

PROGRAMME:PHARM.D

COURSE CODE:2.5 COMMUNITY PHARMACY.

UNIT:12

TOPIC TITLE: RATIONAL DRUG THERAPY

The concept of rational drug use during the past few years has been the theme of various national & international gatherings. Various studies conducted in developed as well as in developing countries during past few years regarding the safe & effective use of drugs show that irrational drug use is a global phenomenon & only few prescriptions justify rational use of drugs.

DEFINITION

In simplest words rational use means “prescribing right drug, in adequate dose for the sufficient duration & appropriate to the clinical needs of the patient at lowest cost.

The concept of rational drug use is age old, as evident by the statement made by the Alexandrian physician Herophilus 300 B.C that is “Medicines are nothing in themselves but are the very hands of god if employed with reason & prudence.”

Rational drug use attained more significance nowadays in terms of medical, socio economical and legal aspect. Factors that have led sudden realization for rational drug use are.

1. Drug explosion:- Increase in the number of drugs available has incredibly complicated the choice of appropriate drug for particular indication.
2. Efforts to prevent the development of resistance – Irrational use of drugs may lead to the premature demise of highly efficacious & life saving new antimicrobial drug due to development of resistance.
3. Growing awareness:- Today, the information about drug development, it's uses & adverse

effects travel from one end of the planet to the other end with amazing speed through various media.

4. Increased cost of the treatment:- Increase in cost of the drug increases economic burden on the public as well as on the government. This can be reduced by rational drug use.
5. Consumer protection Act. (CPA):- Extension of CPA in medical profession may restrict the irrational use of drugs.

REASONS FOR IRRATIONAL USE OF DRUGS.

1. Lack of information:-

Unlike many developed countries we don't have regular facility which provides us up to date unbiased information on the currently used drugs. Majority of our practitioners rely on medical representatives. There are differences between pharmaceutical concern & the drug regulatory authorities in the interpretation of the data related to indications & safety of drugs.

2. Faulty & inadequate training & education of medical graduates: -

Lack of proper clinical training regarding writing a prescription during training period, dependency on diagnostic aid, rather than clinical diagnosis, is increasing day by day in doctors.

3. Poor communication between health professional & patient:-

Medical practitioners & other health professional giving less time to the patient & not explaining some basic information about the use of drugs.

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4. Lack of diagnostic facilities/Uncertainty of diagnosis:-

Correct diagnosis is an important step toward rational drug therapy. Doctors posted in remote areas have to face a lot of difficulty in reaching to a precise diagnosis due to non availability of diagnostic facilities. This promotes poly-pharmacy.

5. Demand from the patient :-

To satisfy the patient expectations and demand of quick relief, clinician prescribe drug for every single complaint. Also, there is a belief that “every ill has a pill” All these increase the tendency of polypharmacy.

6. Defective drug supply system & ineffective drug regulation:-

Absence of well organized drug regulatory authority & presence of large number of drugs in the market leads to irrational use of drugs.

7. Promotional activities of pharmaceutical industries:

The lucrative promotional programmes of the various pharmaceutical industries influence the drug prescribing.

HAZARDS OF IRRATIONAL USE OF DRUGS

Irrational use of drugs may lead to:-

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1. Ineffective & unsafe treatment
2. Exacerbation or prolongation of illness.
3. Distress & harm to patient
4. Increase the cost of treatment

MEASURES TO PROMOTE RATIONAL DRUG USE

Medicines (drugs) cannot be used rationally unless every one involved in the pharmaceutical supply chain has access TO objective information about the drug they buy and use. Knowledge & ideas about drugs are constantly changing & a

clinician is expected to know about the new development in drug therapy. The pre-requisites of rational drug use are: -

- ? Critical assessment & evaluation of benefits & risk of drug used.
- ? Compare the advantages, disadvantages, safety & cost of the drug with existing drug for some indication.

OBSTACLES EXIST IN RATIONAL DRUG USE

Various obstacles in rational drug use are:-

1. Lack of objective information & of continuing education & training in pharmacology.
2. Lack of well organized drug regulatory authority & supply of drugs.
3. Presence of large number of drugs in the market & the lucrative methods of promotion of drugs employed by pharmaceutical industries.
4. The prevalent belief that “every ill has a pill.”

STEPS TO IMPROVE RATIONAL DRUG PRESCRIBING

Step:- I

Identify the patient's problem based on symptoms & recognize the need for action.

Step:-II

Diagnosis of the disease. Identify underlying cause & motivating factors. This may be specific as in infectious disease or non specific.

Step:-III

List possible intervention or treatment. This may be non drug treatment or drug treatment. Drug must be chosen from different alternatives based on efficacy, convenience & safety of drugs including, drug inter-actions & high risk group of patients.

Step:-IV

Start the treatment by writing an accurate & complete prescription e.g. name of drugs with dosage forms, dosage schedule & total duration of the treatment.

Step:-V

Given proper information instruction & warning regarding the treatment given e.g. side effects(ADR), dosage schedule & dangers/risk of stopping the therapy suddenly.

Step:-VI

Monitor the treatment to check, if the particular treatment has solved the patient's problem. It may be:

- (a) Passive monitoring – done by the patient himself. Explain him what to do if the treatment is not effective or if too many side effect occurs
- (b) Active monitoring done by physician and he make an appointment to check the response of the treatment.

Conclusion: Indiscriminate use of drugs not only waste scarce resources that could otherwise be spent on other essential services, but also leads to drug induced disease. The drug control authority, the teaching institutes, drug industries, N.G.O & the patient himself may be helpful for rational drug use.

Drug authority must circulate the list of essential drugs which could be updated from time to time. It must monitor the safe & proper use of these drugs & enforce a uniform regulation for promotional literature.

Teaching institute must conduct regular research work & proper training of undergraduates & post graduates. Motivation of NGO to organize various programmes for public awareness lastly, the patient himself should observe strict compliance to the physician's prescription & never indulge in self medication.

To conclude, the demands of rational drug use are:-

1. Availability of essential & life saving drugs and unbiased drug information with generic name.
2. Adequate quality control & drug control.
3. Withdrawal of hazardous & irrational drugs.
4. Drug legislation reform.

Role of pharmacist in promotion of rational use of drugs

Role of pharmacist has been emerging continuously so as to meet the modulating needs of society. The pharmacist is now no longer a supplier of medicines but a coordinator between different members of healthcare team and the patients. Hence, proper role and involvement of a pharmacist in safe use of medicines and overall healthcare becomes very crucial. Through knowledge of drugs. By promoting the rational use of medicines and patient medication counseling pharmacists play a key role in improved quality of life for the community.

The pharmacist being uniquely qualified because

1. They are the custodians of much technical information on the medicinal products.
2. They provide an interface between the duties of prescription and selling medicines and in doing so; they dispose of any perceived or potential conflict of interest between these two functions.
3. Pharmacist has more opportunity to interact closely with the prescriber and therefore, to promote the rational prescribing and use of drugs.
4. By having access to medicinal records the pharmacist is in a position to influence the selection of drugs, dosage regimens, to monitor patient compliance and therapeutics, response to drugs and to recognize and report adverse drug reactions.
5. They are in a better position to educate other health professionals about the rational use of drugs.
6. They can more easily participate in studies to determine the beneficial or adverse effects of drugs and further they are involved in analysis of drugs in body fluids.
7. They can control hospital manufacture and procurement of drugs to ensure the supply of high quality products.
8. They can actively take part in the planning and implementation of clinical trails.

PROGRAMME:Pharm.D
COURSE CODE:2.5 Community
pharmacy
UNIT:13
TOPIC TITLE: Code of Ethics for
Community Pharmacists

Preamble

Community Pharmacists are health professionals who assist individuals in making the best use of medications. This Code, prepared and supported by pharmacists, is intended to state publicly the principles that form the fundamental basis of the roles and responsibilities of pharmacists. These principles, based on moral obligations and virtues, are established to guide pharmacists in relationships with patients, health professionals, and society.

Principles

I. A pharmacist respects the covenantal relationship between the patient and pharmacist.

Interpretation: Considering the patient-pharmacist relationship as a covenant means that a pharmacist has moral obligations in response to the gift of trust received from society. In return for this gift, a pharmacist promises to help individuals achieve optimum benefit from their medications, to be committed to their welfare, and to maintain their trust.

II. A pharmacist promotes the good of every patient in a caring, compassionate, and confidential manner.

Interpretation: A pharmacist places concern for the well-being of the patient at the center of professional practice. In doing so, a pharmacist considers needs stated by the patient as well as those defined by health science. A pharmacist is dedicated to protecting the dignity of the patient. With a caring attitude and a compassionate spirit, a pharmacist focuses on serving the patient in a private and confidential manner.

III. A pharmacist respects the autonomy and dignity of each patient.

Interpretation: A pharmacist promotes the right of self-determination and recognizes individual self-worth by encouraging patients to participate in decisions about their health. A pharmacist communicates with patients in terms that are understandable. In all cases, a pharmacist respects personal and cultural differences among patients.

IV. A pharmacist acts with honesty and integrity in professional relationships.

Interpretation: A pharmacist has a duty to tell the truth and to act with conviction of conscience. A pharmacist

avoids discriminatory practices, behavior or work conditions that impair professional judgment, and actions that compromise dedication to the best interests of patients.

V. A pharmacist maintains professional competence.

Interpretation: A pharmacist has a duty to maintain knowledge and abilities as new medications, devices, and technologies become available and as health information advances.

VI. A pharmacist respects the values and abilities of colleagues and other health professionals.

Interpretation: When appropriate, a pharmacist asks for the consultation of colleagues or other health professionals or refers the patient. A pharmacist acknowledges that colleagues and other health professionals may differ in the beliefs and values they apply to the care of the patient.

VII. A pharmacist serves individual, community, and societal needs.

Interpretation: The primary obligation of a pharmacist is to individual patients. However, the obligations of a pharmacist may at times extend beyond the individual to the community and society. In these situations, the pharmacist recognizes the responsibilities that accompany these obligations and acts accordingly.

VIII. A pharmacist seeks justice in the distribution of health resources.

Interpretation: When health resources are allocated, a pharmacist is fair and equitable, balancing the needs of patients and society.
