

#### Lecture 9



# Subject Medication Administration Part 1

**Theoretical** 

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A **medication** is a substance administered for the diagnosis, cure, treatment, or relief of a symptom or for prevention of disease.



### Factors affecting medication action

- 1. Developmental Factors. (During pregnancy women, Infants, Older adults)
- 2. Gender.
- 3. Diet. (For example, vitamin K, found in green leafy vegetables, can counteract the effect of an anticoagulant such as warfarin).
- 4. Environment. (For example, A client who takes a sedative or analgesic in a busy, noisy environment may not benefit as fully as if the environment were quiet and peaceful).

- 5. Psychological Factors. (For example, client who believes that codeine is ineffective as an analgesic may experience no relief from pain after it is given.)
- 6. Disease and illness. (For example, aspirin can reduce the body temperature of a feverish client but has no effect on the body temperature of a client without fever).
- 7. Time of Administration. (For example, the anti-infective agent ampicillin absorbs more rapidly on an empty stomach, but the antidepressant trazodone hydrochloride is absorbed more rapidly with food).

## Ten "Rights" of Medication Administration

- 1. Right Medication.
- 2. Right Dose.
- 3. Right Time.
- 4. Right Route.
- 5. Right Client.
- 6. Right Client Education.
- 7. Right Client Refuse
- 8. Right Documentation
- 9. Right Assessment.
- 10.Right Evaluation

#### ROUTES OF ADMINISTRATION

#### A. Oral

#### **Advantage**

- 1. Most common
- 2. Least expensive,
- 3. Most convenient route for most clients.
- 4. Not cause stress.

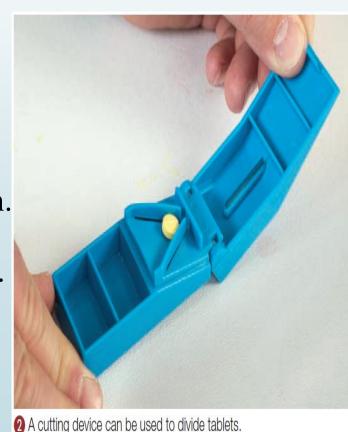
#### **Disadvantage**

- 1. Unpleasant taste of the drugs,
- 2. Irritation of the gastric mucosa,
- 3. Slow or irregular absorption from the GI tract,
- 4. Harm to the client's teeth.



#### Administration oral medication

- 1. Perform hand hygiene.
- 2. Assess allergies to medication (s).
- 3. Assess client's ability to swallow the medication.
- 4. Assess presence of vomiting or diarrhea.
- 5. Obtain the appropriate medication.
- 6. Check the expiration date of the medication.
- 7. Calculate the medication dosage accurately.
- 8. Provide for client privacy.
- 9. Introduce your self.



- 10. Assist the client to a sitting position or to a side-lying position.
- 11. Explain the purpose of the medication.
- 12. Administer the medication at the correct time.
- 13. Give the client sufficient water or preferred juice to swallow the medication.
- 14. Stay with the client until all medications have been swallowed.
- 15. Document each medication given.

#### **B. Sublingual**

In sublingual administration a drug is placed under the tongue, where it dissolves (for example: Nitroglycerin)

#### Advantage

- 1. Short time to action.
- 2. Largely absorbed into the blood vessels

#### **Disadvantage**

The medication should not be swallowed.



#### C. Topical

Topical applications are those applied to a circumscribed surface area of the body. They affect only the area to which they are applied.

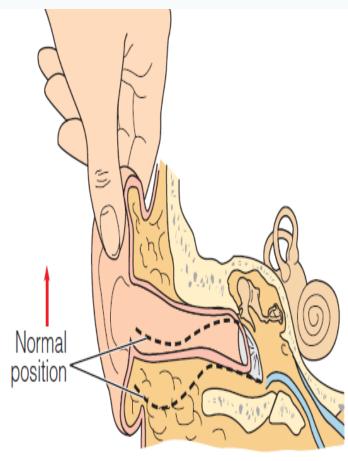
#### **Topical applications include the following:**

1. Dermatologic preparations—applied to the skin



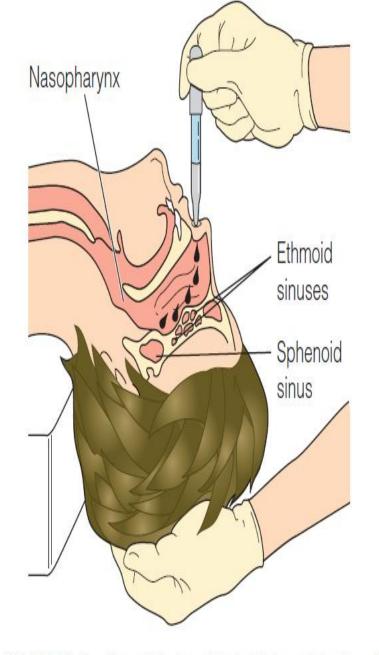
2- Instillations and irrigations—applied into body cavities or orifices, such as the urinary bladder, eyes, ears, nose, rectum, or vagina.

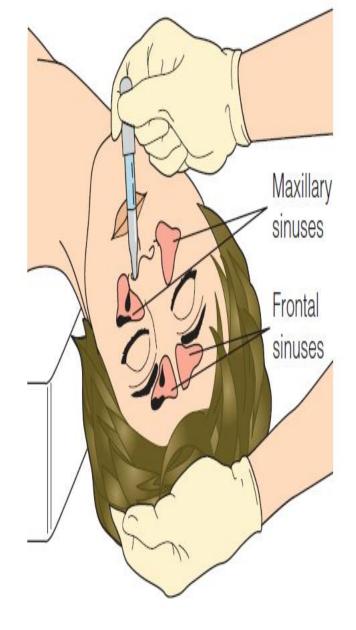




1 Straightening the adult ear canal by pulling the pinna upward and backward.

1 Instilling an eyedrop into the lower conjunctival sac.

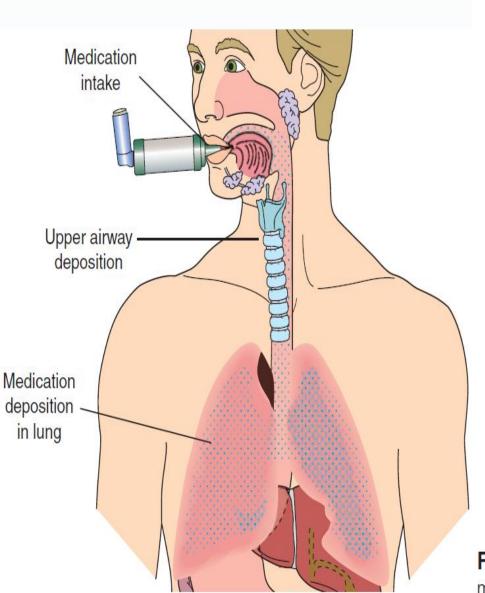




and sphenoid sinuses.

Figure 35-51 Position of the head to instill drops into the ethmoid Figure 35-52 Position of the head to instill drops into the maxillary and frontal sinuses.

# **3- Inhalations**—administered into the respiratory tract by a nebulizer (Air, oxygen, and vapor).





**Figure 35–57** ■ Placing MDI in mouth with lips sealed around the mouthpiece

#### Reference

Berman, A. T., Snyder, S., & Frandsen, G. (2022). Kozier

& Erb's. Fundamentals of Nursing: Concepts, Process,

and Practice (9 th) Edition.