

## **PHARMACOTHERAPEUTICS (ER20-24T)**

### **UNIT-1: INTRODUCTION TO PHARMACOTHERAPEUTICS, RDU, EML, STGs**

#### **□ PUZZLE 1: The Confused Prescriber**

##### **Case Scenario:**

A newly graduated doctor prescribes three antibiotics, two analgesics, and a vitamin injection for a patient suffering from simple viral fever. The patient develops gastric irritation and does not improve.



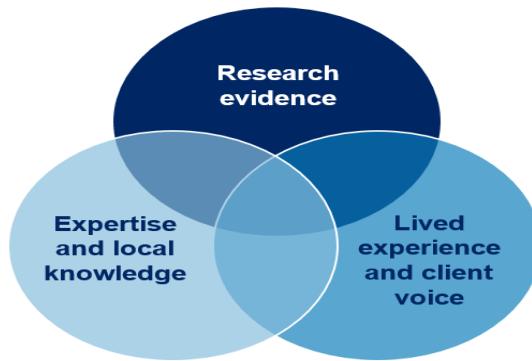
##### **Puzzle Questions:**

1. Identify the **pharmacotherapeutic error** in this prescription.
2. Which principle of **Rational Use of Medicines** is violated?
3. Name one **objective of Pharmacotherapeutics** that could prevent this issue.
4. Which healthcare professional can help correct this therapy?

#### **□ PUZZLE 2: Evidence or Experience?**

##### **Case Scenario:**

A senior physician continues prescribing Drug X for hypertension because it has been used for 20 years. However, recent clinical trials show Drug Y reduces mortality more effectively.



**Puzzle Questions:**

1. Which concept supports the use of Drug Y?
2. Define **Evidence-Based Medicine**.
3. What are the **three core components of EBM** involved in this decision?
4. Why is relying only on experience risky?

**□ PUZZLE 3: The Essential or the Expensive?**

**Case Scenario:**

Two brands are available for treating malaria:

- Drug A: Low cost, listed in EML
- Drug B: Very expensive, heavily advertised, same efficacy

The hospital pharmacy stocks Drug B.



**Puzzle Questions:**

1. Which medicine should ideally be selected and why?
2. What is the **Essential Medicines List (EML)**?
3. Who prepares and updates the EML in India?
4. Mention **two criteria** for selecting drugs into EML.

**□ PUZZLE 4: Missing Guidelines**

**Case Scenario:**

A rural hospital treats tuberculosis patients differently depending on the doctor on duty. Treatment duration and drug combinations vary.



**Puzzle Questions:**

1. What is lacking in this hospital's treatment system?
2. Expand **STGs**.
3. Mention **two advantages of following STGs**.
4. How do STGs improve patient safety?

### □ PUZZLE 5: Too Many Medicines!

#### Case Scenario:

An elderly patient with diabetes, hypertension, and arthritis is prescribed 9 medicines. He forgets doses and develops adverse drug reactions.



#### Puzzle Questions:

1. Identify the pharmacotherapeutic problem.
2. Which principle of **Rational Drug Therapy** is affected?
3. How can STGs help in this case?
4. What role does a pharmacist play here?

### □ PUZZLE 6: Rational or Irrational?

#### Case Scenario:

A patient with acute diarrhea is given antibiotics, antispasmodics, antiemetics, probiotics, and IV fluids without laboratory confirmation.



**Puzzle Questions:**

1. Is this rational or irrational therapy? Justify.
2. Which **objective of pharmacotherapeutics** is violated?
3. Which medicines may be unnecessary?
4. How would EBM change this treatment?

**□ PUZZLE 7: Match the Concept**

**Match Column A with Column B**

<b>Column A</b>	<b>Column B</b>
1. Pharmacotherapeutics	A. Cost-effective medicine list
2. Rational Use of Medicines	B. Best evidence + clinical expertise
3. EBM	C. Safe and effective drug use
4. EML	D. Application of drugs to treat disease
5. STGs	E. Uniform treatment protocols

**□ PUZZLE 8: One-Line Challenge**

Fill in the blanks:

1. The main goal of pharmacotherapeutics is \_\_\_\_\_ and \_\_\_\_\_ treatment.
2. EBM reduces \_\_\_\_\_ prescribing.
3. EML focuses on \_\_\_\_\_, \_\_\_\_\_, and affordability.
4. STGs help in \_\_\_\_\_ use of medicines.