## PHARMACEUTICAL CARE CONCEPTS

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#### WHAT IS PHARMACEUTICAL CARE?

- It is defined as the responsible provision of drug therapy for the purpose of achieving definite therapeutic outcomes that improves the patient's quality of life.
- These outcomes are:
  - Cure of the disease
  - Elimination or reduction of patient's symptoms
  - Arresting or slowing of a disease process
  - Preventing a disease or symptoms

Pharmaceutical care involves the process through which a pharmacist cooperates with a patient and other professionals in designing, implementing and monitoring a therapeutic plan that will produce specific therapeutic outcomes for the patients.

- This involves 3 major functions:
  - Identifying potential and actual drug related problems
  - Resolving actual drug related problems
  - Preventing potential drug related problems

# FUNCTIONS

- COLLECTION OF PATIENT DATA
- IDENTIFICATION OF PROBLEMS
- ESTABLISHING OUTCOME GOALS THROUGH A
  GOOD THERAPEUTIC PLAN
- EVALUATING TREATMENT ALTERNATIVES , BY MONITORING AND MODIFYING THERAPEUTIC PLAN
- INDIVIDUALISING DRUG REGIMENS
- MONITORING OUTCOMES

# COLLECTION OF PATIENT DATA

- Demographics
- Current problems
- Past medical history
- Current medication
- Social habits
- Relevant laboratory data

Subsequent modifications of therapy plan

# IDENTIFICATION OF PROBLEMS

- The data collected can be used to identify actual or potential drug related problems.
  - ACTUAL: A condition that requires the initiation of a new or additional drug.
  - POTENTIAL: The patient may be at risk to develop a new medical problem.
- These problems may be related to the patient's current drug therapy, drug administration, drug compliance, drug toxicity, ADR's and a failure to achieve desired outcomes by the treatment.

## ESTABLISHING OUTCOME GOALS

- Drug therapy can produce positive outcomes:
  - Cure of the disease
  - Elimination or reduction of patient's symptoms
  - Arresting or slowing of a disease process
  - Preventing a disease or symptoms
  - It may also produce negative result, i.e. resulting in disease morbidity and sometimes mortality especially in conditions like palliative care.

### EVALUATING TREATMENT ALTERNATIVES BY MONITORING AND MODIFYING THERAPEUTIC PLAN

- Efficacy, safety, availability and cost of treatment and suitability of the treatment to the patient should be considered while evaluating.
- The risk-benefit ratio factors should also be considered: seriousness of the disease, complications if untreated, efficacy of drug, ADR's.

## INDIVIDUALISING DRUG REGIMENS

- When more than one therapeutic alternatives exist, the following factors to be considered:
  - Patient factors:- diagnosis, treatment goals, past medical and medication history, contraindication, allergies, compliance
  - Drug factors:- efficacy, adverse effects, dosage form, cost, drug-drug interactions

### MONITORING OUTCOMES

- The goals are: Cure of the disease, elimination or reduction of patient's symptoms, arresting or slowing of a disease process, preventing a disease or symptoms.
- But often leads to suboptimal outcomes due to:inappropriate or unnecessary prescribing or drug regimen, dispensing error, non-compliance, inappropriate monitoring.

- To ensure good monitoring outcomes;
  - Regularly should review whether satisfactory progression is made or not according to the therapeutic plan.
  - To determine whether original plan should continue or any treatment modifications to be made or not.
  - Reviews ongoing progress and provides report to patient's other healthcare providers.
  - Should regularly update patient's medical/pharmacy records with information concerning patient's progress.

#### PHARMACEUTICAL CARE IN HOSPITALS

- Prescription monitoring
- Prescribing advice to medical and nursing staff
- Medication errors and adverse reaction monitoring
- Medication history interview
- Patient education and counseling
- Pharmacokinetics and therapeutic drug monitoring
- Hospital formulary

#### PHARMACEUTICAL CARE FOR THE COMMUNITY

- Participate in health screening
- Participate in health promotion and education
- Serve as a source of drug and poison information
- Collaborate with other health care professionals to develop treatment guidelines
- Design and monitor procurement and drug distribution system including storage and disposal.

#### BARRIERS TO PHARMACEUTICAL CARE

- Pharmacist barrier
- Practice setting constraints
- System impediments
- Intra professional barrier

#### THANK YOU

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