

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.

Exercise and Activity

- 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

Positioning

- 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

Crutches

- 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.

Orthotic Devices

- 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.