

1. An infant's current weight indicates that the maximum safe dose of Tylenol is 30 mg by mouth. The physician orders 65 mg to be given, and the nurse administers Tylenol 65 mg. Who is legally responsible in the event that the infant has a toxic reaction to the medication?
 - A) The nurse
 - B) The pharmacist
 - C) The physician
 - D) The pharmacy technician

Ans: A

Feedback:

When giving medications, the nurse is legally responsible for safe and accurate administration. This regulation means that the nurse may be held liable for not giving a drug or for giving a wrong drug or dose. The pharmacist is responsible for filling the medication order, but if an error exists in the order and the medication is still administered by the nurse, the nurse is the most responsible. If the physician writes the order but does not administer the medication, then the physician is not legally responsible. The pharmacy technician is not legally responsible.

2. An 80-year-old patient with risk factors for thrombophlebitis is to be administered heparin 5000 units subcutaneously. The heparin vial is labeled 10,000 units/mL. How many milliliters will the nurse administer to the patient?
 - A) 50 mL
 - B) 1.5 mL
 - C) 5 mL
 - D) 0.5 mL

Ans: D

Feedback:

$5000 \text{ units}/X = 10,000 \text{ units}/1 \text{ mL}$.

3. The physician orders potassium chloride 40 mEq to be added to the patient's IV solution. The vial reads 10 mEq/5 mL. How many milliliters will be added to the IV solution?
 - A) 0.25 mL
 - B) 20 mL
 - C) 200 mL
 - D) 40 mL

Ans: B

Feedback:

$40 \text{ mEq}/X \text{ mL} = 10 \text{ mEq}/5 \text{ mL}$.

4. You have received an order for a medication to be administered buccally. Where is the medication administered?

- A) Eye
- B) Vagina
- C) Cheek
- D) Nose

Ans: C

Feedback:

A medication that has been ordered to be administered buccally is given in the patient's cheek. The eye, vagina, and nose are not considered part of the buccal mucosa.

5. The nurse is repeatedly unsuccessful in starting an IV on a patient who requires antibiotic therapy. The physician then orders the patient to receive an oral antibiotic. What is the major disadvantage of the oral route over the parenteral route?

- A) Slower rate of action
- B) Greater adverse effects
- C) Increased risk of tolerance
- D) Dose must be larger.

Ans: A

Feedback:

The oral route of administration has a slower rate of action. Oral antibiotics do not produce greater adverse effects. The risk of tolerance is equal in intravenous and oral antibiotics. The dose is not necessarily larger in oral versus intravenous antibiotics.

6. A patient has a gastrostomy tube, and the pharmacy has delivered an extended-release tablet. What is the most appropriate action taken by the nurse?

- A) Administer the medication orally.
- B) Administer the medication through the tube.
- C) Crush the medication and administer half of it at a time.
- D) Call the pharmacy to obtain an immediate-release form.

Ans: D

Feedback:

The most important nursing action is to call the pharmacy to determine whether a liquid or a nonextended-release tablet can be substituted. Extended-release tablets should never be crushed—the patient would be placed at risk for overdose or potentially serious adverse effects or death. If the patient has a gastrostomy tube, then he or she cannot swallow and cannot take the pill orally. The medication cannot be administered through the tube because it will obstruct the tube.

7. The nurse has measured a patient's capillary blood glucose and is preparing to administer NPH insulin. Which of the following actions should the nurse perform?
- A) Administer intramuscularly.
 - B) Rotate the liquid.
 - C) Vigorously shake the vial.
 - D) Administer intradermally.

Ans: B

Feedback:

When administering NPH insulin, particles of active drug are suspended in a liquid; the liquid must be rotated. NPH insulin is administered subcutaneously, not intramuscularly or intradermally. The vial should be rotated or shaken, but not vigorously shaken.

8. A nurse begins a patient interaction by systematically gathering information on the patient's care and eventually evaluating the outcomes of care. Which of the following represents this continuum of care?
- A) Assessment process
 - B) Outcomes analysis
 - C) Nursing interventions
 - D) Nursing process

Ans: D

Feedback:

The nursing process is a systematic way of gathering and using information to plan and provide individualized patient care and to evaluate the outcomes of care. The assessment, outcomes, and nursing interventions are individual components of the nursing process.

9. Which of the following assessments should be made before administering a new medication?
- A) Determine the patient's past medication history.
 - B) Evaluate the patient's health beliefs.
 - C) Instruct the patient on the effect of the medication.
 - D) Teach the patient about the desired outcomes of drug therapy.

Ans: A

Feedback:

Assessment involves collecting data on patient characteristics known to affect drug therapy. This process includes observing and interviewing the patient, interviewing family members, completing a physical assessment, reviewing medical records for pertinent laboratory and diagnostic reports, and other methods. Initially (before drug therapy is started or on first contact), the patient should be assessed for age, weight, vital signs, health status, pathologic conditions, and ability to function in usual activities. It is not necessarily important to evaluate the patient's health beliefs at this point. Education is considered to be an intervention, not an assessment.

10. A patient states that she takes acetaminophen (Tylenol) four to five times daily when she is at home. Which of the following laboratory tests is a relevant response to this practice?
- A) Cardiac enzymes
 - B) Peak and trough
 - C) Liver enzymes
 - D) White blood cell count

Ans: C

Feedback:

Laboratory tests of liver, kidney, and bone marrow function are often helpful because some drugs may damage these organs. Cardiac enzymes are assessed in the event that the patient has had myocardial infarction symptoms. The peak and trough indicates the amount of medication when half the medication has been excreted and the serum level of the medication prior to the administration of the next dose. The white blood cell count is indicative in the event of agranulocytosis or infection.

11. A patient who has been diagnosed with type 2 diabetes mellitus is being instructed on her medication regimen, diet, and exercise. She is having difficulty grasping information about when exactly she should administer insulin. Which of the following nursing diagnoses is most appropriate for this patient?
- A) Deficient knowledge: drug therapy regimen
 - B) Noncompliance: overuse
 - C) Risk for injury related to adverse effects
 - D) Acute confusion related to insulin regimen

Ans: A

Feedback:

Deficient knowledge: drug therapy regimen is the most accurate nursing diagnosis for this patient. The question does not address noncompliance: overuse. The patient is not necessarily at risk for injury based on the stem of the question. Acute confusion does not relate to a lack of understanding or knowledge.

12. A patient is diagnosed with pneumonia and has been placed on antibiotics to treat the infection. Which of the following nursing actions will assist in increasing lung capacity?
- A) Promoting hand hygiene
 - B) Increasing rest
 - C) Frequent repositioning
 - D) Promoting deep breathing

Ans: D

Feedback:

Assisting the patient to cough and deep breathe will increase lung capacity and assist in fighting the infection. Promoting hand hygiene is important but will not increase lung capacity. Increasing rest will assist in recovery but will not increase lung capacity. Frequent repositioning does not increase lung capacity.

13. The nurse is providing care for a patient who has rheumatoid arthritis. Which of the following herbal supplements is often combined with chondroitin to repair cartilage?

- A) Ginkgo
- B) Glucosamine
- C) St. John's wort
- D) Saw palmetto

Ans: B

Feedback:

Glucosamine is an herbal supplement that is usually combined with chondroitin to repair cartilage. Ginkgo is used to improve memory and cognitive function in people with Alzheimer's disease. St. John's Wort is used to treat depression. Saw palmetto is used to treat urinary symptoms in men with benign prostatic hyperplasia.

14. The nurse makes an effort to provide high-quality care to patients by obtaining and analyzing the best available scientific research. This activity demonstrates an important component of which of the following?

- A) Evidence-based nursing
- B) Medical justification
- C) Nursing data synthesis
- D) Scientific nursing

Ans: A

Feedback:

Evidence-based nursing practice requires a conscientious and continuing effort to provide high-quality care to patients by obtaining and analyzing the best available scientific evidence from research. Then, the scientific evidence is integrated with the nurse's clinical expertise and the patient's preferences and values to yield "best practices" for a patient with a particular disease process or health problem.

15. A patient has informed the nurse that he has begun supplementing his medication regimen with a series of herbal remedies recommended by his sister-in-law. Which of the following is the most important nursing responsibility regarding herbal supplements?
- A) Research for potential interactions with medications.
 - B) Instruct the patient to discontinue them if taking prescription medications.
 - C) Instruct the patient to take the supplements 1 hour before prescription medications.
 - D) Instruct the patient to take the supplements 3 hours after prescription medications.

Ans: A

Feedback:

Two major concerns are that the use of supplements may keep patients from seeking treatment from a health care provider and that products may interact with prescription drugs. Not all herbal supplements should be discontinued in combination with prescription medications. The herbal supplements should be administered in varying quantities and at varying times based on the medication regime. They are not always administered 1 hour before prescription medications or 3 hours after prescription medications.

16. A patient is being administered a selective serotonin reuptake inhibitor to treat depression. Which of the following herbal supplements is contraindicated?
- A) St. John's wort
 - B) Glucosamine
 - C) Chondroitin
 - D) Melatonin

Ans: A

Feedback:

St. John's wort should not be combined with monoamine oxidase inhibitors or selective serotonin reuptake inhibitor antidepressants.

17. A pediatric nurse confronts many challenges when providing medications to children and infants. Which of the following principles is most appropriate when administering medication to children?
- A) If a child is resistant to taking the medication, the nurse should tell the child that it is candy.
 - B) Measurement by teaspoons is as accurate as milliliters.
 - C) If a drug is not supplied in liquid form, the nurse can always crush the pill.
 - D) Assess the child's weight prior to initial drug administration.

Ans: D

Feedback:

It is imperative to determine a child's weight in order to ensure safe dosage. Never describe the medication to the child as candy. Liquid medications should always be measured by milliliters, not teaspoons. Some, but not all, medications may be safely crushed.

18. An 88-year-old woman has developed syncope (fainting) since an antihypertensive agent was added to her medication regime. The development of syncope may be related to which of the following physiologic processes?
- A) Interaction of other medications
 - B) Ingestion of herbal supplements
 - C) Diminished excretion of the medication
 - D) Increased metabolism of the medication

Ans: C

Feedback:

Adverse effects of medications in an elderly patient are likely because of physiologic changes associated with aging, pathologic changes due to disease processes, multiple drugs for acute and chronic disorders, impaired memory and cognition, and difficulty in complying with drug orders. The question does not address the interaction of other medications. The question does not identify any herbal supplements. Based on physiologic alterations, the patient will not have increased metabolism of the medication.

19. A nurse is preparing to administer a patient's scheduled beta-adrenergic blocker. The nurse is aware that the patient is receiving this drug for the treatment of hypertension. The nurse has addressed which of the following rights of safe medication administration?
- A) Right indication
 - B) Right diagnosis
 - C) Right reason
 - D) Right history

Ans: C

Feedback:

“Right reason” is one of the universally recognized rights of safe drug administration. The other listed “rights” are not used in practice.

20. A nurse is preparing to administer an intramuscular injection of an older adult's seasonal influenza vaccination. What size needle should the nurse use to administer the injection?
- A) 16 gauge
 - B) 20 gauge
 - C) 24 gauge
 - D) 28 gauge

Ans: B

Feedback:

Usually, a 25-gauge, 5/8-inch needle is used for Sub-Q injections and a 22- or 20-gauge, 1 1/2-inch needle is used for IM injections.