

Irrational Drug Use -An Overview

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Amritsar

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Consider this.....

- 90% of prescriber-patient relationship results in a prescription.
- New classes of drugs are being discovered.
- You will use medicines which were not taught.
- The increasing use of OTC drugs and absence of regulations allows for inappropriate use.
- An increase in the incidence of serious ADRs

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Examples of Inappropriate Prescribing Practices

- Overuse of antibiotics and antidiarrhoeals for nonspecific childhood diarrhea
- Indiscriminate use of injections for malaria
- Multiple or overprescription
- Use of antibiotics for mild, nonbacterial infection, e.g., ARI
- Tonics and multivitamins
- Unnecessary use of expensive anti-hypertensives

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Other Drug Use Problems

- Use of alternative systems of medicine
- Poor compliance with TB therapy
 - Causes treatment failure and resistant organisms
- Under use of effective drugs
 - Hypertension
 - Depression
- Hospital drug use problems
 - Antibiotic misuse for surgical prophylaxis

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What is Rational Use of Drugs?

The rational use of drugs requires that patients receive medicines appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and the community

- WHO

Components of Rationality

- Appropriate indication
- Appropriate drug
- Appropriate administration, dosage, and duration
- Appropriate patient
- Appropriate patient information
- Appropriate evaluation

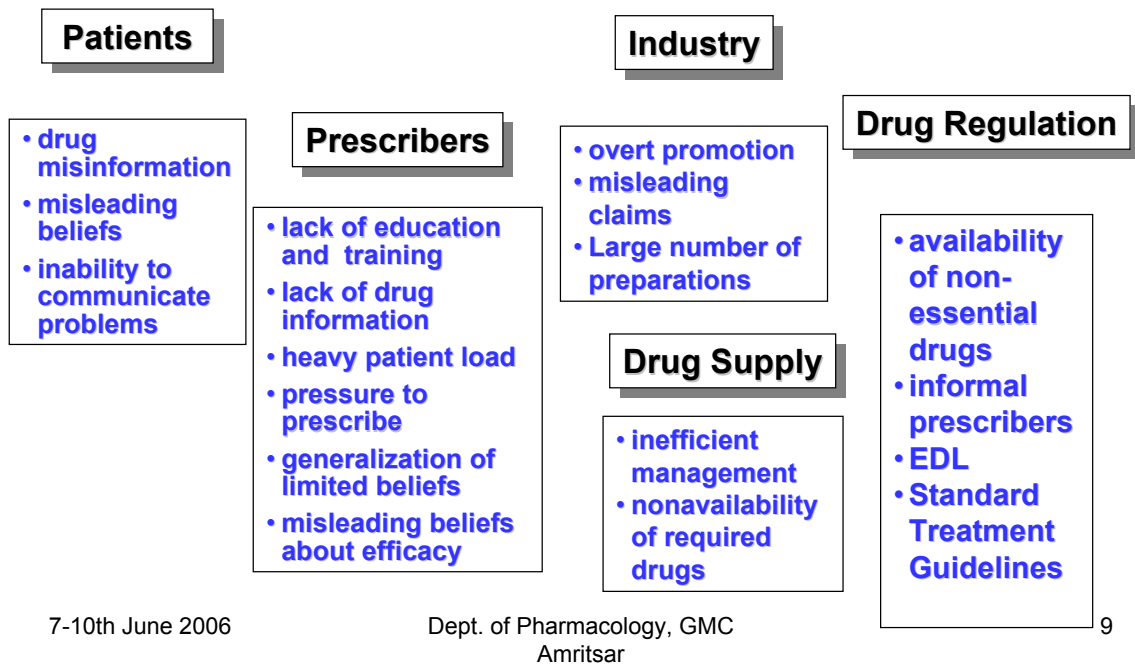
Irrational Use of Drugs = Pathology of Prescribing

- The use of drugs when no drug therapy is indicated
- The use of wrong drugs for a specific condition requiring drug therapy
- The use of drugs with doubtful or unproven efficacy

.....pathology of prescribing

- The use of drugs of uncertain safety status
- Failure to prescribe available, safe, & effective drugs
- Incorrect administration, dosages, or duration

Factors Underlying Irrational Use of Drugs



Factors which retard the practice of Rational Drug Use

- Prescribing **exceedingly high doses**
- Prescribing more **toxic drugs** than necessary
- Prescribing an **unnecessary** drug
- Prescribing a drug which leads to a **drug-drug interaction**
- **Inability** to write a coherent and complete prescription

Commercial interests

- May not always match public interest
- Goal is increasing sales and profits of a given product
- Independent, comprehensive and comparative information is not available
- It can contribute to inappropriate drug use and the purchase of needlessly expensive products

Generic Prescribing

- Reduced costs
- Easier availability
- Obviates the need for multiple stocks
- Easier to remember
- Substitution ?
- Bioequivalence ?
- Quality control ?

Six Key Steps

- Making an accurate diagnosis
- Understanding the pathophysiology of the disease
- Reviewing the menu of therapeutic options
- Selecting a patient specific drug and dose
- Selecting end points for follow up
- Monitoring and stopping the drug

Avoidable Mistakes

- Prescribing multiple drugs
- Prescribing to keep up with the latest fad
- Prescribing an older drug out of habit
- Prescribing in order to satisfy the expectations of the patient
- Prescribing out of pressure from drug companies, other prescribers or media

Conclusion

- Drug use is the end point of the therapeutic consultation
- Prescribers have the responsibility to ensure that the right drug is prescribed, dispensed, and taken
- Methods exist to measure drug use and to change practices
- Improving drug use improves the quality of care and lowers costs

Problems of Irrational Drug Use: Objectives

- **Identify magnitude and nature of inappropriate drug utilization- Prescription Audit and analysis**
- **Describe factors that influence the use of decisions about drugs**
- **Critically appraise advertising and sources of information**
- **Discuss specific medication use problems- Exercises on common problems**