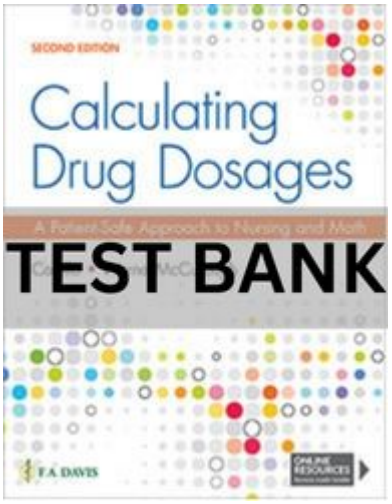
Chapter 1: Safety in Medication Administration



MULTIPLE CHOICE

1. The following medication order is in the patient's medication administration record (MAR):

   methylPREDnisolone 40 mg PO daily at 0900.

   After reading the order, the nurse correctly determines:
   A "PO" is an inappropriate abbreviation.
   B the medication order is written correctly.
   C 40 mg should be written as 40mg.
   D tall man lettering indicates that the drug is a narcotic.

   ANS: B

Feedback
The medication order has all the required components (drug name, dose, route, and frequency of administration) for a drug order. "PO" is an appropriate abbreviation; 40 mg is written correctly with a space between the dose and the unit of measurement. Tall man lettering is used to distinguish the drug from another drug with a similar name.

2. Which of the following accurately describes the "Boxed Warning" found on a drug label?
   A It is primarily is used to identify the safe dose for the patient.
   B It is commonly found on all drug labels.
   C It identifies serious potential risks and side effects related to drug use.
   D It protects the patient by providing information to decrease side effects.

   ANS: C

Feedback
A drug label with a boxed warning provides information to healthcare professionals and patients regarding the serious risks and side effects related to the drug. The Boxed Warning is not the primary source for identifying the patient's drug dosage. The warning is found on specific prescription medications and does not provide information to reduce or decrease side effects.

3. When practicing safety in the administration of medication, for which of the following medication orders should a nurse seek clarification ***before*** the administration of the medication?
   A Regular insulin 5 u subcut now.
   B Enoxaparin 80 mg subcut every 12 hours.
   C Benadryl 50 mg PO PRN every 6 hr for itching.
   D Ondansetron 4 mg IVP stat.

   ANS: A

Feedback
The "u" should never be used in a medication order; rather, for safety, the word "units" should be spelled out. The other answer options contain the required components needed to safely carry out the medication order.

4. A nurse is reviewing a drug label with a drug name written with tall man lettering. Which statements shows the nurse has a correct understanding of tall man lettering on a drug label?
   A "The tall man lettering means this is a high alert drug."
   B "The tall man lettering helps me distinguish this drug with other drugs that have similar names."
   C "The tall man lettering means that this drug must have a Boxed Warning."
   D "The tall man lettering helps me quickly identify that this drug is an injectable drug."

   ANS: B

Feedback
Tall man lettering highlights a portion of the drug name to help distinguish from similar drug names. It is not used to identify high alert drugs, highlight a boxed warning, or identify injectable drugs.

5. The following medication orders are found in the patient's MAR:

   Metformin HCl 500 mg PO daily at 0900.
   Hydrochlorothiazide 25 mg PO every 12 hr at 0900 and 2100.
   Digoxin .25 mg PO daily at 0900.

   In reading the medication orders for the 0700–1500 shift, the nurse determines that which of the following is the ***priority*** nursing intervention?
   A Clarify the metformin HCl order.
   B Clarify the hydrochlorothiazide order.
   C Clarify the digoxin order.
   D Prepare to administer the 0900 medications.

ANS: C

Feedback
The digoxin medication order is lacking a zero before the decimal fraction (.25). Safe practice recommends using a zero before a decimal point when the dose is less than one. The metformin HCl and the hydrochlorothiazide orders are written correctly. The order should be clarified before preparing the 0900 medications.

6. In the administration of medications, when should the nurse document the administration of medications?
   A 30 minutes before administering to the patient.
   B Immediately before administering to the patient.
   C At the end of the shift.
   D Immediately after administering to the patient.

ANS: D

Feedback
The last "Right of Medication Administration" is the documentation of medications. The documentation is done immediately after administering the medications to the patient.

7. The following medication is ordered for the patient:

   Calcitriol Oral Solution 2 µg PO Daily

   After reading the order, what is the ***initial*** action needed by the nurse?
   A Clarify the written medication dose of 2 µg.
   B Look up the dose in a drug reference book.
   C Transcribe the medication order onto the MAR.
   D Ask the patient the daily dose taken at home.

ANS: A

Feedback
The initial action is for the nurse to clarify the drug dose because it is written with the error-prone letter/symbol "µ." To avoid medication errors, it is recommended that the "µ" not be used in medication orders. Instead the abbreviation "mcg" is to be used for microgram.

8. Recommendations by the Institute of Medicine for reducing medication errors help enhance safe nursing practice by:
   A shifting primary responsibility for drug therapy onto patients and families.
   B referring patients and families to the pharmacist for drug therapy questions.
   C answering drug therapy questions when a new prescription is ordered.

D promoting ongoing communication between patients and healthcare providers.

ANS: D

Feedback
The Institute of Medicine recommendations include the establishment of collaborative partnership between patients and healthcare providers to assist in educating, consulting, and listening to patient's concerns. Ongoing communication between patients and healthcare providers keeps the focus on the needs of the individual patient and promotes safety.

9. In consulting a drug reference book, the nurse reads that certain medications are classified as "high-alert" medications. In the administration of high-alert medications, what is the priority action of the nurse?
   A Inform the patient of the harmful side effects.
   B Double-check the dose with another nurse prior to administering the drug.
   C Provide drug literature to the family to assist with monitoring for harmful effects.
   D Seek assistance from the pharmacist to explain the effects of the drug.

ANS: B

Feedback
High-alert medications have an increased risk of patient harm. Safe practice in the administration of high-alert medications requires the nurse to double check the dose with another nurse prior to the administration of the drug. Informing the patient and family of the drug's harmful effects may be indicated for some patients, but the prevention of a medication error is critical. Drug literature may be helpful for some families, but not all. The nurse should seek assistance from the pharmacist whenever there is a question, but this is not specific for high-alert medications.

10. All of the following medication orders are found in a patient's MAR. Select the medication order that requires clarification ***before*** administration.
    A Captopril 12.5 mg PO at 0700 and 1700
    B Regular insulin 7 units subcut 30 minutes before breakfast.
    C Ketorolac 15 mg IM stat
    D Morphine sulfate 45.0 mg PO every 5 hr for pain.

ANS: D

Feedback
The ordered dose of morphine sulfate, 45.0 mg, has a trailing zero, which may lead to an error in the administration of the ordered dose. The medication orders for captopril, Regular insulin, and ketorolac contain the required components of a medication order.

Chapter 2: The Drug Label

MULTIPLE CHOICE

11. On a home health visit, the nurse finds a drug bottle with the following information on the label:

Flagyl ®
metronidazole tablets USP
250 mg tablets

In reading the drug label, the nurse is correct to interpret that:
A Metronidazole is the generic name of the drug.
B Flagyl is the generic name of the drug.
C "USP" indicates a boxed warning.
D The symbol ® identifies the drug as a high-alert drug.

ANS: A

Feedback
The generic name is listed under the brand name. Flagyl is the brand name. USP stands for United States Pharmacopeia and does not indicate a boxed warning. The symbol ® is found next to the brand name and indicates that the drug name is registered and trademark protected.

12. The following information is on the drug label:

Diazepam CIV
Oral Solution
5 mg per 5 mL

In reading the drug label, the nurse is correct to interpret that:
A diazepam is the brand name.
B diazepam is a controlled substance.
C the CIV is used to identify oral solutions on the label.
D the drug is on the list of Confused Drug names.

ANS: B

Feedback
The CIV indicates that the drug is a controlled substance found under the Schedule IV category. Diazepam is the generic name. The letter "C" indicates that the drug is a controlled substance and the roman numeral (IV) signify under which schedule the drug is categorized. The CIV is not used to highlight confused drug names.

13. The following information is on the drug label:

Minipress ®
(prazosin hydrochloride)
1 mg
Capsules

The nurse can safely administer this drug via which route?

A IM
B Subcut
C IV
D PO

ANS: D

Feedback
Although not specifically stated on the label, it is understood that capsules and tablets are administered via the oral (PO) route. All the other routes indicate parenteral routes of administration.

14. The nurse is preparing the following medication:

Glucotrol XL ®
(glipizide)
Extended release tabs
2.5 mg

What does the nurse need to do when administering this drug?

A Crush and dissolve the tablet in 15 mL of water.
B Give half the tablet now and the other a half hour later.
C Instruct the patient swallow the entire tablet.
D Instruct the patient to chew the tablet slowly.

ANS: C

Feedback
Extended release tablets must be swallowed whole to safely allow for constant release of the medication over a specific time. Extended release tablets must not be crushed, divided, or chewed.

15. The medication order is to administer 0.1 mL of a drug intradermally. The nurse demonstrates proper administration of the drug when the drug is:

A given into the muscle.
B placed between the gum and lining of the cheek.
C injected into the top layers of the skin.

D inhaled through the mouth or nose.

ANS: C

Feedback
Intradermal (ID) administration of a drug is given into the top layers of the skin. Drugs given into the muscle use the intramuscular (IM) route. Drugs placed between the gum and lining of the cheek use the buccal route. Drugs administered through the mouth or nose use the inhalant route.

16. The medication order is to give 0.5 mg of a drug sublingually. The nurse demonstrates proper administration of the drug when the drug is:
    A placed between the gum and lining of the cheek.
    B placed under the tongue.
    C injected into the subcutaneous tissue.
    D inhaled through the nasal mucosa.

ANS: B

Feedback
The sublingual (SL) administration of a drug is correct when the drug is placed under the tongue. Drugs placed between the gum and lining of the cheek use the buccal route. Drugs injected into the top layers of the skin use the subcutaneous (subcut) route. Drugs inhaled through the nasal mucosa use the intranasal route.

17. The nurse finds the following medication in the patient's medication drawer:

    Aldactazide ®
    spironolactone and
    hydrochlorothiazide
    tablets
    25 mg/25 mg

    The nurse is correct to interpret that:
    A Aldactazide is the generic name of the drug.
    B the dosage strength is 25 mg per tablet.
    C the drug may be cut into two pieces.
    D this is a fixed dose combination drug.

ANS: D

Feedback
Fixed dose combination drugs contain two active ingredients and are manufactured in fixed doses. Aldactazide is the brand name. Because there are two active ingredients in the drug, the dosage strength is expressed as 25 mg/25 mg per tablet. A drug may not be cut into separate pieces unless the instructions indicate that the drug is "scored."

18. Pharmacy sends a drug bottle labeled:

Calcitriol Oral Solution
1 mcg/mL
15 mL

Which dosage strength, if written on the medication order, would the nurse question?

A 1 mcg / mL
B 1 mcg per 1 mL
C 1 mcg / 15 mL
D 1 mcg / 1 mL

ANS: C

Feedback
1 mcg / 15 mL should be questioned. The strength of the drug (1 mcg) is correct but the dosage form (15 mL) is not correct. "15 mL" represents the total amount of medication in the bottle. From this drug label, the dosage strength consists of the strength of the drug (1 mcg) and the dosage form, which may be written as: " / mL, per mL, or / 1 mL."

19. The nurse reads the following drug label:

Cyanocobalamin
Injection, USP
1,000 mcg/mL
For IM or SC USE ONLY
1 mL Vial

By which routes can the drug be safely administered?

A Intramuscular, subcutaneous
B Intravenous, intramuscular
C Subcutaneous, intradermal
D Intravenous, sublingual

ANS: A

Feedback
The drug label indicates "For IM or SC USE ONLY." The approved routes of administration are intramuscular (IM) and subcutaneous (SC). Intravenous (IV), intradermal (ID), and sublingual (SL) are not approved routes of administration for this drug.

20. The pharmacist sends the following medication for the patient:

Cyanocobalamin
Injection, USP
1,000 mcg/mL
For IM or SC USE ONLY
1 mL Ampule

Which action by the nurse is correct **after** the administration of 500 mcg IM?

A Keep the ampule.
B The remaining amount should be stored.
C Discard the ampule.
D Save the remaining amount in a syringe.

ANS: C

Feedback
Although 500 mcg was administered, leaving 500 mcg in ampule, the ampule and the remaining amount should be discarded. An ampule is considered a single dose container because once opened it cannot be resealed. The remaining amount is discarded, not saved.

21. Heparin 2,000 units IV is ordered for the patient. The nurse has the following vial:

HEPARIN
Sodium Injection, USP
10,000 USP units/10 mL
(1,000 USP units/mL)
For Subcutaneous or Intravenous use.
Multidose Vial

Which statement is **most** appropriate regarding the dosage strength?

A 10,000 USP units/1 mL is the recommended dosage strength.
B 1,000 USP units/mL is the recommended dosage strength.
C 10,000 USP units/10 mL and 1,000 USP units/mL are equivalent dosage strengths.
D 1,000 USP units/mL should be listed as 1,000 USP units per 1 mL.

ANS: D

Feedback
10,000 USP units/10 mL and 1,000 USP units/mL are equivalent dosage strengths. The label identifies two dosage strengths (10,000 USP units/10 mL or 1,000 USP units/mL), but both are equivalent; 1,000 USP units/mL indicates the same as 1,000 USP units per 1 mL.

22. The nurse reads the following on the Heparin drug label:

HEPARIN
Sodium Injection, USP
20,000 USP units per mL
For Subcutaneous or Intravenous use.
1 mL Multidose Vial

The nurse correctly determines:

A the vial can be used for the administration of multiple doses.
B the vial must be discarded after the first dose regardless of the dose administered.
C HEPARIN is the brand name of the drug.
D HEPARIN contains tall man lettering.

ANS: A

Feedback
The "1 mL Multidose Vial" on the drug label indicates that the vial may be used for the administration of multiple doses. HEPARIN is the generic name. Tall man lettering is a combination of lowercase and uppercase letters found in the drug name.

23. **M.D. Order:** Atorvastatin calcium 10 mg PO daily.
The pharmacy sends a bottle with the following information:

Caduet ®
(amlodipine besylate/atorvastatin calcium)
5 mg/10 mg
Tablets

What is the most appropriate action **initially** needed by the nurse?

A Administer one tablet of the Caduet.
B Clarify the M.D order with the pharmacist.
C Review the medication with the patient.
D Ask the M.D. to order Caduet.

ANS: B

Feedback
The nurse needs to clarify the M.D. order and the medication sent with the pharmacist. Although atorvastatin calcium 10 mg is found in Caduet, the nurse should not administer Caduet because this is a fixed dose combination drug consisting of two active ingredients. The ordered drug may be reviewed with the patient after the order is clarified. It is not appropriate for the nurse to ask the M.D. to change the medication order to what the pharmacy has sent.