Chapter 27

Exercise and Activity Needs
Lesson 27.1

- Define the key terms and key abbreviations in this chapter.
- Describe bedrest.
- Explain how to prevent the complications from bedrest.
- Describe the devices that support and maintain body alignment.
Lesson 27.1 (Cont.)

- Describe range-of-motion exercises.
- Describe 4 walking aids.
- Perform the procedures described in this chapter.
- Explain how to promote PRIDE in the person, the family, and yourself.
Illness, surgery, injury, pain, and aging can limit activity.

- Inactivity, whether mild or severe:
  - Affects every body system
  - Affects mental well-being

You assist the nurse in promoting exercise and activity in all persons to the extent possible.
Bedrest

- The doctor orders bedrest to:
  - Reduce physical activity
  - Reduce pain
  - Encourage rest
  - Regain strength
  - Promote healing

- These types of bedrest are common:
  - Strict bedrest (everything done for the person)
  - Bedrest (some ADL allowed)
  - Bedrest with commode privileges
  - Bedrest with bathroom privileges (bedrest with BRP)
Bedrest Complications

- Bedrest and lack of exercise and activity can cause the following serious complications:
  - Pressure injuries
  - Constipation and fecal impaction
  - Urinary tract infections and renal calculi (kidney stones)
  - Blood clots (thrombi)
  - Pneumonia (inflammation and infection of the lung)
  - Musculo-skeletal system complications
    - Contractures
    - Muscle atrophy
    - Orthostatic hypotension (postural hypotension)
Bedrest Complications (Cont.)

● These important nursing measures help prevent complications of bedrest:
  ➢ Good alignment
  ➢ Range-of-motion exercises
  ➢ Frequent position changes
Supportive devices are often used.

- Bed-boards are placed under the mattress to prevent it from sagging.
- Foot-boards prevent plantar flexion that can lead to footdrop.
- Trochanter rolls prevent the hips and legs from turning outward.
- Hip abduction wedges keep the hips abducted.
- Hand rolls or hand grips prevent contractures of the thumb, fingers, and wrist.
- Splints keep the elbows, wrists, thumbs, fingers, ankles, and knees in normal position.
- Bed cradles keep the weight of top linens off the feet and toes.
Range-of-Motion Exercises

- The movement of a joint to the extent possible without causing pain is the range of motion (ROM) of that joint.
  - Active ROM exercises are done by the person.
  - With passive ROM, someone moves the joints through their range of motion.
  - With active-assistive ROM, the person does the exercises with some help.
Ambulation

- Ambulation is the act of walking.
- After bedrest, activity increases slowly and in steps.
- Persons who are weak and unsteady from bedrest, illness, surgery, or injury need help walking.
  - Follow the care plan.
  - Use a gait (transfer) belt if the person is weak or unsteady.
  - The person also uses hand rails along the wall.
  - Always check the person for orthostatic hypotension.
Walking Aids

- Walking aids support the body.
  - The physical therapist or nurse measures and teaches the person to use the device.
  - Crutches are used:
    - When the person cannot use one leg
    - When one or both legs need to gain strength
    - When the person has permanent leg weakness
When crutches are used, follow these safety measures:

- Check the crutch tips.
  - Replace worn or torn crutch tips.
  - Dry wet tips with a towel or paper towels.
- Check crutches for flaws.
- Tighten all bolts.
- Street shoes are worn.
  - They must be flat and have non-skid soles.
- Clothes must fit well.
- Practice safety rules to prevent falls.
- Keep crutches within the person’s reach.
Canes and Walkers

- Canes are used for weakness on one side of the body.
  - They help provide balance and support.
  - A cane is held on the strong side of the body.
  - The person walks as follows:
    - The cane is moved forward 6 to 10 inches.
    - The weak leg is moved forward even with the cane.
    - The strong leg is moved forward and ahead of the cane and the weak leg.

- A walker gives more support than a cane.
  - Wheeled walkers are common.
    - The person pushes the walker about 6 to 8 inches in front of his or her feet.
Braces do the following:
- Support weak body parts
- Prevent or correct deformities
- Prevent joint movement

A brace is applied over the ankle, knee, or back.
- To prevent skin breakdown:
  - Keep skin and bony points under braces clean and dry.
  - Report redness or signs of skin breakdown at once.
  - Report complaints of pain or discomfort.

The care plan tells you when to apply and remove a brace.