# Adams, Pharmacology for Nurse: A Pathophysiologic Approach, 4/E Chapter 3

**Question 1 Type:** MCMA

The physician has ordered several medications for the patient. What does the nurse recognize as responsibilities regarding administration of medications?

Note: Credit will be given only if all correct choices and no incorrect choices are selected.

Standard Text: Select all that apply.

- 1. Knowing whether or not the medication is on the hospital formulary
- 2. Knowing the reason the medication was prescribed for this patient
- **3.** Knowing how the medication is to be administered.
- **4.** Knowing how the medication is supplied by the pharmacy
- **5.** Knowing the name of the medication

Correct Answer: 2,3,4,5

**Rationale 1**: How the medication is supplied by the pharmacy, how the medication is to be administered, the name of the medication, and the reason the medication was prescribed for the patient are the responsibilities of the nurse regarding medication administration. Whether or not a drug is on a hospital formulary list is not a primary responsibility of the nurse.

**Rationale 2**: How the medication is supplied by the pharmacy, how the medication is to be administered, the name of the medication, and the reason the medication was prescribed for the patient are the responsibilities of the nurse regarding medication administration. Whether or not a drug is on a hospital formulary list is not a primary responsibility of the nurse.

**Rationale 3**: How the medication is supplied by the pharmacy, how the medication is to be administered, the name of the medication, and the reason the medication was prescribed for the patient are the responsibilities of the nurse regarding medication administration. Whether or not a drug is on a hospital formulary list is not a primary responsibility of the nurse.

**Rationale 4**: How the medication is supplied by the pharmacy, how the medication is to be administered, the name of the medication, and the reason the medication was prescribed for the patient are the responsibilities of the nurse regarding medication administration. Whether or not a drug is on a hospital formulary list is not a primary responsibility of the nurse.

**Rationale 5**: How the medication is supplied by the pharmacy, how the medication is to be administered, the name of the medication, and the reason the medication was prescribed for the patient are the responsibilities of the nurse regarding medication administration. Whether or not a drug is on a hospital formulary list is not a primary responsibility of the nurse.

## **Global Rationale:**

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Evaluation

**Learning Outcome: 3-2** 

## Question 2 Type: MCMA

The nurse is preparing medications prior to administration. To promote patient safety, the nurse uses "rights" of drug administration. What do these "rights" include?

Note: Credit will be given only if all correct choices and no incorrect choices are selected.

Standard Text: Select all that apply.

- 1. The right medication
- **2.** The right time of delivery
- **3.** The right dose
- **4.** The right route of administration
- **5.** The right patient

**Correct Answer:** 1,2,3,4,5

**Rationale 1**: The five rights of drug administration are the right patient, the right medication, the right dose, the right route of administration, and the right time of delivery.

**Rationale 2**: The five rights of drug administration are the right patient, the right medication, the right dose, the right route of administration, and the right time of delivery.

**Rationale 3**: The five rights of drug administration are the right patient, the right medication, the right dose, the right route of administration, and the right time of delivery.

**Rationale 4**: The five rights of drug administration are the right patient, the right medication, the right dose, the right route of administration, and the right time of delivery.

**Rationale 5**: The five rights of drug administration are the right patient, the right medication, the right dose, the right route of administration, and the right time of delivery.

#### Global Rationale:

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Planning

**Learning Outcome: 3-3** 

## **Question 3 Type:** MCSA

The nurse suspects that the patient has not been taking his prescribed antihypertensive medication because the patient's blood pressure remains elevated. What is the best therapeutic question the nurse can ask that will assess noncompliance?

- 1. "Taking medication is difficult for many people. What are some of your concerns about the medication?"
- 2. "Your blood pressure is really high; do you realize the serious consequences of not taking your medication?"
- 3. "I really doubt that you are taking your medication. What would you think about talking to the doctor?"
- **4.** "You are one of my favorite patients and I want you to be safe. Are you really taking your medication?"

## Correct Answer: 1

Rationale 1: The most therapeutic question informs the patient that compliance is difficult for many people, and does not directly challenge the patient about not taking the medication. Telling the patient that the nurse doubts he is taking the medication directly challenges him, and recommending that he see the physician is threatening. Telling the patient his blood pressure is high and there are serious consequences is using the "scare tactic," and is non-therapeutic; the patient most likely is aware of the consequences. Telling the patient that he is a favorite is manipulating.

Rationale 2: The most therapeutic question informs the patient that compliance is difficult for many people, and does not directly challenge the patient about not taking the medication. Telling the patient that the nurse doubts he is taking the medication directly challenges him, and recommending that he see the physician is threatening. Telling the patient his blood pressure is high and there are serious consequences is using the "scare tactic," and is non-therapeutic; the patient most likely is aware of the consequences. Telling the patient that he is a favorite is manipulating.

**Rationale 3**: The most therapeutic question informs the patient that compliance is difficult for many people, and does not directly challenge the patient about not taking the medication. Telling the patient that the nurse doubts he is taking the medication directly challenges him, and recommending that he see the physician is threatening. Telling the patient his blood pressure is high and there are serious consequences is using the "scare tactic," and is

non-therapeutic; the patient most likely is aware of the consequences. Telling the patient that he is a favorite is manipulating.

Rationale 4: The most therapeutic question informs the patient that compliance is difficult for many people, and does not directly challenge the patient about not taking the medication. Telling the patient that the nurse doubts he is taking the medication directly challenges him, and recommending that he see the physician is threatening. Telling the patient his blood pressure is high and there are serious consequences is using the "scare tactic," and is non-therapeutic; the patient most likely is aware of the consequences. Telling the patient that he is a favorite is manipulating.

## **Global Rationale:**

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Assessment

**Learning Outcome: 3-4** 

**Question 4 Type:** MCSA

The patient is having chest pain. The physician orders sublingual nitroglycerine STAT. The nurse obtains the medication from the pharmacy and administers it to the patient 30 minutes later. Which statement best describes the nurse's action?

- 1. The medication should have been administered immediately.
- 2. The physician should have specified the time frame for the medication.
- **3.** The medication should have been administered within a 5-minute time frame.
- **4.** The nursing action was correct because the medication was not on the unit.

## **Correct Answer: 3**

**Rationale 1**: For a STAT order, the time frame between writing the order and administering the drug should be 5 minutes or less. Not having a drug on the unit is not an excuse, as commonly ordered STAT medications should be kept in stock. Although the drug does not need to be administered immediately, it should be done within 5 minutes. It is not the physician's responsibility to specify the time frame.

**Rationale 2**: For a STAT order, the time frame between writing the order and administering the drug should be 5 minutes or less. Not having a drug on the unit is not an excuse, as commonly ordered STAT medications should be kept in stock. Although the drug does not need to be administered immediately, it should be done within 5 minutes. It is not the physician's responsibility to specify the time frame.

**Rationale 3**: For a STAT order, the time frame between writing the order and administering the drug should be 5 minutes or less. Not having a drug on the unit is not an excuse, as commonly ordered STAT medications should Adams, *Pharmacology for Nurse: A Pathophysiologic Approach*, 4/E Copyright 2014 by Pearson Education, Inc.

be kept in stock. Although the drug does not need to be administered immediately, it should be done within 5 minutes. It is not the physician's responsibility to specify the time frame.

**Rationale 4**: For a STAT order, the time frame between writing the order and administering the drug should be 5 minutes or less. Not having a drug on the unit is not an excuse, as commonly ordered STAT medications should be kept in stock. Although the drug does not need to be administered immediately, it should be done within 5 minutes. It is not the physician's responsibility to specify the time frame.

### **Global Rationale:**

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Evaluation

**Learning Outcome: 3-5** 

## **Question 5 Type:** MCSA

The nurse uses the nursing process prior to administering any medications. Which step will assure the best patient safety?

- **1.** Assess the patient's developmental level.
- **2.** Assess the patient's medical history.
- **3.** Assess the patient's disease process.
- **4.** Assess the patient's learning needs.

## **Correct Answer: 2**

Rationale 1: An assessment of the patient's medical history, which includes allergies, is the most important assessment prior to administering medications. Assessing the patient's learning needs is important for medication education, but not for safely administering medications. Assessing the patient's developmental level is important for medication education, but not for safely administering medications. Assessing the patient's disease process is important in evaluating the effects of the medications, but not for safely administering medications.

Rationale 2: An assessment of the patient's medical history, which includes allergies, is the most important assessment prior to administering medications. Assessing the patient's learning needs is important for medication education, but not for safely administering medications. Assessing the patient's developmental level is important for medication education, but not for safely administering medications. Assessing the patient's disease process is important in evaluating the effects of the medications, but not for safely administering medications.

**Rationale 3**: An assessment of the patient's medical history, which includes allergies, is the most important assessment prior to administering medications. Assessing the patient's learning needs is important for medication education, but not for safely administering medications. Assessing the patient's developmental level is important

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for medication education, but not for safely administering medications. Assessing the patient's disease process is important in evaluating the effects of the medications, but not for safely administering medications.

Rationale 4: An assessment of the patient's medical history, which includes allergies, is the most important assessment prior to administering medications. Assessing the patient's learning needs is important for medication education, but not for safely administering medications. Assessing the patient's developmental level is important for medication education, but not for safely administering medications. Assessing the patient's disease process is important in evaluating the effects of the medications, but not for safely administering medications.

## **Global Rationale:**

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Assessment

**Learning Outcome: 3-1** 

## **Question 6 Type:** MCSA

The physician prescribes an oral medication for the patient. What is the primary nursing assessment of the patient prior to receiving this medication?

- 1. The patient's understanding of the medication
- 2. The patient's ability to swallow
- **3.** The patient's allergies
- 4. The patient's eyesight

### Correct Answer: 2

**Rationale 1**: The ability of the patient to swallow is a safety issue to prevent aspiration of the medication. The patient's understanding is important, but not a priority. The patient's eyesight is not significant. The patient's allergies are important, but if the patient cannot swallow the medication, then the allergies are not significant.

**Rationale 2**: The ability of the patient to swallow is a safety issue to prevent aspiration of the medication. The patient's understanding is important, but not a priority. The patient's eyesight is not significant. The patient's allergies are important, but if the patient cannot swallow the medication, then the allergies are not significant.

**Rationale 3**: The ability of the patient to swallow is a safety issue to prevent aspiration of the medication. The patient's understanding is important, but not a priority. The patient's eyesight is not significant. The patient's allergies are important, but if the patient cannot swallow the medication, then the allergies are not significant.

**Rationale 4**: The ability of the patient to swallow is a safety issue to prevent aspiration of the medication. The patient's understanding is important, but not a priority. The patient's eyesight is not significant. The patient's allergies are important, but if the patient cannot swallow the medication, then the allergies are not significant.

## **Global Rationale:**

Cognitive Level: Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Assessment

**Learning Outcome: 3-7** 

**Question 7 Type:** MCSA

The physician ordered an oral medication. The nurse incorrectly administered the medication intravenously. What does the best analysis of the nurse's action reveal?

- **1.** An antidote cannot be given.
- **2.** The nurse will be terminated from her job.
- **3.** The medication cannot be retrieved.
- **4.** A lawsuit by the patient will be impending.

### **Correct Answer: 3**

**Rationale 1**: When a medication is given intravenously, its effects cannot be reversed because it is already in the bloodstream. A lawsuit may occur, but this is not the primary concern; patient safety is the primary concern. The nurse may be terminated, but patient safety is the main concern, and the effect of the medication cannot be reversed. Antidotes may be given, but this must be done very quickly.

**Rationale 2**: When a medication is given intravenously, its effects cannot be reversed because it is already in the bloodstream. A lawsuit may occur, but this is not the primary concern; patient safety is the primary concern. The nurse may be terminated, but patient safety is the main concern, and the effect of the medication cannot be reversed. Antidotes may be given, but this must be done very quickly.

**Rationale 3**: When a medication is given intravenously, its effects cannot be reversed because it is already in the bloodstream. A lawsuit may occur, but this is not the primary concern; patient safety is the primary concern. The nurse may be terminated, but patient safety is the main concern, and the effect of the medication cannot be reversed. Antidotes may be given, but this must be done very quickly.

**Rationale 4**: When a medication is given intravenously, its effects cannot be reversed because it is already in the bloodstream. A lawsuit may occur, but this is not the primary concern; patient safety is the primary concern. The nurse may be terminated, but patient safety is the main concern, and the effect of the medication cannot be reversed. Antidotes may be given, but this must be done very quickly.

## **Global Rationale:**

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Evaluation

**Learning Outcome: 3-7** 

**Question 8 Type:** MCSA

What is the best plan as the nurse prepares to administer a topical medication?

- 1. Check the medication for interactions with other medications.
- **2.** Take the patient's vital signs.
- **3.** Educate the patient to not disturb the patch.
- **4.** Assess the patient's skin where the medication will be applied.

**Correct Answer: 4** 

**Rationale 1**: Planning to assess the patient's skin is imperative; if it is cracked, dry, or irritated, the medication may not be properly absorbed. Patient education is important, but is not the priority. Vital signs are not always indicated; it depends on the medication. Checking for drug interactions is important, but it is not the priority.

**Rationale 2**: Planning to assess the patient's skin is imperative; if it is cracked, dry, or irritated, the medication may not be properly absorbed. Patient education is important, but is not the priority. Vital signs are not always indicated; it depends on the medication. Checking for drug interactions is important, but it is not the priority.

**Rationale 3**: Planning to assess the patient's skin is imperative; if it is cracked, dry, or irritated, the medication may not be properly absorbed. Patient education is important, but is not the priority. Vital signs are not always indicated; it depends on the medication. Checking for drug interactions is important, but it is not the priority.

**Rationale 4**: Planning to assess the patient's skin is imperative; if it is cracked, dry, or irritated, the medication may not be properly absorbed. Patient education is important, but is not the priority. Vital signs are not always indicated; it depends on the medication. Checking for drug interactions is important, but it is not the priority.

## **Global Rationale:**

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Planning

**Learning Outcome: 3-7** 

## **Question 9**

Type: MCSA

The physician ordered an intravenous medication for a patient with nausea. The patient asks the nurse how it will help his nausea. What is the best response by the nurse?

- 1. "We have more intravenous drugs for nausea than we do oral drugs."
- 2. "If you take an oral medication, you will just vomit it up."
- 3. "This will work much faster for your nausea."
- 4. "You can't have anything by mouth, so will receive the medication intravenously."

## **Correct Answer: 3**

**Rationale 1**: The intravenous route provides the quickest route of medication absorption. Telling the patient that he will vomit the medication is non-therapeutic. Telling the patient that the nurse has more intravenous drugs than oral drugs does not answer the patient's question. There is no evidence that the patient cannot have anything by mouth.

**Rationale 2**: The intravenous route provides the quickest route of medication absorption. Telling the patient that he will vomit the medication is non-therapeutic. Telling the patient that the nurse has more intravenous drugs than oral drugs does not answer the patient's question. There is no evidence that the patient cannot have anything by mouth.

**Rationale 3**: The intravenous route provides the quickest route of medication absorption. Telling the patient that he will vomit the medication is non-therapeutic. Telling the patient that the nurse has more intravenous drugs than oral drugs does not answer the patient's question. There is no evidence that the patient cannot have anything by mouth.

**Rationale 4**: The intravenous route provides the quickest route of medication absorption. Telling the patient that he will vomit the medication is non-therapeutic. Telling the patient that the nurse has more intravenous drugs than oral drugs does not answer the patient's question. There is no evidence that the patient cannot have anything by mouth.

#### **Global Rationale:**

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-7** 

Question 10 Type: MCSA

The physician orders enteric-coated aspirin, 300 mg every day, for the patient with a nasogastric tube. What is the priority action by the nurse?

- 1. Crush the tablet, dissolve it in 30 mL of water, and administer through the tube.
- 2. Put the tablet in the tube, "milk" it down the tube, and then flush the tube with 60 mL of water.
- **3.** Withhold the medication and contact the physician.
- **4.** Substitute plain aspirin, dissolve it in 30 mL of water, and administer through the tube.

## **Correct Answer: 3**

**Rationale 1**: The only option is to withhold the medication and contact the physician. Crushing the tablet destroys the enteric coating. Putting the tablet in the tube will result in clogging of the tube. The nurse cannot substitute plain aspirin; this requires a physician's order.

**Rationale 2**: The only option is to withhold the medication and contact the physician. Crushing the tablet destroys the enteric coating. Putting the tablet in the tube will result in clogging of the tube. The nurse cannot substitute plain aspirin; this requires a physician's order.

**Rationale 3**: The only option is to withhold the medication and contact the physician. Crushing the tablet destroys the enteric coating. Putting the tablet in the tube will result in clogging of the tube. The nurse cannot substitute plain aspirin; this requires a physician's order.

**Rationale 4**: The only option is to withhold the medication and contact the physician. Crushing the tablet destroys the enteric coating. Putting the tablet in the tube will result in clogging of the tube. The nurse cannot substitute plain aspirin; this requires a physician's order.

#### **Global Rationale:**

Cognitive Level: Analyzing

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-7** 

## **Question 11 Type:** MCSA

The patient is receiving a sustained-release capsule for his cardiac condition. The patient tells the nurse there is no way he can swallow such a large pill. What is the best response by the nurse?

- 1. "Withhold the medication and contact the physician."
- 2. "Place the capsule on the back of the patient's tongue, and have him drink a full glass of water."

- **3.** "Open the capsule and sprinkle the contents over applesauce."
- 4. "Encourage the patient to try and swallow the capsule because it is the best medication for his heart condition."

## Correct Answer: 1

**Rationale 1**: The only option is to contact the physician. Several sustained-release medications cannot be opened and sprinkled on food. Placing the capsule on the back of the patient's tongue and having him drink a full glass of water may cause the patient to aspirate the capsule and/or the water. Encouraging the patient to try to swallow the capsule is coercive, and may result in the patient choking on the medication.

**Rationale 2**: The only option is to contact the physician. Several sustained-release medications cannot be opened and sprinkled on food. Placing the capsule on the back of the patient's tongue and having him drink a full glass of water may cause the patient to aspirate the capsule and/or the water. Encouraging the patient to try to swallow the capsule is coercive, and may result in the patient choking on the medication.

**Rationale 3**: The only option is to contact the physician. Several sustained-release medications cannot be opened and sprinkled on food. Placing the capsule on the back of the patient's tongue and having him drink a full glass of water may cause the patient to aspirate the capsule and/or the water. Encouraging the patient to try to swallow the capsule is coercive, and may result in the patient choking on the medication.

**Rationale 4**: The only option is to contact the physician. Several sustained-release medications cannot be opened and sprinkled on food. Placing the capsule on the back of the patient's tongue and having him drink a full glass of water may cause the patient to aspirate the capsule and/or the water. Encouraging the patient to try to swallow the capsule is coercive, and may result in the patient choking on the medication.

#### **Global Rationale:**

Cognitive Level: Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-7** 

## **Question 12 Type:** MCSA

While in the hospital, the pediatric patient has been receiving amoxicillin 10 mL orally bid, pc. The child will be going home on this medication. What is the best instruction by the nurse for the parents?

- 1. Give 2 teaspoons by mouth, 3 times a day, on an empty stomach.
- 2. Give 2 teaspoons by mouth, twice a day, after meals.
- **3.** Give 2 teaspoons by mouth, 3 times a day, after meals.
- **4.** Give 2 teaspoons by mouth, twice a day, with meals.

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### Correct Answer: 2

**Rationale 1**: Giving 2 teaspoons by mouth, twice a day, after meals is correct. Giving 2 teaspoons by mouth, 3 times a day, after meals is incorrect. Giving 2 teaspoons by mouth, twice a day, with meals is incorrect. Giving 2 teaspoons by mouth, 3 times a day, on an empty stomach is incorrect.

**Rationale 2**: Giving 2 teaspoons by mouth, twice a day, after meals is correct. Giving 2 teaspoons by mouth, 3 times a day, after meals is incorrect. Giving 2 teaspoons by mouth, twice a day, with meals is incorrect. Giving 2 teaspoons by mouth, 3 times a day, on an empty stomach is incorrect.

**Rationale 3**: Giving 2 teaspoons by mouth, twice a day, after meals is correct. Giving 2 teaspoons by mouth, 3 times a day, after meals is incorrect. Giving 2 teaspoons by mouth, twice a day, with meals is incorrect. Giving 2 teaspoons by mouth, 3 times a day, on an empty stomach is incorrect.

**Rationale 4**: Giving 2 teaspoons by mouth, twice a day, after meals is correct. Giving 2 teaspoons by mouth, 3 times a day, after meals is incorrect. Giving 2 teaspoons by mouth, twice a day, with meals is incorrect. Giving 2 teaspoons by mouth, 3 times a day, on an empty stomach is incorrect.

#### Global Rationale:

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-6** 

## **Question 13 Type:** MCSA

The patient is 3 days postop, and the physician orders an oral pain medication. The patient asks the nurse if it wouldn't be better to get the medication in the intravenous (IV) line. What is the best response by the nurse?

- 1. "No, because you could not medicate yourself intravenously (IV) at home."
- 2. "No, because pills are more effective than intravenous (IV) medications."
- 3. "No, because pills are safer than intravenous (IV) medications."
- **4.** "No, because we are going to take your intravenous (IV) line out."

## **Correct Answer: 3**

**Rationale 1**: Oral medications are safer than intravenous (IV) medications. Telling the patient that she cannot have the medication intravenously because the intravenous line is to be removed does not answer the patient's question. There is no evidence that the patient will be going home with an intravenous line, so this answer is incorrect. Oral medications are not more effective than IV medications.

**Rationale 2**: Oral medications are safer than intravenous (IV) medications. Telling the patient that she cannot have the medication intravenously because the intravenous line is to be removed does not answer the patient's question. There is no evidence that the patient will be going home with an intravenous line, so this answer is incorrect. Oral medications are not more effective than IV medications.

**Rationale 3**: Oral medications are safer than intravenous (IV) medications. Telling the patient that she cannot have the medication intravenously because the intravenous line is to be removed does not answer the patient's question. There is no evidence that the patient will be going home with an intravenous line, so this answer is incorrect. Oral medications are not more effective than IV medications.

**Rationale 4**: Oral medications are safer than intravenous (IV) medications. Telling the patient that she cannot have the medication intravenously because the intravenous line is to be removed does not answer the patient's question. There is no evidence that the patient will be going home with an intravenous line, so this answer is incorrect. Oral medications are not more effective than IV medications.

### Global Rationale:

**Cognitive Level:** Applying

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-8** 

## **Question 14 Type:** MCSA

The nurse plans to administer heparin by drawing the heparin up in an appropriate syringe, donning gloves, prepping the patient's abdominal area, injecting the needle, aspirating for blood, and injecting the medication. Which statement best describes the nurse's plan?

- **1.** The nurse does not need to wear gloves.
- **2.** The nurse should not aspirate for blood.
- **3.** The nurse does not need to prep the skin.
- **4.** The nurse performed the injection correctly.

### Correct Answer: 2

**Rationale 1**: When performing heparin injections, the nurse should not aspirate for blood as this may cause bruising or bleeding. Gloves must always be worn for invasive techniques. The nurse did not perform the correct technique. The skin should be prepped with alcohol prior to administering an injection.

**Rationale 2**: When performing heparin injections, the nurse should not aspirate for blood as this may cause bruising or bleeding. Gloves must always be worn for invasive techniques. The nurse did not perform the correct technique. The skin should be prepped with alcohol prior to administering an injection.

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**Rationale 3**: When performing heparin injections, the nurse should not aspirate for blood as this may cause bruising or bleeding. Gloves must always be worn for invasive techniques. The nurse did not perform the correct technique. The skin should be prepped with alcohol prior to administering an injection.

**Rationale 4**: When performing heparin injections, the nurse should not aspirate for blood as this may cause bruising or bleeding. Gloves must always be worn for invasive techniques. The nurse did not perform the correct technique. The skin should be prepped with alcohol prior to administering an injection.

#### Global Rationale:

Cognitive Level: Analyzing

Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Evaluation

**Learning Outcome: 3-7** 

## **Question 15 Type:** MCSA

An order for a medication to be given prn means

- 1. as needed.
- 2. every day.
- 3. at bedtime.
- 4. with food.

## Correct Answer: 1

Rationale 1: These are the letters used to designate as needed.

Rationale 2: PRN does not mean every day.

Rationale 3: PRN does not mean at bedtime.

Rationale 4: PRN does not mean with food.

### **Global Rationale:**

Cognitive Level: Remembering

Client Need: Health Promotion and Maintenance

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Assessment

**Learning Outcome: 3-5** 

## **Question 16**

Type: MCSA

A patient has an increased reaction to a drug following a change in her dietary habits. Which of the following changes would most likely be the cause?

- 1. Increased intake of grapefruit juice
- 2. Reduced intake of alcohol
- 3. Increased fiber intake
- 4. Reduced intake of citrus fruit

Correct Answer: 1

**Rationale 1**: Grapefruit juice lowers the acidity of enzymes in the GI system that break down medications. This in turn results in higher medication absorption into the bloodstream. A reduction in citrus fruit intake would likely cause a lowered drug reaction. A reduced intake of alcohol or fiber would not likely produce an increased reaction to a drug. (p. 20)

**Rationale 2**: Grapefruit juice lowers the acidity of enzymes in the GI system that break down medications. This in turn results in higher medication absorption into the bloodstream. A reduction in citrus fruit intake would likely cause a lowered drug reaction. A reduced intake of alcohol or fiber would not likely produce an increased reaction to a drug. (p. 20)

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#### **Global Rationale:**

Cognitive Level: Understanding Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Evaluation

**Learning Outcome:** 3-1 and 3-2

**Question 17 Type:** MCSA

The nurse administers an oral preparation of liquid Tylenol 650 mg as ordered. Afterward, the patient indicates he had been receiving Tylenol 650 mg in pill form. Which of the following is accurate in regards to the five rights?

- 1. The nurse failed to deliver the correct dose.
- **2.** The nurse failed to administer the right medication.
- **3.** The nurse did not violate the five rights.
- **4.** The nurse failed to give the medication via the correct route.

## **Correct Answer: 3**

Rationale 1: Nothing in the question depicts a violation of the five rights.

Rationale 2: Nothing in the question depicts a violation of the five rights.

Rationale 3: Nothing in the question depicts a violation of the five rights.

Rationale 4: Nothing in the question depicts a violation of the five rights.

## **Global Rationale:**

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-3** 

## **Question 18 Type:** MCSA

Five milliliters is equivalent to

- 1. 2 tablespoons.
- 2. 1 fluid ounce.
- **3.** 15 drops.
- **4.** 1 teaspoon.

## **Correct Answer: 4**

**Rationale 1**: Conversion from the metric system (p. 21)

Rationale 2: Conversion from the metric system (p. 21)

**Rationale 3**: Conversion from the metric system (p. 21)

Rationale 4: Conversion from the metric system (p. 21)

### Global Rationale:

Cognitive Level: Remembering

Client Need: Health Promotion and Maintenance

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-6** 

## **Question 19 Type:** MCSA

Placement of a tablet between the cheek and gum would be which route?

- 1. Buccal
- 2. Oral
- **3.** Transdermal
- 4. Sublingual

## **Correct Answer:** 1

Rationale 1: This is the term used to describe a medication placed between the cheek and gum.

**Rationale 2**: An oral medication is swallowed.

**Rationale 3**: A transdermal medication is applied to the skin.

Rationale 4: A sublingual medication is placed under the tongue.

### Global Rationale:

Cognitive Level: Remembering

Client Need: Health Promotion and Maintenance

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-7** 

## **Ouestion 20**

## Type: MCSA

A patient who recently returned from surgery is experiencing nausea. Which statement best explains why this patient would benefit from IV medication administration?

- **1.** The IV is already in place following the surgery.
- **2.** IV medication administration should be avoided in patients with nausea.
- **3.** Medications are more effective when given IV.
- **4.** IV medications bypass the need for GI absorption.

## **Correct Answer: 4**

**Rationale 1**: Nauseated patients might find medications that need to be absorbed through the GI system irritating, worsening their nausea. The presence of an existing IV line is not a reason to administer medications through it. Some medications are more effective when given IV, but bypassing the need for GI absorption is the better answer.

**Rationale 2**: Nauseated patients might find medications that need to be absorbed through the GI system irritating, worsening their nausea. The presence of an existing IV line is not a reason to administer medications through it. Some medications are more effective when given IV, but bypassing the need for GI absorption is the better answer.

**Rationale 3**: Nauseated patients might find medications that need to be absorbed through the GI system irritating, worsening their nausea. The presence of an existing IV line is not a reason to administer medications through it. Some medications are more effective when given IV, but bypassing the need for GI absorption is the better answer.

**Rationale 4**: Nauseated patients might find medications that need to be absorbed through the GI system irritating, worsening their nausea. The presence of an existing IV line is not a reason to administer medications through it. Some medications are more effective when given IV, but bypassing the need for GI absorption is the better answer.

### **Global Rationale:**

Cognitive Level: Understanding Client Need: Physiological Integrity

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Evaluation

**Learning Outcome: 3-8** 

**Question 21 Type:** MCSA

Which of the following is accurate regarding medication administration via the intradermal route? Adams, *Pharmacology for Nurse: A Pathophysiologic Approach*, 4/E

- **1.** Injections should be limited to 1–2 milliliters.
- **2.** Hairy sites should be avoided.
- **3.** Usual administration sites include the upper and lower abdomen.
- **4.** Medications should be injected into the epidermis skin layer.

### **Correct Answer: 2**

**Rationale 1**: Usual sites of intradermal administration include nonhairy surfaces, including the forearm, upper chest, and scapulae. Intradermal injection involves administering small amounts (0.1–0.2 milliliters) of medication into the dermis layer of skin. (p. 28)

**Rationale 2**: Usual sites of intradermal administration include nonhairy surfaces, including the forearm, upper chest, and scapulae. Intradermal injection involves administering small amounts (0.1–0.2 milliliters) of medication into the dermis layer of skin. (p. 28)

**Rationale 3**: Usual sites of intradermal administration include nonhairy surfaces, including the forearm, upper chest, and scapulae. Intradermal injection involves administering small amounts (0.1–0.2 milliliters) of medication into the dermis layer of skin. (p. 28)

**Rationale 4**: Usual sites of intradermal administration include nonhairy surfaces, including the forearm, upper chest, and scapulae. Intradermal injection involves administering small amounts (0.1–0.2 milliliters) of medication into the dermis layer of skin. (p. 28)

#### **Global Rationale:**

Cognitive Level: Remembering

Client Need: Health Promotion and Maintenance

**Client Need Sub:** 

Nursing/Integrated Concepts: Nursing Process: Planning

**Learning Outcome: 3-7** 

## **Question 22 Type:** MCMA

Which patients should the nurse be concerned about regarding nonadherence to prescribed medication regimens?

*Note: Credit will be given only if all correct choices and no incorrect choices are selected.* 

**Standard Text:** Select all that apply.

**1.** A 70-year-old hypertensive male patient who has a prescription for a diuretic and is complaining that his medication is keeping him up all night

- **2.** A 30-year-old college student who has a prescription for birth control pills and tells the nurse she has had breakthrough bleeding this past cycle
- 3. A 45-year-old diabetic who has a prescription for insulin and whose blood sugar is within the normal range
- **4.** A 57-year-old day laborer who has a prescription for Lipitor for high cholesterol and a prescription card for a free health clinic
- 5. An 18-year-old male with a prescription for an acne medication that must be taken 4 times a day

**Correct Answer: 1,5** 

Rationale 1: This patient has been taking his diuretic in the evening instead of in the morning and is most likely experiencing increased urination at night that is disrupting his sleep. Adverse side effects are common causes for nonadherence.

Rationale 2: Birth control pills often cause midcycle bleeding. This does not raise any red flags for nonadherence.

**Rationale 3**: The fact that this diabetic patient's blood sugar is within the normal range may be evidence that the patient is taking insulin as directed.

Rationale 4: The means to pay for medication (free clinic prescription card) decreases the patient's risk for nonadherence.

**Rationale 5**: One of the most common reasons for nonadherence is forgetting a dose, particularly with drugs that must be taken more than twice a day.

### **Global Rationale:**

Cognitive Level: Analyzing

Client Need: Physiological Integrity

Client Need Sub: Pharmacological and Parenteral Therapies Nursing/Integrated Concepts: Nursing Process: Assessment

**Learning Outcome: 3.1** 

## **Question 23 Type:** MCMA

A patient admitted to the hospital tells the nurse she is very nervous about getting all her medications while she is in the hospital because her health care provider has her on a very "strict" schedule. Which principles describe how medication dosing schedules are determined?

*Note: Credit will be given only if all correct choices and no incorrect choices are selected.* 

**Standard Text:** Select all that apply.

- 1. The physical and biologic characteristics of a drug may determine dosing schedule.
- 2. Specific times may improve effectiveness and decrease risk of adverse effects.
- **3.** Some drugs must be taken a certain time prior to an event or immediately after an event.
- **4.** Dosing may be set for the convenience of patient and nurse.
- **5.** Hospitals have routine dosing intervals so that all patients receive medications at the same time each day.

Correct Answer: 1,2,3,4

**Rationale 1**: The properties of a medication will determine how often it must be given to keep the drug at a therapeutic level in the body.

**Rationale 2**: Some medications are administered at certain times of day to improve effectiveness or decrease adverse effects.

**Rationale 3**: Some medications are taken to prevent or to cause an effect. For example, insulin should be given 30 minutes prior to eating to promote glucose usage.

**Rationale 4**: If the drug does not have a characteristic that relies on a certain event to take place, then the drug can be given at the convenience of patient and/or nurse.

Rationale 5: While most hospitals do have specific times of day (agency protocol) when medications are administered, this is not a principle that determines any specific dosing schedule.

### **Global Rationale:**

**Cognitive Level:** Applying

Client Need: Physiological Integrity

Client Need Sub: Pharmacological and Parenteral Therapies
Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-4** 

## **Question 24 Type:** MCMA

A patient at a community health center has been prescribed oral medications and tells the nurse that medications were administered intravenously when the patient was in the hospital. The nurse discusses the benefits and disadvantages of oral medications, including which facts?

*Note: Credit will be given only if all correct choices and no incorrect choices are selected.* 

**Standard Text:** Select all that apply.

- 1. The oral route is considered the second safest route, after the intradermal route.
- **2.** Tablets that are scored may be crushed for easier swallowing.
- **3.** Enteric-coated drugs are designed to dissolve in the stomach, not the small intestine.
- **4.** A major disadvantage of oral medications is that the patient must be conscious and able to swallow.
- **5.** Enteric-coated drugs should be crushed to help facilitate dissolving by the stomach acid.

## Correct Answer: 2,4

**Rationale 1**: The oral route is considered the safest because the skin barrier is not compromised; if an overdose occurs, drugs remaining in the stomach can be evacuated with stomach contents.

Rationale 2: The purpose of scoring a tablet is the greater ease of cutting the tablet in half or quarters. These same tablets may be crushed, if needed.

**Rationale 3**: Some drugs irritate the stomach lining and are coated to prevent being dissolved in the stomach. These drugs go on to the small intestine and are dissolved in the alkaline environment.

**Rationale 4**: This is a major disadvantage of oral medications.

**Rationale 5**: Enteric-coated drugs are designed specifically to bypass the stomach's acidic environment and continue to the alkaline environment of the small intestine.

## **Global Rationale:**

Cognitive Level: Applying

Client Need: Physiological Integrity

Client Need Sub: Pharmacological and Parenteral Therapies
Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-7** 

## **Question 25 Type:** MCMA

The nurse has finished teaching a patient's husband how to administer drugs and enteral feeding through a gastrostomy tube. The nurse knows the husband understands the use of the tube when he makes which statement?

Note: Credit will be given only if all correct choices and no incorrect choices are selected.

**Standard Text:** Select all that apply.

1. "My wife has a gastrostomy tube instead of a nasogastric tube because she will have the tube for a long time."

- **2.** "I will need to use liquid medications. If any of the medications are in pill form, I will use the pill crusher to crush them and mix them with water before putting them in the tube."
- **3.** "This medication says it is enteric coated. I'm not supposed to crush this kind of medication. I will need to ask the doctor to substitute another medication that is liquid or can be crushed."
- **4.** "There's a big difference in how the drugs work in the body when they're taken orally and when they're administered through the tube. That's why my wife has to have this tube."
- 5. "I have to be very careful to flush the tube after I put medication in it. If I don't, the tube could get clogged."

Correct Answer: 1,2,3,5

**Rationale 1**: Nasogastric tubes are used for short-term care while gastrostomy tubes are placed in patients who will need long-term care.

**Rationale 2**: Most health care providers order drugs in liquid form for NG and G tube patients. If a medication does not come in liquid form, the solid form will need to be crushed and mixed with water prior to administration unless there is a contraindication for crushing the medication.

**Rationale 3**: Enteric-coated medications should not be crushed. To do so would expose the drug to the acid in the stomach when it is intended to bypass the stomach acid and be dissolved in the alkaline environment of the small intestine.

**Rationale 4**: Drugs administered via gastrostomy tube are affected by the same physiological processes as those given orally.

**Rationale 5**: While solid drugs may be crushed and dissolved in water prior to being administered, they tend to clog the tubes if the tubes are not routinely flushed.

#### **Global Rationale:**

**Cognitive Level:** Applying

Client Need: Physiological Integrity

Client Need Sub: Pharmacological and Parenteral Therapies Nursing/Integrated Concepts: Nursing Process: Evaluation

**Learning Outcome: 3-7** 

**Question 26 Type:** MCMA

The nurse is caring for a patient who has been involved in a motor vehicle crash. The health care provider has written orders for a transdermal patch for pain to be applied for steady pain control. The nurse knows that

Note: Credit will be given only if all correct choices and no incorrect choices are selected.

**Standard Text:** Select all that apply.

Adams, Pharmacology for Nurse: A Pathophysiologic Approach, 4/E

- 1. the transdermal patch should not be applied to areas of abrasion.
- 2. transdermal medications undergo the first-pass effect in the liver.
- **3.** transdermal medications completely bypass digestive enzymes.
- **4.** the actual dose received by the patient from this pain patch may vary.
- **5.** transdermal patches are not considered an effective means of delivering medications because the rate of delivery and actual dose can vary.

**Correct Answer: 1,3,4** 

**Rationale 1**: Applying transdermal patches to skin that has abrasions may unintentionally increase the dose of the medication.

Rationale 2: Transdermal medications avoid the first-pass effect.

**Rationale 3**: Transdermal medications never come into contact with digestive enzymes but go straight into the bloodstream.

**Rationale 4**: While transdermal patches do contain a specific amount of medication, the rate of delivery may vary for each patient.

**Rationale 5**: It is true that the rate of delivery and actual dose received can vary, but this route is an effective means of delivering many medications such as birth control medications and nitroglycerin for angina.

## Global Rationale:

**Cognitive Level:** Applying

**Client Need:** Physiological Integrity

Client Need Sub: Pharmacological and Parenteral Therapies
Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-7** 

## **Question 27 Type:** MCMA

A patient has been referred to an allergist for allergy testing. Which parenteral routes would the nurse not expect to be used for the tests?

*Note: Credit will be given only if all correct choices and no incorrect choices are selected.* 

**Standard Text:** Select all that apply.

1. The intradermal (ID) route

- **2.** The subcutaneous route
- **3.** The intramuscular (IM) route
- **4.** The intravenous (IV) route
- **5.** The buccal route

Correct Answer: 2,3,4,5

**Rationale 1**: The ID route is used to administer very small volumes of a drug into the intradermal layer of skin. This route is most commonly used for allergy and TB skin testing.

**Rationale 2**: The subcutaneous route is used to deliver medication into the deepest layer of skin. Drugs that are delivered by this route include insulin, heparin, and some vaccines.

**Rationale 3**: The IM route is used to deliver medication deep into a muscle. Antibiotics, vitamins, and some vaccines are delivered by this route.

**Rationale 4**: The IV route delivers medication directly into the bloodstream. Fluid replacement, antibiotics, blood products, and many other drugs can be delivered via this route.

**Rationale 5**: Medications administered by the buccal route are intended to be absorbed. This is not a route used for allergy testing.

### **Global Rationale:**

Cognitive Level: Applying

Client Need: Physiological Integrity

Client Need Sub: Pharmacological and Parenteral Therapies
Nursing/Integrated Concepts: Nursing Process: Implementation

**Learning Outcome: 3-7**