Medication Interactions

*sometimes we want a medication to affect another medication a certain way and sometimes we don’t*

- Occur when one medication modifies the action of another
- A synergistic effect occurs when the combined effect of two medications is greater than the effect of the medications given separately
  the effect of multiple medications is better when given together

Therapeutic Range

- If too much of a medication is given, the more toxic it becomes
- If too little is given, it is not effective
- Must be in between the therapeutic range, **all based on time**
  - that is why some medications are given multiple times a day; so that it continues to have therapeutic effects

  refer to therapeutic range chart in powerpoint

Medication Dose Responses

- Onset: time it takes for a medication to produce a response
- Trough: minimum blood serum concentration before next scheduled dose
- Plateau: point at which blood serum concentration is reached and maintained
- Peak: time at which a medication reaches its highest effective concentration
- Duration: time medication takes to produce greatest result
- Biological half-life: time for serum medication concentration to be halved

Routes of Administration

- Non-parenteral, oral, sublingual, buccal
- Parenteral, ID, Sub Q, IM, IV
  - Intrathecal, intraosseous, intraperitoneal, intrapleural, intra-arterial only
  - administered by APRN or physician, not regular RN
- Topical
  - direct, body cavity
- Inhalation
- Intraocular—given in the eye

Oral Route

- Sublingual
  - tablet administered under the tongue
  - gets absorbed fast
- Buccal