ ADR reports
  - $\checkmark$  Medication error reports

#### 5. <u>Promoting Interventions to Improve Medicine</u> <u>Use</u>

- Irrational use of medicines, a common problem present in all health care systems worldwide, contributes to poor patient outcomes and wastes valuable resources. Promoting and implementing effective interventions are necessary to ensure rational use of medicines. Important interventions to improve medicine use are as follows—
- a) Educational programs
  - Drug bulletins and newsletters
  - □In-service education
- b) Managerial programs
  - **D**UE
  - Clinical pharmacy programs

#### 6. Managing Adverse Drug Reactions

- An adverse reaction is defined as any unusual or unexpected harmful reaction from a drug.
- Every case of adverse drug reaction must be first reported by the attending physician to the chairman of the PTC or clinical pharmacologist.
- The attending physician should complete the 'Adverse Drug Reaction Report form'.
- The medical record room will, upon the patients discharge, remove this report from the medical record and forward it to the chairman, who in turn periodically forward essential data to the central committee on Adverse Reactions formed by the State Government or the drug control authorities of the state, Government and the Drugs Controller or consultations with the bodies of experts such as Drugs Technical Advisory Board.

#### SUSPECTED ADVERSE DRUG REACTION REPORTING FORM

For VOLUNTARY reporting of Adverse Drug Reactions by healthcare professionals

INDIAN PHARMACOPOEIA COMMISSION								(	AMC/ NO	CC Use	only)	
(National Coordination Centre-Pharmacovigilance Programme of India)								1	AMC Report No.			
Ministry of Health & Family Welfare Government of India								L				
Sector-23, Raj Nagar, Ghaziabad-201002								N 1	Worldwide Unique			
A. PATIENT INFORMATION							12. Relevant tests / laboratory data with dates					
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6. Date of recovery (dd/mm/yyyy)							se, nepatic/	renal dystu	inction e	tc)		
. Des	scribe reactio	n or proble	m			1						
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						Death (dd/mm/yyyy) Congenital-anomaly Life threatening Required intervention						
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							Disability impairment / damage					
										Other	(specify)	
ł						15.0	utcomes					
							Fatal	Recovering Unknown				
							Continuing	R	ecovered		Other (specify)	
-	SPECTED ME	DICATION Manufact	(S) Batch					-				
No	8. Name (brand and	urer	No./Lot	Exp. Date (if known))	Dose used	Route used	Frequency	Therapy dates (if known, give duration)		Reason for use of prescribed for		
	/or generic name)	(if known)	No. (if known)					Date	Date		1	
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## 7. Managing Medication Errors

- Medication errors may occur in prescribing a medicine, in preparing and dispensing by a pharmacist, in preparing and administering by a nurse, and when a patient takes the medicine.
- The problem is pervasive and occurs with all persons who handle medications. The causes of errors are numerous and include lack of knowledge, fatigued employees, careless work attitudes, poor procedures for pharmaceutical distribution, lack of policies, unfamiliar dosage forms and human error.
- PTCs can reduce such errors by monitoring, analysing, reporting errors and implementing corrective action.

#### 8. Role of PTC in "Emergency drug list"

- The Time Factor is necessary for the Pharmacy and Therapeutics Committee of a hospital to get prepared boxes containing emergency drugs which should be always available readily for use at the bed-side. List of such drugs and other supplies should compiled by Committee, and it should find their place in "Emergency Kits"
- After the emergency boxes have been placed in the wards, it is very essential and compulsory that a system is developed whereby they are checked daily either by the hospital pharmacists or by nursing supervisor responsible for the ward

#### • Examples of drugs for emergency box

- ✓ Atropine sulphate 0.4 mg/ml
- ✓ Digoxin 0.25 mg/ml
- ✓ Heparin 10000 mg/ml
- ✓ Mannitol inj 25%
- ✓ Saline for inj
- ✓ Water for inj 20 ml











- Pharmacist are essential to the formulary management process. As the drug expert, the pharmacist can assure safe, efficacious and cost effective drug use through the formulary system.
- Pharmacists guide the PTC activities to assure optimal medication management.
- Establish committee meeting agenda.
- Archive committee actions by keeping minutes of meeting.
- Analyse scientific, clinical and economic information.
- Follow up research when necessary
- Communicate decisions.

## **University Questions**

- Describe the objectives, formulation and significances of pharmacy and therapeutic committee in a hospital. (10)
- 2. Briefly explain the organisation and functions of pharmacy and therapeutic committee (10)

