Test Bank for Pharmacology for Nursing Care 7th Edition by Lehne


Chapter 01: Orientation to Pharmacology

Test Bank

MULTIPLE CHOICE

1. The student is providing a presentation to the class regarding concepts in pharmacodynamics. Which statement made by a student in the class best demonstrates understanding of pharmacodynamics?
   a. “Excretion and metabolism are components of pharmacodynamics.”
   b. “Receptor binding is the main component of pharmacodynamics.”
   c. “Age and gender are components of pharmacodynamics.”
   d. “Routes of administration are components of pharmacodynamics.”

ANS: B
Receptor binding is the main component of pharmacodynamics. Excretion and metabolism are components of pharmacokinetics. Age and gender are biologic/physiologic variations. Routes of administration are considered pharmacokinetics.

PTS: 1  DIF: Cognitive Level: Comprehension  REF: p. 3
TOP: Nursing Process: Evaluation
MSC: NCLEX Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies
2. The nurse is administering morning medications. A patient questions the nurse, “How does the drug know where to go?” The nurse’s best response to the patient is based on the understanding that a drug that elicits only those responses for which it is given is considered
a. safe. 
 b. effective. 
 c. selective. 
 d. predictable.

ANS: C
Selectivity defines a drug that elicits only those responses for which it is given. There are no drugs that are considered safe by definition. “Effective” is a term that describes a drug that is doing what it is expected to do. A predictable drug response will have the mechanism of action that is expected from it.

PTS: 1       DIF: Cognitive Level: Comprehension       REF: p. 2
TOP: Nursing Process: Diagnosis
MSC: NCLEX Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

3. A nurse is teaching a continuing education class on pharmacology. The nurse is evaluating the participants’ knowledge and poses the question, “When a disease process triggers increased metabolism of the drug, the disease has altered the drug’s __________.”
 a. pharmacodynamics
 b. pharmacokinetics 
 c. pharmacotherapeutics
 d. selectivity

ANS: B
Metabolism is a component of pharmacokinetics. Pharmacodynamics is the impact of drugs on the body. Pharmacotherapeutics refers to the use of drugs to diagnose, prevent, or treat disease or to prevent pregnancy. Selectivity refers to the ability of a drug to elicit only the response for which it is given.

PTS: 1       DIF: Cognitive Level: Comprehension       REF: pp. 2-3
TOP: Nursing Process: Evaluation
MSC: NCLEX Client Needs Category: Physiological Integrity: Physiological Adaptation
4. A patient with type I diabetes mellitus comes to the clinic with complaints of low blood sugar. The nurse questions the patient regarding compliance with medications. The patient states that she gives herself more insulin per dose so she doesn’t have to take it as often. Which factors should the nurse educate the patient about as affecting the patient’s response to the medication?

a. Administration  
   b. Pharmacokinetics  
   c. Pharmacodynamics  
   d. Chemical stability

ANS: A

Administration of medications relates to the appropriate dosage amount, route, and timing of administration and is an important determinant of a patient’s drug response. Pharmacokinetics determines how much of an administered dose gets to its sites of action. Pharmacodynamics is the impact of drugs on the body; it determines the nature of the response and is not directly related to dose and compliance. Chemical stability relates to the stability of the medication when mixed in solution or with another form or preparation or when stored on a shelf.

PTS: 1  
DIF: Cognitive Level: Analysis  
REF: pp. 2-3  
TOP: Nursing Process: Implementation  
MSC: NCLEX Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. What are the properties of an ideal drug? (Select all that apply.)

a. Irreversible action  
b. Predictability  
c. Ease of administration  
d. Chemical stability  
e. A simple trade name

ANS: B, C, D  

In addition to predictability, ease of administration, and chemical stability, other properties would include a reversible action to undo any harm the drug may have caused and a simple generic name, because generic names are usually complex and difficult to remember and pronounce.
Chapter 3: Drug Regulation, Development, Names, and Information

Test Bank

1. A nurse educator is providing a continuing education class on pharmacology. To evaluate the learning of the nurses in the class, the nurse educator asks, “Which of the following is (or are) a generic drug name?”

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<tbody>
<tr>
<td>a.</td>
<td>Acetaminophen</td>
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<tr>
<td>b.</td>
<td>Tylenol</td>
</tr>
<tr>
<td>c.</td>
<td>Cipro</td>
</tr>
<tr>
<td>d.</td>
<td>Motrin</td>
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ANS: A
Acetaminophen is the generic name. Tylenol, Cipro, and Motrin are all trade names.
2. A researcher working for a pharmaceutical company is providing orientation to a new nurse researcher. The researcher determines that further education is needed when the nurse states that

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a. | preclinical testing takes place in animals. |
| b. | clinical testing phase 1 involves normal volunteers. |
| c. | clinical testing phase 2 involves normal volunteers. |
| d. | clinical testing phase 3 involves patients. |

ANS: C

Clinical testing phase 2 involves patients, not normal volunteers, therefore further education is required.

Preclinical testing does take place in animals, therefore no further education is necessary.

Clinical testing phase 1 does involve normal volunteers, therefore no further education is needed.

Clinical testing phase 3 involves patients, therefore no further education is required.

DIF: Cognitive Level: Comprehension  REF: p. 17
TOP: Nursing Process: Evaluation

MSC: NCLEX Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies
3. A nurse is providing discharge teaching about an opiate analgesic for a patient. The nurse correctly tells the patient that the greatest potential for abuse exists with drugs from which schedule?

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<td>c.</td>
<td>III</td>
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<td>d.</td>
<td>IV</td>
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ANS: A

Schedule I drugs have the greatest potential for abuse.

Drugs from schedule II have less potential for abuse.

Drugs from schedule III also have less potential for abuse.

Drugs from schedule IV do not have the greatest potential for abuse.

DIF: Cognitive Level: Comprehension     REF: p. 15

TOP: Nursing Process: Implementation

MSC: NCLEX Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A prescriber orders a drug that is considered “off label.” A patient asks what “off label” means. The nurse correctly explains that “off label” means that a drug is

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<td>a.</td>
<td>still being tested in the FDA experimental stages.</td>
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</table>
b. FDA approved for one use but is being prescribed for another purpose.

c. in the “fast-track” FDA approval process to expedite use.

d. a schedule I drug but may be used as a schedule II drug.

ANS: B

The term off label indicates that the drug is approved for one use but may be used for a different purpose.

A drug still being tested in the FDA experimental stages is called an investigational drug.

The term fast track refers to the expeditious nature in which a drug would be channeled for approval by the FDA.

The classification of scheduled drugs has to do with abuse potential, not labeled or unlabeled uses.

DIF: Cognitive Level: Comprehension  REF: p. 16

TOP: Nursing Process: Implementation

MSC: NCLEX Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies

5. What was the rationale for the 1992 changes in the Food and Drug Administration’s regulations to permit accelerated approval of drugs for the treatment of life-threatening or severely debilitating disease?

a. To allow for marketing before completion of phase II of drug trials

b. To ensure that the unknown risks associated with early approval are
balanced by the need for effective drugs

c. To change the rules because existing FDA regulations were too stringent for potentially effective drugs

d. To accelerate approval of new drugs to give prescribers the option of using them without research findings

ANS: B

Accelerated drug approval was needed to ensure that effective drugs necessary for life-threatening and/or severely debilitating diseases were available but with a balance of benefit/effectiveness and risk.

Phase II drug trials are related to the therapeutic utility and dosage range, not to accelerated approval of drugs.

FDA regulations were not stringent enough, but became so over time to protect consumers.

Accelerated approval of new drugs did not give prescribers the option to use them without research findings. Drugs are approved only after a rigorous clinical trial and research process.

DIF: Cognitive Level: Comprehension    REF: pp. 15-17

TOP: Nursing Process: Diagnosis

MSC: NCLEX Client Needs Category: Physiological Integrity: Reduction of Risk Potential

MULTIPLE RESPONSE
1. A nurse is providing patient education regarding over-the-counter medications. To evaluate the patient’s learning, the nurse asks the patient which of these medications are considered over-the-counter medications. What is her response? (Select all that apply.)

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<tbody>
<tr>
<td>a.</td>
<td>Acetaminophen (Tylenol)</td>
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<tr>
<td>b.</td>
<td>Diphenhydramine (Benadryl)</td>
</tr>
<tr>
<td>c.</td>
<td>Sildenafil (Viagra)</td>
</tr>
<tr>
<td>d.</td>
<td>Ciprofloxacin (Cipro)</td>
</tr>
<tr>
<td>e.</td>
<td>Ibuprofen (Motrin)</td>
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</tbody>
</table>

ANS: A, B, E

Acetaminophen, diphenhydramine, and ibuprofen are all over-the-counter medications. Cipro and Viagra are not.

Acetaminophen, diphenhydramine, and ibuprofen are all over-the-counter medications and therefore do not require a prescription from a licensed physician or nurse practitioner. Cipro and Viagra do require a prescription from a licensed physician or nurse practitioner, therefore they are not over-the-counter medications.

DIF: Cognitive Level: Comprehension    REF: pp. 22-23

TOP: Nursing Process: Evaluation

MSC: NCLEX Client Needs Category: Physiological Integrity: Pharmacological and Parenteral Therapies