

TEST BANK

Pharmacology and the Nursing Process

9th Edition

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Chapter 01: The Nursing Process and Drug Therapy

MULTIPLE CHOICE

1. The nurse is writing a nursing diagnosis for a plan of care for a patient who has been newly diagnosed with type 2 diabetes. Which statement reflects the correct format for a nursing diagnosis?
 - a. Anxiety
 - b. Anxiety related to new drug therapy
 - c. Anxiety related to anxious feelings about drug therapy, as evidenced by statements such as “I’m upset about having to test my blood sugars.”
 - d. Anxiety related to new drug therapy, as evidenced by statements such as “I’m upset about having to test my blood sugars.”

ANS: D

Formulation of nursing diagnoses is usually a three-step process. “Anxiety” is missing the “related to” and “as evidenced by” portions of defining characteristics. “Anxiety related to new drug therapy” is missing the “as evidenced by” portion of defining characteristics. The statement beginning “Anxiety related to anxious feelings” is incorrect because the “related to” section is simply a restatement of the problem “anxiety,” not a separate factor related to the response.

DIF: COGNITIVE LEVEL: Understanding (Comprehension)

TOP: NURSING PROCESS: Nursing Diagnosis

MSC: NCLEX: Safe and Effective Care Environment: Management of Care

2. The patient is to receive oral guaifenesin (Mucinex) twice a day. Today, the nurse was busy and gave the medication 2 hours after the scheduled dose was due. What type of problem does this represent?
 - a. “Right time”
 - b. “Right dose”
 - c. “Right route”
 - d. “Right medication”

ANS: A

“Right time” is correct because the medication was given more than 30 minutes after the scheduled dose was due. “Dose” is incorrect because the dose is not related to the time the medication administration is scheduled. “Route” is incorrect because the route is not affected. “Medication” is incorrect because the medication ordered will not change.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Safe and Effective Care Environment: Safety and Infection Control

3. The nurse has been monitoring the patient’s progress on a new drug regimen since the first dose and documenting the patient’s therapeutic response to the medication. Which phase of the nursing process do these actions illustrate?
 - a. Nursing diagnosis

15. A patient arrives at the urgent care center complaining of leg pain after a fall when rock climbing. The x-rays show no broken bones, but he has a large bruise on his thigh. The patient says he drives a truck and does not want to take anything strong because he needs to stay awake. Which statement by the nurse is **most** appropriate?
- “It would be best for you not to take anything if you are planning to drive your truck.”
 - “We will discuss with your doctor about taking an opioid because that would work best for your pain.”
 - “You can take acetaminophen, also known as Tylenol, for pain, but no more than 1000 mg per day.”
 - “You can take acetaminophen, also known as Tylenol, for pain, but no more than 3000 mg per day.”

ANS: D

Acetaminophen is indicated for mild-to-moderate pain and does not cause drowsiness, as an opioid would. Currently, the maximum daily amount of acetaminophen is 3000 mg/day. The 1000-mg amount per day is too low. Telling the patient not to take any pain medications is incorrect.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Planning

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

16. A patient is suffering from tendonitis of the knee. The nurse is reviewing the patient's medication administration record and recognizes that which adjuvant medication is **most** appropriate for this type of pain?
- Antidepressant
 - Anticonvulsant
 - Corticosteroid
 - Local anesthesia

ANS: C

Corticosteroids have an anti-inflammatory effect, which may help to reduce pain. The other medications do not have anti-inflammatory properties.

DIF: COGNITIVE LEVEL: Understanding (Comprehension)

TOP: NURSING PROCESS: Planning

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. Vicodin (acetaminophen/hydrocodone) is prescribed for a patient who has had surgery. The nurse informs the patient that which common adverse effects can occur with this medication? (*Select all that apply.*)
- Diarrhea
 - Constipation
 - Lightheadedness
 - Nervousness

MULTIPLE RESPONSE

1. A nurse is providing teaching for a patient who will be taking varenicline (Chantix) as part of a smoking-cessation program. Which teaching points are appropriate for a patient taking this medication? (*Select all that apply.*)
 - a. This drug is available as a chewing gum that can be taken to reduce cravings.
 - b. Use caution when driving because drowsiness may be a problem.
 - c. There have been very few adverse effects reported for this drug.
 - d. Notify the prescriber immediately if feelings of sadness or thoughts of suicide occur.
 - e. Avoid caffeine while on this drug.

ANS: B, D

Patients taking varenicline have reported drowsiness, which has prompted the U.S. Food and Drug Administration (FDA) to recommend caution when driving and engaging in other potentially hazardous activities until the patient can determine how the drug affects his or her mental status. In addition, the FDA has warned about psychiatric symptoms including agitation, depression, and suicidality. Varenicline is an oral tablet, and common adverse effects include nausea, vomiting, headache, and insomnia. There are no cautions about taking caffeine while on this drug.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Reduction of Risk Potential

2. A patient has been taking disulfiram (Antabuse) as part of his rehabilitation therapy. However, this evening, he attended a party and drank half a beer. As a result, he became ill and his friends took him to the emergency department. The nurse will look for which adverse effects associated with acetaldehyde syndrome? (*Select all that apply.*)
 - a. Euphoria
 - b. Severe vomiting
 - c. Diarrhea
 - d. Pulsating headache
 - e. Difficulty breathing
 - f. Sweating

ANS: B, D, E, F

Acetaldehyde syndrome results when alcohol is taken while on disulfiram (Antabuse) therapy. Adverse effects include CNS effects (pulsating headache, sweating, marked uneasiness, weakness, vertigo, others); GI effects (nausea, copious vomiting, thirst); and difficulty breathing. Cardiovascular effects also occur; see Table 17-2. Euphoria and diarrhea are not adverse effects associated with acetaldehyde syndrome.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

According to the JNC-8 guidelines, calcium channel blockers and diuretics are recommended as first-line therapy for management of hypertension in African-American patients. The other drugs are not recommended as first-line drugs for this group.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

7. The nurse is creating a plan of care for a patient with a new diagnosis of hypertension. Which is a potential nursing diagnosis for the patient taking antihypertensive medications?
- Diarrhea
 - Sexual dysfunction
 - Urge urinary incontinence
 - Impaired memory

ANS: B

Sexual dysfunction is a potential nursing diagnosis related to possible adverse effects of antihypertensive drug therapy. The other nursing diagnoses are not appropriate.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Nursing Diagnosis

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

8. A patient's blood pressure elevates to 270/150 mm Hg, and a hypertensive emergency is obvious. He is transferred to the intensive care unit and started on a sodium nitroprusside (Nipride) drip to be titrated per his response. With this medication, the nurse knows that the maximum dose of this drug should be infused for how long?
- 10 minutes
 - 30 minutes
 - 1 hour
 - 24 hours

ANS: A

Sodium nitroprusside is a potent vasodilator and may lead to extreme decreases in the patient's blood pressure. For this reason, it is never infused at the maximum dose for more than 10 minutes. If this drug does not control a patient's blood pressure after 10 minutes, it will most likely be ordered to be discontinued. The other times listed are incorrect.

DIF: COGNITIVE LEVEL: Understanding (Comprehension)

TOP: NURSING PROCESS: Planning

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

9. A patient with primary hypertension is prescribed drug therapy for the first time. The patient asks how long drug therapy will be needed. Which answer by the nurse is the correct response?
- "This therapy will take about 3 months."
 - "This therapy will take about a year."
 - "This therapy will go on until your symptoms disappear."
 - "Therapy for high blood pressure is usually lifelong."

Mix the powder with food or at least 4 to 6 ounces of fluid. The powder may not mix completely at first, but patients should be sure to mix the dose as much as possible and then dilute any undissolved portion with additional fluid. The powder should be dissolved for at least 1 full minute. Powder and granule dosages are never to be taken in dry form.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

4. A patient is concerned about the adverse effects of the fibric acid derivative she is taking to lower her cholesterol level. Which is an adverse effect of this class of medication?
- Constipation
 - Diarrhea
 - Joint pain
 - Dry mouth

ANS: B

Fibric acid derivatives may cause nausea, vomiting, diarrhea, drowsiness, and dizziness. Other effects are listed in Table 27-8. The other options are not adverse effects of fibric acid derivatives.

DIF: COGNITIVE LEVEL: Understanding (Comprehension)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

5. While a patient is receiving antilipemic therapy, the nurse knows to monitor the patient closely for the development of which problem?
- Neutropenia
 - Pulmonary problems
 - Vitamin C deficiency
 - Liver dysfunction

ANS: D

Antilipemic drugs may adversely affect liver function; therefore, liver function studies need to be closely monitored. The other options do not reflect problems that may occur with antilipemic drugs.

DIF: COGNITIVE LEVEL: Understanding (Comprehension)

TOP: NURSING PROCESS: Evaluation

MSC: NCLEX: Physiological Integrity: Physiological Adaptation

6. A patient tells the nurse that he likes to eat large amounts of garlic “to help lower his cholesterol levels naturally.” The nurse reviews his medication history and notes that which drug has a potential interaction with the garlic?
- Acetaminophen (Tylenol)
 - Warfarin (Coumadin)
 - Digoxin (Lanoxin)
 - Phenytoin (Dilantin)

Chapter 32: Antidiabetic Drugs

MULTIPLE CHOICE

1. The nurse is administering insulin lispro (Humalog) and will keep in mind that this insulin will start to have an effect within which time frame?
 - a. 15 minutes
 - b. 1 to 2 hours
 - c. 80 minutes
 - d. 3 to 5 hours

ANS: A

The onset of action for insulin lispro is 15 minutes. The peak plasma concentration is 1 to 2 hours; the elimination half-life is 80 minutes; and the duration of action is 3 to 5 hours.

DIF: COGNITIVE LEVEL: Remembering (Knowledge)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

2. When teaching about hypoglycemia, the nurse will make sure that the patient is aware of the early signs of hypoglycemia, including:
 - a. hypothermia and seizures.
 - b. nausea and diarrhea.
 - c. confusion and sweating.
 - d. fruity, acetone odor to the breath.

ANS: C

Early symptoms of hypoglycemia include the central nervous system manifestations of confusion, irritability, tremor, and sweating. Hypothermia and seizures are later symptoms of hypoglycemia. The other options are incorrect.

DIF: COGNITIVE LEVEL: Understanding (Comprehension)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Health Promotion and Maintenance

3. The nurse is teaching a group of patients about self-administration of insulin. What content is important to include?
 - a. Patients need to use the injection site that is the most accessible.
 - b. If two different insulins are ordered, they need to be given in separate injections.
 - c. When mixing insulins, the cloudy (such as NPH) insulin is drawn up into the syringe first.
 - d. When mixing insulins, the clear (such as regular) insulin is drawn up into the syringe first.

ANS: D

If mixing insulins in one syringe, the clear (regular) insulin is always drawn up into the syringe first. Patients always need to rotate injection sites. Mixing of insulins may be ordered.

DIF: COGNITIVE LEVEL: Applying (Application)

- a. "I will rinse my mouth with water after using the inhaler and then spit out the water."
- b. "I will gargle after using the inhaler and then swallow."
- c. "I will clean the plastic inhaler casing weekly by removing the canister and then washing the casing in warm soapy water. I will then let it dry before reassembling."
- d. "I will use this inhaler for asthma attacks."
- e. "I will continue to use this inhaler, even if I am feeling better."
- f. "I will use a peak flow meter to measure my response to therapy."

ANS: B, D

The inhaled corticosteroid is a maintenance drug used to prevent asthma attacks; it is not indicated for acute asthma attacks. Rinsing the mouth with water is appropriate and necessary to prevent oral fungal infections; the water is not to be swallowed after rinsing. The patient needs to be given instructions about keeping the inhaler clean, including removing the canister from the plastic casing weekly and washing the casing in warm soapy water. Once the casing is dry, the canister and mouthpiece may be put back together and the cap applied. The glucocorticoid may predispose the patient to oral fungal overgrowth, thus the need for implicit instructions about cleaning inhaling devices. Use of a peak flow meter assists in monitoring the patient's response to therapy. The medication needs to be taken as ordered every day, regardless of whether the patient is feeling better.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

COMPLETION

1. A patient has a metered-dose inhaler that contains 200 actuations ('puffs'), and it does not have a dose counter. He is to take two puffs two times a day. If he does not take any extra doses, identify how many days will this inhaler last at the prescribed dose. _____

ANS:

50 days

Note the number of doses in the canister, and then calculate the number of days that the canister will last. For this question, assuming that two puffs are taken two times a day, and the inhaler has a capacity of 200 inhalations. Two puffs two times a day equal four inhalations per day. Four divided into 200 yields 50; that is, the inhaler will last approximately 50 days.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

2. A patient will be receiving oral theophylline (Theo-Dur), 600 mg/day, in three divided doses. Identify how many milligrams will the patient receive per dose. _____

- a. Fluconazole (Diflucan)
- b. Miconazole (Mycomine)
- c. Caspofungin (Cancidas)
- d. Nystatin (Mycostatin)

ANS: C

Caspofungin is used for treating severe infection by *Aspergillus* species (invasive aspergillosis) in patients who are intolerant of or refractory to other drugs.

DIF: COGNITIVE LEVEL: Understanding (Comprehension)

TOP: NURSING PROCESS: Planning

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

7. A patient with a severe fungal infection has orders for voriconazole (Vfend). The nurse is reviewing the patient's medical record and would be concerned if which assessment finding is noted?
 - a. Decreased breath sounds in the lower lobes
 - b. History of cardiac dysrhythmias
 - c. History of type 2 diabetes
 - d. Potassium level of 4.0 mEq/L

ANS: B

Voriconazole is contraindicated when co-administered with certain other drugs metabolized by the cytochrome P-450 enzyme 3A4 (e.g., quinidine) because of the risk for inducing serious cardiac dysrhythmias.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Assessment

MSC: NCLEX: Physiological Integrity: Reduction of Risk Potential

8. During therapy with amphotericin B, the nurse will monitor the patient for known adverse effects that would be reflected by which laboratory result?
 - a. Serum potassium level of 2.7 mEq/L
 - b. Serum potassium level of 5.8 mEq/L
 - c. White blood cell count of 7000 cells/mm³
 - d. Platelet count of 300,000/ microliter

ANS: A

The nurse needs to monitor for hypokalemia, a possible adverse effect of amphotericin B. The other options are incorrect.

DIF: COGNITIVE LEVEL: Analyzing (Analysis)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

9. A patient has received a prescription for a 2-week course of antifungal suppositories for a vaginal yeast infection. She asks the nurse if there is an alternative to this medication, saying, "I don't want to do this for 2 weeks!" Which is a possibility in this situation?
 - a. A single dose of a vaginal antifungal cream.

ANS: D

The nurse must double-check the formulation before giving cyclosporine. Cyclosporine-modified products (such as Neoral or Gengraf) are interchangeable with each other but are *not* interchangeable with Sandimmune. In this case, the nurse must obtain the Sandimmune form of the drug from the pharmacy. The other options are incorrect.

DIF: COGNITIVE LEVEL: Analyzing (Analysis)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

4. The nurse is preparing to administer an injection of monoclonal antibodies. Which additional drug will the nurse administer to minimize adverse reactions to the monoclonal antibodies?
- A nonsteroidal anti-inflammatory drug
 - A benzodiazepine
 - An opioid pain reliever
 - A corticosteroid

ANS: D

The monoclonal antibodies basiliximab and daclizimab have a tendency to cause the allergy-like reaction known as *cytokine release syndrome*, which can be severe and even involve anaphylaxis. In an effort to avoid or alleviate this problem, it is recommended that an injection of a corticosteroid, such as methylprednisolone, be administered before the injection of monoclonal antibodies.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Reduction of Risk Potential

5. When administering cyclosporine, the nurse notes that allopurinol is also ordered for the patient. What is a potential result of this drug interaction?
- Reduced adverse effects of the cyclosporine
 - Increased levels of cyclosporine and toxicity
 - Reduced uric acid levels
 - Reduced nephrotoxic effects of cyclosporine

ANS: B

The allopurinol may cause increased levels of cyclosporine, and toxicity may result. The other options are incorrect.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Planning

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

6. The nurse is monitoring a patient who is receiving muromonab-CD3 (Orthoclone OKT3) after an organ transplant. Which effect is possible with muromonab-CD3 therapy?
- Chest pain
 - Hypotension
 - Confusion
 - Dysuria

- cramps.”
- c. “Keep in mind that if you suddenly stop taking these large doses, you might experience symptoms similar to scurvy.”
 - d. “Studies have shown that vitamin C has little value in preventing the common cold.”
 - e. “Vitamin C acidifies the urine, which can lead to the formation of kidney stones.”
 - f. “Large doses of vitamin C may delay wound healing.”

ANS: B, C, D, E

Vitamin C is usually nontoxic unless excessive dosages are consumed. Large doses (megadoses) can produce nausea, vomiting, headache, and abdominal cramps, and they acidify the urine, which can result in the formation of kidney stones. Furthermore, individuals who discontinue taking excessive daily doses of ascorbic acid can experience scurvy-like symptoms. Studies have shown that megadoses of vitamin C have little or no value as prophylaxis against the common cold. Vitamin C is required for several important metabolic activities, including collagen synthesis and the maintenance of connective tissue and tissue repair.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

3. During an intravenous infusion of calcium, the nurse carefully monitors the patient for symptoms of hypercalcemia. Which are symptoms of hypercalcemia? (*Select all that apply.*)
 - a. Anorexia
 - b. Nausea and vomiting
 - c. Diarrhea
 - d. Constipation
 - e. Cardiac irregularities
 - f. Drowsiness

ANS: A, B, D, E

Symptoms of hypercalcemia include anorexia, nausea, vomiting, and constipation. Long-term excessive calcium intake can result in severe hypercalcemia, which can cause cardiac irregularities, delirium, and coma. The other options are incorrect.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

COMPLETION

1. A patient will be receiving monthly injections of cyanocobalamin (Nascobal). The dose is 100 mcg/month IM. The medication is available in a strength of 1000 mcg/mL. Identify how many milliliters will the nurse draw up into the syringe. (record answer using one decimal place)

7. The nurse is administering eardrops that have been refrigerated. Which action by the nurse is correct before administering the drops?
- Leave the drops in the refrigerator until use.
 - Heat the chilled solution for 10 seconds in the microwave.
 - Soak the bottle for 60 seconds in a container of very hot water.
 - Take the drops out of the refrigerator 1 hour before the dose is due.

ANS: D

Give eardrops at room temperature. If the pharmacy indicates that the drug is to be refrigerated, it should be taken out of the refrigerator up to 1 hour before it is to be instilled so that it can warm up to room temperature. They are not to be placed in the microwave or soaked in hot water; eardrops that are overheated may lose potency. Administration of solutions that are too cold may cause a vestibular reaction that includes vomiting and dizziness. If the solution has been refrigerated, allow it to warm to room temperature.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Physiological Integrity: Pharmacological and Parenteral Therapies

MULTIPLE RESPONSE

1. The nurse is teaching a patient about proper administration of eardrops. Which statements are correct? (*Select all that apply.*)
- Remove cerumen with a cotton-tipped swab before instilling the drops.
 - Instill the drops while still cool from refrigeration.
 - Warm the eardrops to room temperature before instillation.
 - The adult patient should pull the pinna of the ear up and back.
 - Insert a dry cotton ball firmly into the ear canal after instillation.
 - Massage the earlobe after instillation.

ANS: C, D, E

Remove cerumen before instillation by irrigation, not with cotton-tipped swabs. The drops must be at room temperature; cold drops may cause dizziness or other discomfort. Hold the pinna of the ear up and back when giving eardrops to adults or children older than 3 years of age.

Massage the tragus area after instillation to encourage flow through the ear canal. A small cotton ball may be inserted gently into the ear canal to keep the drug in place, but do not force or jam it into the ear canal. Gentle massage to the tragus area of the ear (not the earlobe) may also help to increase coverage of the medication after it is given.

DIF: COGNITIVE LEVEL: Applying (Application)

TOP: NURSING PROCESS: Implementation

MSC: NCLEX: Safe and Effective Care Environment: Management of Care

2. A child has been diagnosed with bacterial otitis externa and will be receiving eardrops. Which of these eardrops are appropriate for this infection? (*Select all that apply.*)
- Floxin Otic
 - Cortic