

Potter & Perry: Fundamentals of Nursing, 7th Edition

Answer Key to Study Guide

Chapter 35: Medication Administration

1.
 - a. To protect the health of the people by ensuring that medications are safe and effective. Currently the Food and Drug Administration (FDA) ensures that all medications undergo vigorous testing before they are sold.
 - b. Conform to federal legislation but also has additional controls such as alcohol and tobacco
 - c. Individual policies to meet federal and state regulations
 - d. Defines the scope of a nurse's professional functions and responsibilities
2. Provides an exact description of the medication's composition and molecular structure
3. Name given by the manufacturer who first develops the medication, which becomes the official name
4. The medication's name has been trademarked by the manufacturer.
5. The effect of the medication on a body system, the symptoms the medication relieves, or the medication's desired effect
6. Its route of administration
7. The study of how medications enter the body, reach their site of action, metabolize, and exit the body
8. Refers to the passage of medication molecules into the blood from the site of administration
9.
 - a. Route of administration
 - b. Ability of the medication to dissolve
 - c. Blood flow to the site of administration
 - d. Body surface area
 - e. Lipid solubility
10.
 - a. Circulation
 - b. Membrane permeability
 - c. Protein binding
11. Occurs under the influence of enzymes that detoxify, degrade, and remove biologically active chemicals, mostly in the liver
12. The kidneys; when renal function declines, a client is at risk for medication toxicity
13. Are the expected or predictable physiological response to a medication
14. Are the unintended, secondary effects a medication predictably will cause
15. Are severe responses to medication
16. Develop after prolonged intake of a medication or when a medication accumulates in the blood because of impaired metabolism or excretion
17. Are unpredictable effects in which a client overreacts or underreacts to a medication or has reaction different from normal
18. Are unpredictable responses to a medication

19. Are allergic reactions that are life-threatening characterized by sudden constriction of bronchiolar muscles, edema of the pharynx and larynx, and severe wheezing and shortness of breath
20. When one medication modifies the action of another medication
21. The combined effect of the two medications is greater than the effect of the medications when given separately
22. Is a constant blood level within a safe therapeutic range
23. Is the highest serum concentration
24. Is the time it takes for excretion processes to lower the serum medication concentration by half
25. The time it takes after a medication is administered for it to produce a response
26. The time it takes for a medication to reach its highest effective concentration
27. Minimum blood serum concentration of medication reached just before the next scheduled dose
28. Time during which the medication is present in concentration great enough to produce a response
29. Blood serum concentration of a medication reached and maintained after repeated fixed doses
30.
 - a. Oral
 - b. Buccal
 - c. Sublingual
31.
 - a. Intradermal
 - b. Subcutaneous
 - c. Intramuscular
 - d. Intravenous
32. Administered in the epidural space via a catheter, usually used for postoperative analgesia
33. A catheter that is in the subarachnoid space or one of the ventricles of the brain
34. Infusion of medication directly into the bone marrow, commonly used in infants and toddlers
35. Into the peritoneal cavity such as chemotherapeutic agents, insulin, and antibiotics
36. Directly into the pleural space, commonly chemotherapeutics
37. Directly into the arteries
38. Injection directly into the cardiac tissue
39. Injection of a medication into a joint
40.
 - a. Directly applying a liquid or ointment
 - b. Inserting a medication into a body cavity
 - c. Instilling fluid into a body cavity
 - d. Irrigating a body cavity
 - e. Spraying
41. Medications are readily absorbed and work rapidly because of the rich vascular alveolar capillary network present in the pulmonary tissue.
42.
 - a. Metric
 - b. Apothecary
 - c. Household

43. A given mass of solid substance dissolved in a known volume of fluid or a given volume of liquid dissolved in a known volume of another fluid
44. Dose ordered/dose on hand \times amount on hand = Amount to administer
45. Child's dose = Body surface area of child/ 1.7 m^2 \times normal adult dose
46. The order is given verbally to the nurse by the provider.
47. Is carried out until the prescriber cancels it by another order or until a prescribed number of days elapse
48. A medication that is given only when a client requires it
49. A medication that is given only once at a specified time
50. Single dose of a medication is to be given immediately and only once.
51. Is used when a client needs a medication quickly but not right away; nurse has up to 90 minutes to administer
52.
 - a. Unit dose
 - b. Automated medication dispensing systems (AMDS)
53. Inaccurate prescribing, administration of the wrong medicine, giving the medication using the wrong route or time interval, and administering extra doses or failing to administer a medication
54.
 - a. Verify
 - b. Clarify
 - c. Reconcile
 - d. Transmit
55.
 - a. The right medication
 - b. The right dose
 - c. The right client
 - d. The right route
 - e. The right time
 - f. The right documentation
56.
 - a. To be informed of the medication's name, purpose, action, and potential undesired effects
 - b. To refuse a medication regardless of the consequences
 - c. To have qualified nurses or health care providers assess a medication history
 - d. To be properly advised of the experimental nature of medication therapy and give written consent
 - e. To receive labeled medications safely without discomfort
 - f. To receive appropriate supportive therapy
 - g. To not receive unnecessary medications
 - h. To be informed if medications are a part of a research study
57.
 - a. History
 - b. History of allergies
 - c. Medication data
 - d. Diet history
 - e. Client's perceptual or coordination problems
 - f. Client's current condition
 - g. Client's attitude about medication use
 - h. Client's knowledge and understanding of medication therapy
 - i. Client's learning needs

58. Anxiety
59. Ineffective health maintenance
60. Health-seeking behaviors
61. Deficient knowledge
62. Noncompliance
63. Disturbed visual sensory perception
64. Impaired swallowing
65. Effective therapeutic regimen management
66. Ineffective therapeutic regimen management
67.
 - a. Will verbalize understanding of desired effects and adverse effects of medications
 - b. Will state signs, symptoms, and treatment of hypoglycemia
 - c. Will be able to monitor blood sugar to determine if medication is appropriate to take
 - d. Will establish a daily routine that will coordinate timing of medication with mealtimes
68. Health beliefs, personal motivations, socioeconomic factors, and habits
69.
 - a. Client's full name
 - b. Date and time that the order is written
 - c. Medication name
 - d. Dose
 - e. Route of administration
 - f. Time and frequency of administration
 - g. Signature of provider
70. The name of the medication, dose, route, and the exact time of administration and site
71.
 - a. When clients need to take several medications to treat their illnesses
 - b. Happens when people take more medications than needed
72.
 - a. Client and family understand medication therapy.
 - b. Client safely self-administers medications.
73.
 - a. Determine the client's ability to swallow.
 - b. Assess the client's cough.
 - c. Determine the presence of a gag reflex.
 - d. Prepare oral medications in the form that is easiest to swallow.
 - e. Allow the client to self-administer medications if possible.
 - f. If the client has unilateral weakness, place the medication in the stronger side of the mouth.
 - g. Administer pills one at a time, ensuring that each medication is properly swallowed before the next one is introduced.
 - h. Thicken regular liquids or offer fruit nectars if the client cannot tolerate thin liquids.
 - i. Avoid straws because they decrease the control the client has over volume intake, which increases the risk for aspiration.
 - j. Have client hold and drink from cup if possible.
 - k. Time medications to coincide with mealtimes or when the client is well rested

- and awake if possible.
- l. Administer medications using another route if risk for aspiration is severe.
74. a. Document where the medication was placed on the medication administration record (MAR).
b. Assess if client has an existing patch before application.
c. Assess the skin thoroughly.
d. Medication history/reconciling medications
e. Apply a noticeable label to the patch.
f. Document removal of medication on the MAR.
75. Decongestant spray or drops
76. a. Avoid instilling any eye medication directly onto the cornea.
b. Avoid touching the eyelids or other eye structures with eye droppers or ointment tubes.
c. Use medication only for the client's affected eye.
d. Never allow a client to use another client's eye medications.
77. a. Vertigo
b. Dizziness
c. Nausea
78. Suppositories, foam, jellies, or creams
79. Exerting local effects (promoting defecation) or systemic effects (reducing nausea)
80. a. Deliver a measured dose of medication with each push of a canister, often used with a spacer
b. Hold dry, powered medication and create an aerosol when the client inhales through a reservoir that contains the medication.
81. Draw medication from ampule quickly; do not allow to stand open.
82. Avoid letting needle touch contaminated surface.
83. Avoid touching length of plunger or inner part of barrel.
84. Prepare skin; use friction and a circular motion while cleaning with an antiseptic swab; start from the center, and move outward.
85. a. The client's size and weight
b. Type of tissue into which the medication is to be injected
86. a. Contain single doses of medications in a liquid
b. Is a single-dose or multidose container with a rubber seal at the top (closed system)
87. a. Do not contaminate one medication with another.
b. Ensure the final dose is accurate.
c. Maintain aseptic technique.
88. Rate of action (rapid, short, intermediate, and long acting); each has a different onset, peak, and duration of action
89. a. Need to maintain clients' individual routine when preparing and administering their insulin
b. Do not mix insulin with any other medication or diluents.
c. Never mix insulin glargine or insulin detemir with other types of insulin.
d. Inject rapid-acting insulins mixed with NPH within 15 minutes before a meal.
e. Do not mix short-acting and Lente insulins unless the blood glucose levels are

- currently under control with this mixture.
- f. Do not mix phosphate-buffered insulins with Lente insulins.
90. a. Use a sharp beveled needle in the smallest suitable length and gauge.
b. Position the client as comfortably as possible to reduce muscle tension.
c. Select the proper injection site.
d. Divert the client's attention from the injection.
e. Insert the needle quickly and smoothly.
f. Hold the syringe while the needle remains in tissues.
g. Inject the medication slowly and steadily.
91. The outer posterior aspect of the upper arms, the abdomen (below the costal margins to the iliac crests), and the anterior aspects of the thighs
92. 0.5 to 1 mL
93. 25-gauge 5/8-inch needle inserted at a 45-degree angle or a 1/2-inch needle inserted at a 90-degree angle
94. 90 degrees
95. a. 3 mL into a large muscle
b. 2 mL
c. 1 mL
96. Lacks major nerves and blood vessels; rapid absorption; frequently used in infants, older children, and toddlers (immunizations)
97. Deep site away from nerves and blood vessels, less chance of contamination, easily identified landmarks, preferred site for medications
98. Easily accessible but muscle not well developed, use small amounts, not used in infants or children, potential for injury to radial and ulnar nerves, immunizations for children, recommended site for hepatitis B and rabies injections
99. Minimizes local skin irritation by sealing the medication in muscle tissue
100. Skin testing, injected into the dermis where medication is absorbed slowly
101. a. As mixtures within large volumes of IV fluids
b. Injection of a bolus or small volume of medication
c. Piggyback infusion
102. a. When fast-acting medications must be delivered quickly
b. To establish constant therapeutic blood levels
c. Delivery of medication that is highly alkaline and irritating to muscle and subcutaneous tissue.
103. a. Most dangerous method because there is not time to correct errors
b. A bolus may cause direct irritation to the lining of blood vessels.
104. a. Reduce risk for rapid infusion by IV push
b. Allow for administration of medications that are stable for a limited time in solution
c. Allow for control of IV fluid intake
105. A small (25 to 250 mL) IV bag connected to a short tubing line that connects to the upper Y port of a primary infusion line
106. Small (25 to 100 mL) IV bag connected to a short tubing line to the lower Y port of a primary infusion line
107. Small (50 to 150 mL) container that attaches below the primary infusion bag

108. It is battery operated and allows medications to be given in very small amounts of fluid (5 to 60 mL).
109. a. Cost savings
b. Convenience
c. Increased mobility, safety, and comfort for the client
110. 3. Definition of pharmacokinetics
111. 1. Absorption refers to the passage of medication molecules into the blood from the site of administration.
112. 1. Definition of onset
113. 1. Is an oral route
114. 2. Child's dose = Body surface area of child/ 1.7 m^2 \times normal adult dose
115. 2. If mixing rapid- or short-acting insulin with intermediate- or long-acting insulin, take insulin syringe and aspirate volume of air equivalent to the dose of insulin to be withdrawn from the long-acting insulin first.