

Chapter 14

Body Mechanics

Lesson 14.1

- Define the key terms and key abbreviations in this chapter.
- Explain the purpose and rules of body mechanics.
- Identify the risk factors for work-related injuries.
- Identify the signs, symptoms, and activities associated with back injuries.

Lesson 14.1 (Cont.)

- Explain how to prevent work-related injuries.
- Position persons in the basic bed positions and in a chair.
- Explain how to promote PRIDE in the person, the family, and yourself.

Body Mechanics

- Body mechanics means using the body in an efficient and careful way.
- It involves good posture, balance, and using your strongest and largest muscles for work.

Principles of Body Mechanics

- Body alignment (posture) is the way the head, trunk, arms, and legs are aligned with one another.
 - Good alignment:
 - Lets the body move and function with strength and efficiency
 - Is needed when standing, sitting, and lying down

Principles of Body Mechanics (Cont.)

- Base of support is the area on which an object rests.
 - A good base of support is needed for balance.
- To handle and move persons and heavy objects, use your strongest and largest muscles in the shoulders, upper arms, hips, and thighs.
- For good body mechanics:
 - Bend your knees and squat to lift a heavy object.
 - Hold items close to your body and base of support.
- All activities require good body mechanics.

Work-Related Injuries

- Musculo-skeletal disorders (MSDs) are injuries and disorders of the muscles, tendons, ligaments, joints, and cartilage.
 - Can be caused or made worse by the work setting.
 - Early signs and symptoms include pain, limited joint movement, or soft tissue swelling.

MSD Risk Factors

- Force
- Repeating action
- Awkward postures
- Heavy lifting

Preventing MSDs

- Ergonomics is the science of designing a job to fit the worker.
 - The goal is to prevent a serious and disabling work-related musculo-skeletal disorder (MSD).
 - MSDs are injuries and disorders of the muscles, tendons, ligaments, joints, and cartilage.
 - They also can involve the nervous system.
- Early signs and symptoms of MSDs include:
 - Pain
 - Limited joint movement
 - Soft tissue swelling

Positioning the Person

- Regular position changes and good alignment:
 - Promote comfort and well-being
 - Make breathing easier
 - Promote circulation
 - Prevent contractures and pressure injuries
- Whether in bed or in a chair, the person is repositioned at least every 2 hours.
 - Follow the nurse's instructions and the care plan.

Positioning the Person (Cont.)

- Follow these guidelines to safely position a person:
 - Use good body mechanics.
 - Ask a co-worker to help you if needed.
 - Explain the procedure to the person.
 - Be gentle when moving the person.
 - Provide for privacy.
 - Use pillows as directed by the nurse for support and alignment.
 - Provide for comfort after positioning.
 - Place the call light within reach after positioning.
 - Complete a safety check before leaving the room.

Positioning the Person (Cont.)

- Fowler's position is a semi-sitting position.
 - The head of the bed is raised between 45 and 60 degrees.
 - The knees may be slightly elevated.
- Supine position (dorsal recumbent position)
 - This is the back-lying position.
- In the prone position, the person lies on the abdomen with the head turned to one side.
- Lateral position (side-lying position)
 - The person lies on one side or the other.

Positioning the Person (Cont.)

- Sims' position (semi-prone side position) is a left side-lying position.
 - The upper leg is sharply flexed so it is not on the lower leg.
 - The lower arm is behind the person.
- Chair position
 - Persons who sit in chairs must hold their upper bodies and heads erect.
 - A pillow is not used behind the back if restraints are used.
 - Some persons have positioners.
 - Ask the nurse about their proper use.
 - Some people require postural supports.