

## Part 2

# Medication Administration

# Medication Administration

- Overall nursing responsibilities with medication administration include:
  - Knowledge of the medication being administered including compatibility
  - Knowledge of the patients history:
    - Allergies or previous reactions
    - Overall condition of patient
  - Use proper technique of administration
  - Prepare medication in quiet & well-lit area

# Medication Administration

- Check & verify order prior to administration
- Administer medication utilizing the 6 Rights
- Check label 3 times
- Wash hands, do not touch medication
- Aseptic technique
- Patient teaching

# Setting Up Medication

## Set Up:

- Sanitize work area prior to pouring meds
- Wash hands
- Work from top to the bottom of MAR when setting up medication
- Compare each label with the MAR; any questions clarify

# Setting Up Medication

- Set up:
  - Perform 3 checks:
    - When taking medication out of draw or computerized
    - Before placing medication in souffle cup
    - Before administration
  - Never give a medication if label illegible
  - Be familiar with abbreviations & generic & trade names
  - Use caution with medications with similar spelling

# Setting Up Medication

- Set Up:
  - Be sure of expiration & spoilage
  - Do not open unit dose medication until at patients bedside
  - ***Never give medication someone else has poured***
  - Only prepare medication for one patient at a time

# Enteral route

- AKA oral route
- Most frequently used route
- Forms
  - Tablets & pills
  - Capsules
  - Lozenges
  - Liquids
    - Elixirs & emulsions
  - Syrups & suspensions
  - Sustained release
    - Dissolve over extended time periods
    - Tablet & capsules

# Administration via Enteral Route

- Prepare Equipment:
  - MAR
  - Medication
  - Medication cup or syringe
  - Liquid with straw
- Wash hands
- Begin to prepare medication following MAR & using the 6 Rights & 3 Checks

# Administration via Enteral Route

- Place medication cart close to the patients room
- Prepare medication for 1 patient at a time
- Read MAR & select proper medication from the draw
- Be sure to check the expiration date of the medication & the condition of the packaging

# Administration via Enteral Route

- Unit dose:
  - do not remove from package until in the room
- Multidose:
  - place medication in the cap of bottle & then into medicine cup
  - do not touch the medication
- Liquids:
  - hold the bottle with label to palm
  - read amount of medication at the bottom of the meniscus at eye level
  - wipe the bottle top with paper towel

# Administration via Enteral Route

- When all medication are prepared for one patient do third check
- Transport the medication to the bedside with care
- Be sure to keep medications in sight at all times
- **Identify patient prior to administration**
- Complete all appropriate assessments

# Administration via Enteral Route

- Patient upright
- Full glass of water available
  - Sip water before taking med
  - Place med on back of tongue
  - Tilt head back
  - Sip water – then finish entire glass
- Assess pt's need for assistance
- **NEVER** leave drug at bedside
- Stay with patient until all medications are taken

# Administration via Enteral Route

- Reposition the patient for comfort
- Wash hands upon exiting room
- Always verify effect of medication with patient, usually within 30 minutes
- Provide appropriate documentation as per facility policy

# Enteral Route via Nasogastric or Gastric Tube

- Equipment needed
  - 60 mL syringe
  - Gastric pH test tape
  - Graduated container
  - Water
  - Drug to be administered
  - Pill crusher (if med tablet form)
  - MAR
  - Disposable gloves

# Enteral Route via Nasogastric or Gastric tube

- Gather equipment
- Check medication order
- Check allergies
- Knowledge of medications
- Wash hands
- Prepare medication utilizing the 6 Rights & 3 checks

# Enteral Feeding via Nasogastric & Gastric Tube

- If pills are able to be crushed then utilize the pill crusher & crush one pill at a time
- If liquid place in the medicine cup & read meniscus at eye level
- Complete necessary assessment prior to administration
- Place in High-Fowlers, unless contraindicated

# Enteral Feeding via Nasogastric & Gastric Tube

- Wash hands & Don gloves
- Identify patient
- If patient is receiving a continuous feeding, pause the feeding
- Pour water into the irrigation container
- Fold over tube to pinch off or utilize stopcock to close of flow from stomach
- Insert the 60 cc syringe into tube
- Pull back using constant, gentle pressure to check for residual of feeding & placement

# Enteral Feeding via Nasogastric & Gastric Tube

- Note the amount of residual & replace residual back into the stomach
- Fold the gastric tube over & clamp with fingers & remove the syringe
- Now pour 30 ml of water into the syringe without the plunger & allow to flow into the tube by gravity
- Administer one dose of medication at a time with 5-10 ml of water

# Enteral Feeding via Nasogastric & Gastric Tube

- Give a final 30-60ml flush at end
- Clamp tube, remove syringe & replace feeding if applicable
- Remove gloves & wash hands
- Place patient into Semifowlers (45°)
- Evaluate patient response to medication
- Document on MAR



# Enteral Route

## Rectal Suppositories

- Equipment needed
  - Rectal suppository
  - Lubricating jelly (water soluble)
  - Clean gloves
  - Tissue
  - Drape
  - MAR

# Enteral Route

## Rectal Suppositories

- Gather Equipment
- Check MAR to Dr. order
- Check patient for allergies
- Wash hands
- Prepare medication utilizing 6 Rights & 3 Checks
- Assess for allergies
- Identify patient
- Complete necessary assessment

# Enteral Route

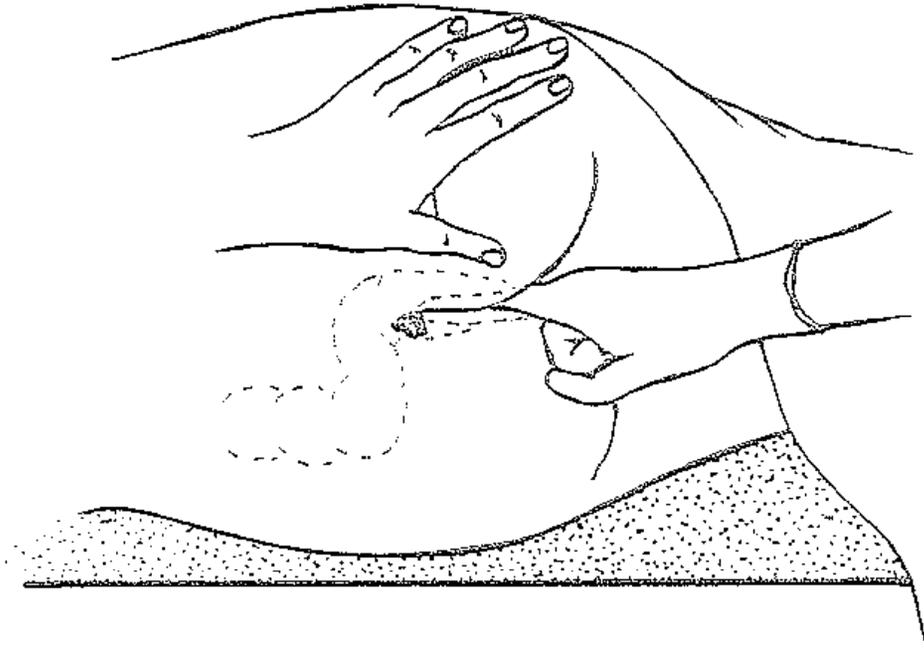
## Rectal Suppositories

- Perform hand hygiene & Don gloves
- Assist patient onto left side in Sims position
- Expose only the buttocks
- Remove suppository from the packet & apply lubricant on rounded end & your index finger
- Separate buttocks with non-dominant hand & insert suppository round side first along rectal wall 3-4 inches

# Enteral Route

## Rectal Suppositories

- Cleanse area with tissue
- Encourage patient to stay on Left side for 5 minutes
- Remove gloves & wash hands
- Evaluate the patients response
- Document appropriately



# Enteral Route

## Enemas

- Instillation of solution into rectum and sigmoid colon
- Uses
  - Treat constipation
  - Empty bowel prior to dxs or surgery
- Types
  - Tap water
  - Physiological normal saline
  - Hypertonic solution
  - Soapsuds
  - Cleansing
  - Oil-retention
  - Medicated

# Topical Route

- Most act on skin but not absorbed
- Utilized to
  - Soften skin
  - Disinfect
  - Lubricate skin
  - Treat minor superficial skin infections

# Topical Route

- Types
  - Lotions
  - Patches
  - Pastes
  - Ointments
  - Wet dressings
- Equipment
  - Medicaiton
  - MAR
  - Tongue depressor, sterile dressing or gloves

# Topical Route

- **Technique:**
  - Utilize clean technique with intact skin
  - Utilize sterile technique impaired skin integrity
- **Documentation**
  - Document on MAR
  - It may also be necessary to document wound care on the chart or a wound treatment record

## Topical Route Transdermal Route

- Equipment
  - Medication patch
  - Gloves
  - Scissors (as necessary)
  - Washcloth, soap & water
  - MAR

## Topical Route Transdermal Route

- Technique
  - Gather equipment
  - Verify medication on MAR with Dr. order
  - Assess the patient for allergies
  - Prepare & administer medication utilizing 6 Rights & 3 Checks
  - Verify Right patient prior to administration

# Topical Route

## Transdermal Route

- Complete necessary assessments before administering medication
- Site of application must clean, dry, intact & free of irritation
- Site of application is dependent upon medication
- Wash hands & don gloves
- Be sure to remove any old patches prior to applying the new patch
- Fold the old patch adhesive side sticking together
- Wash the old site with soap & water

## Topical Route Transdermal Route

- Remove the new patch from the package
- Write your initials & date on patch
- Remove covering on back without touching the medication side
- Apply to skin & firmly hold in place for 10 seconds
- Remove gloves & wash hands
- Document On MAR including site
- Evaluate patient response

## Transdermal Route



STEP 3b(1) Ointment spread in inches over measuring guide.



STEP 3b(5) Nurse applies wrapper with medication on client's skin.

# Mucous Membrane Route

- Sublingual
- Buccal
- Ophthalmic
- Otic
- Inhalation
- Nasal
- Vaginal

# Mucous Membrane Buccal & Sublingual

## Equipment:

- MAR
- Medication
- Gloves
- Medication cup
- Technique
- Sublingual
  - Placed under the tongue
- Buccal drugs
  - Place against mucous membrane of cheek

# Mucous Membrane Route

## Ophthalmic Route

- Types
  - Drops
  - Ointments
- Uses
  - Glaucoma
  - Surgical prophylaxis (i.e., cataract removal)
  - Infection

# Mucous Membrane Route

## Ophthalmic Route

- Equipment:
  - MAR
  - Medication
  - Clean cotton ball
  - Gloves
  - Tissues

# Mucous Membrane Route

## Ophthalmic Route

- Technique
  - Gather equipment
  - Verify order with MAR
  - Check for allergies
  - Knowledge of Medication
  - Wash hands
  - Prepare medication utilizing 6 Rights & 3 Checks

# Mucous Membrane Route

## Ophthalmic Drops

- Wash hands & Don gloves
- Have patient lie or sit down with head tilted back & slightly to the side into which the medication will be instilled
- Administer the medication into the lower conjunctival sac
- Place in center of everted lower lid
- Have client close eyelid & place gentle pressure on innercanthus for 1-2mins
- Gently pat off any excess medication with tissue

# Mucous Membrane Route

## Ophthalmic Drops

- If patient is to receive medication in both eyes repeat process with other eye
- If a dropper is indicated utilize new dropper
- Wash hands
- Reposition patient for comfort
- Evaluate effect of medication
- Document on MAR & if necessary on chart

# Mucous Membrane Route

## Ophthalmic Ointment

- With eye ointment, wipe the top of tube with a tissue & discard small amount of ointment
- Apply the ointment inside the lower lid, in a thin line from the inner to outer canthus
- Ask client to blink a few times
- Use clean cotton ball or tissue to remove excess medication



# Mucous Membrane Route

## Otic Route

- Types
  - Drops
  - Irrigations
- Uses
  - Soften wax
  - Relieve pain
  - Apply local anesthesia
  - Destroy organisms
  - Destroy a lodged insect

# Mucous Membrane Route

## Otic Route

- Equipment:
  - MAR
  - Medication
  - Cotton balls
  - Gloves

# Mucous Membrane Route

## Otic Route

- Technique
  - Gather equipment
  - Wash hands & Don gloves
  - Have client lie on side of unaffected ear
  - Remove any excess drainage from external canal to allow medication to pass
  - Expose the external ear by adjusting clients ear lobe
    - **Adults pull lobe Up & Back**
    - **Children pull Down & Back**

# Mucous Membrane Route

## Otic Route

- Squeeze medication into the ear without touching the ear with the dropper or bottle
- Release pinna & press tragus a few times
- Instruct the patient to remain side-lying for 5-10 minutes
- Place a cotton ball into external ear
- If procedure is ordered for both ears, wait the 5-10 minutes & repeat the process in other ear
- Wash hands & reposition
- Evaluate response
- Document on MAR & if needed in nurses notes

## Instilling Ear Drops



Adult



School-aged child

# Mucous Membrane Route

## Nasal Route

- Equipment:
  - MAR
  - Medication
  - Dropper(if needed)
  - Gloves
  - Tissue

# Mucous Membrane Route

## Nasal Drops

- Technique:
  - Wash hands & Don gloves
  - Assess patients nares for redness, drainage or tenderness
  - Provide the patient with tissues & have the patient blow nose
  - Have patient sit up with head tilted back

# Mucous Membrane Route

## Nasal Drops

- Have patient breathe through mouth
- Hold tip & instill the correct amount of drops into nare
- Have patient remain in position for a few minutes
- Remove gloves & wash hands
- Evaluate patients response to medication
- Document MAR

# Mucous Membrane Route

## Nasal Spray

- Technique:
  - Assist patient into upright position
  - Wash hands & Don gloves
  - Agitate medication gently
  - Insert nozzle of medication container into nostril
  - Compressor container to spray medicine into nostril
  - Instruct patient to inhale gently through nose as the spray is administered

# Mucous Membrane Route

## Nasal Spray

- Keep container compressed until removed from nostril
- Have patient then hold nostril closed
- Have patient keep head tilted back for 1-2 minutes
- Remove gloves & wash hands
- Assist to comfortable position
- Document on MAR

# Mucous Membrane Route

## Inhalation Route

- Types
  - Bronchodilators
  - Mucolytics
- Uses
  - Chronic respiratory disease
  - Control
    - Airway hyperactivity
    - Airway constriction

# Mucous Membrane Route

## Inhalation Route

- Equipment
  - Stethoscope
  - Medication
  - MAR
  - Spacer chamber (if utilized)

# Mucous Membrane Route

## Inhalation Route

- Technique:
  - Gather equipment
  - Complete necessary assessment prior to administration of medication including lung sounds
  - Wash hands
  - With inhaler, have the patient position the inhaler in front of their mouth, push down on the canister & inhale slowly & deeply

# Mucous Membrane Route

## Inhalation Route

- One spray of the medication is one “puff”
- Instruct the patient to hold breath for about 10 seconds & then to slowly exhale
- Repeat process for as many puff as ordered
- Some medication require the patient to rinse their mouth
- Remove gloves & wash hands
- Evaluate effect; can assess lung sounds
- Document on MAR & nurses notes

# Mucous Membrane Route

## Inhalation via Nebulizer

- Special process
- Must fill medication into the nebulizer cup
- Connect tubing to oxygen source & turn on
- Patient must close lips around lip piece & breath through mouth
- Must continue until medication is complete; usually mist is gone

# Mucous Membrane Route Inhalation via Nebulizer

- Patient may rinse mouth
- Remove gloves & wash hands
- Evaluate response to medication; can include lung sounds
- Document on MAR & nurses notes as necessary

# Mucous Membrane Route Inhalation via Metered-dose inhaler

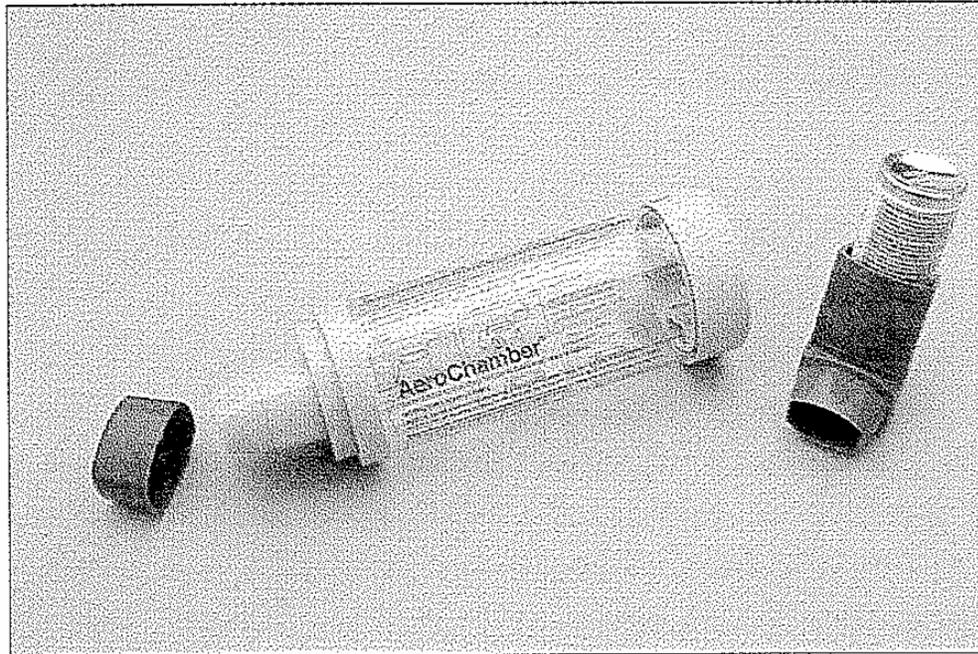
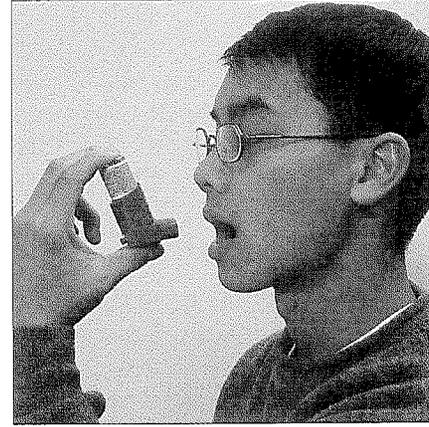


FIGURE 17-1 Example of a metered-dose inhaler (MDI) with spacer.

## Using a MDI



STEP 4d(1) One technique for use of the inhaler. The client opens lips and places inhaler in mouth with opening toward back of throat.



STEP 4d(2) One technique for use of the inhaler. The client positions the mouthpiece 1 to 2 inches from the mouth. This is considered the best way to deliver the medication.

## Using a MDI with a Aerochamber



# Mucous Membrane Route

## Vaginal Route

- Types
  - Anti-infective agents
  - Vaginal medications
    - Foams
    - Jellies
    - Creams
    - Suppositories
    - Medicated irrigations or douches
- Uses
  - Vaginal infections
  - Personal hygiene

# Mucous Membrane Route

## Vaginal Route

- Equipment:
  - MAR
  - Medication
  - Perineal pad
  - Washcloth
  - Gloves
  - Water soluble lubricant (if needed)

# Mucous Membrane Route

## Vaginal Route

- Technique:
  - Ask patient to void before inserting medication
  - Wash hands & Don gloves
  - Complete necessary assessment prior to administration
  - Patient should lie on her back with knees flexed
  - Drape patient to minimize exposure

# Mucous Membrane Route

## Vaginal Route

- Cleanse the vaginal orifice with warm water & washcloth
- Remove gloves & wash hands
- Replace gloves
- Fill applicator with medication if necessary
- Lubricate applicator or medication as necessary
- Spread labia with non-dominant hand

# Mucous Membrane Route

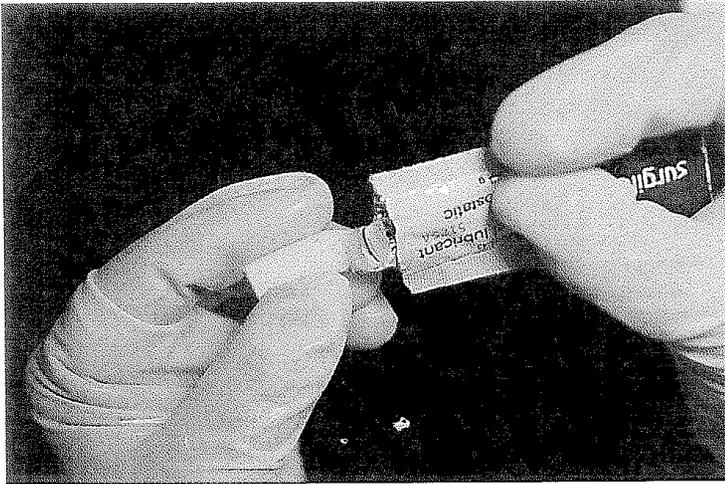
## Vaginal Route

- With the dominant hand gently insert the medication or applicator in a downward & backward direction
- If using applicator gently roll applicator & push plunger instilling the medication
- Remove applicator
- Ask patient to remain in supine position for 5-10minutes

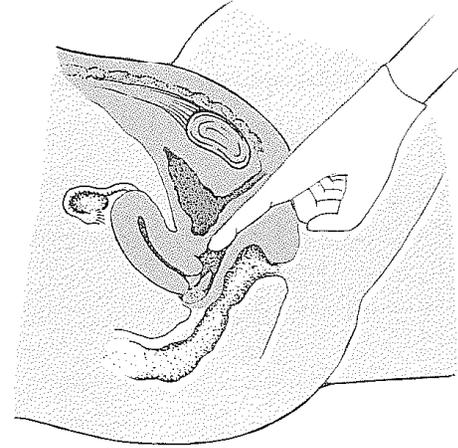
# Mucous Membrane Route

## Vaginal Route

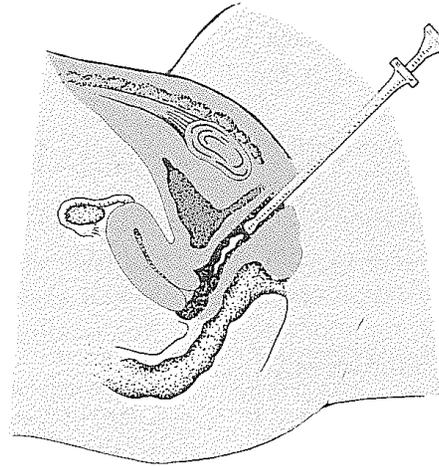
- Offer perineal pad
- Dispose applicator in red bag
- Remove gloves & wash hands
- Evaluate patient response to medication
- Document on MAR & if nurses notes as necessary



STEP 7a Lubricate tip of suppository.



STEP 7c Angle of suppository insertion.



STEP 8c Applicator inserted into vaginal canal. Plunger pushed to instill medication.