

Rational Use of Drugs

RUD is “prescribing right drug, in adequate dose for the sufficient duration & appropriate to the clinical needs of the patient at lowest cost.

These requirements will be fulfilled if the process of prescribing is appropriately followed.

This includes

- Right diagnosis
- effective and safe treatments (drugs and non drugs)
- appropriate drugs, dosage and duration.
- patients adequate information.
- Monitoring treatment responses.

Rational Prescribing

It fulfills the following criteria's –

1. Appropriate diagnosis
2. Appropriate indications
3. Appropriate drug
4. Appropriate dosage
5. Appropriate duration
6. Appropriate route of administration

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Why Rational Drug Use?

1. Drug explosion
2. Efforts to prevent the development of resistance
3. Growing awareness
4. Increased cost of the treatment
5. Consumer protection Act (CPA)

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Criteria for Rational Prescribing

- Appropriate indications (effective and safe treatment)
- Appropriate Drug (efficacy, safety, suitability and cost considerations)
- Appropriate Patient (contraindications / adverse reaction)
- Appropriate Information
- Appropriate Monitoring

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Steps to Improve Rational Drug Prescribing

Step: I (Identify the patient's problem)

Step: II (Diagnosis of the disease)

Step: III (List possible intervention or treatment)

Step: IV (Start the treatment by writing an accurate & complete prescription)

Step: V (Given proper information instruction & warning)

Step: -VI (Monitor the treatment to check)

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Irrational Prescribing

- When medically inappropriate, ineffective and economically inefficient drugs are used, it is called irrational prescribing.
- Some common irrational prescribing:
 1. Excessive use of drugs.
 2. Overuse of antibiotics.
 3. Prescribing new costly drug, when an alternate cheaper drug is available etc.

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Irrational Prescribing

- Use of drug when none is needed; e.g. antibiotics for viral fevers and nonspecific diarrhoeas.
- Compulsive coprescription of vitamins I tonics.
- Use of drugs not related to the diagnosis, e.g. chloroquine/ ciprofloxacin for any fever,
- proton pump inhibitors for any abdominal symptom.
- Selection of wrong drug, e.g. tetracycline/ ciprofloxacin for pharyngitis, beta blocker as antihypertensive for asthmatic patient.
- Incorrect route of administration: injection when the drug can be given orally.

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Impact of Irrational use of Drugs

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

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Factor affecting Irrational use of drug

- Lack of Information
- Faculty and inadequate training and education
- Poor communication between health professional and patient
- Lack of diagnostic facilities
- Demand from the patient
- Defective drug supply system and ineffective drug regulation
- Promotional activities of pharmaceutical industries

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