

Chapter 28

RANGE OF MOTION EXERCISES

What You Will Learn

- The purposes of range of motion exercises
- Types of range of motion exercises
- The In-Home Aide's responsibilities when giving range of motion exercises
- How to give range of motion exercises according to proper procedure

Purposes of Range of Motion Exercises (ROM)

The musculoskeletal system must be exercised to remain healthy. ROM exercises prevent joints from becoming stiff and contractures (deformities) from developing. ROM exercises allow clients' joints to move more freely and as a result, the clients remain more independent. They prevent the loss of minerals from bones (osteoporosis) and improve circulation. ROM exercises also prevent muscles from losing strength and shrinking (atrophy).

Types of Range of Motion Exercises

Active ROM means that the client performs the exercises alone or uses a device such as a pulley or bicycle.

Passive ROM means that the exercise is done for the client who is unable to move independently. It involves moving the client's body parts through a series of exercises.

The In-Home Aide's Responsibilities When Giving Range of Motion Exercises

Always check with the supervisor/nurse and the plan of care for instructions or limitations before starting ROM exercises. Always handle the client gently with open palms. Be aware of the normal ROM for each joint. Support each joint above and below the joint being exercised. This prevents joint pain and possible injury. Exercise as many times as ordered, usually three to five times. Never exercise or stretch a joint to the point of pain. Exercise joints only within the range of easy movement. Always stop the exercise if discomfort, pain, or spasms develop and contact the supervisor/nurse for further instructions.

In addition to regularly scheduled range of motion exercises, exercises can be incorporated into activities of daily living. Allow client to assist in procedure as much as possible.

Remember, hyperextension of the neck is not possible with the client in a supine position.

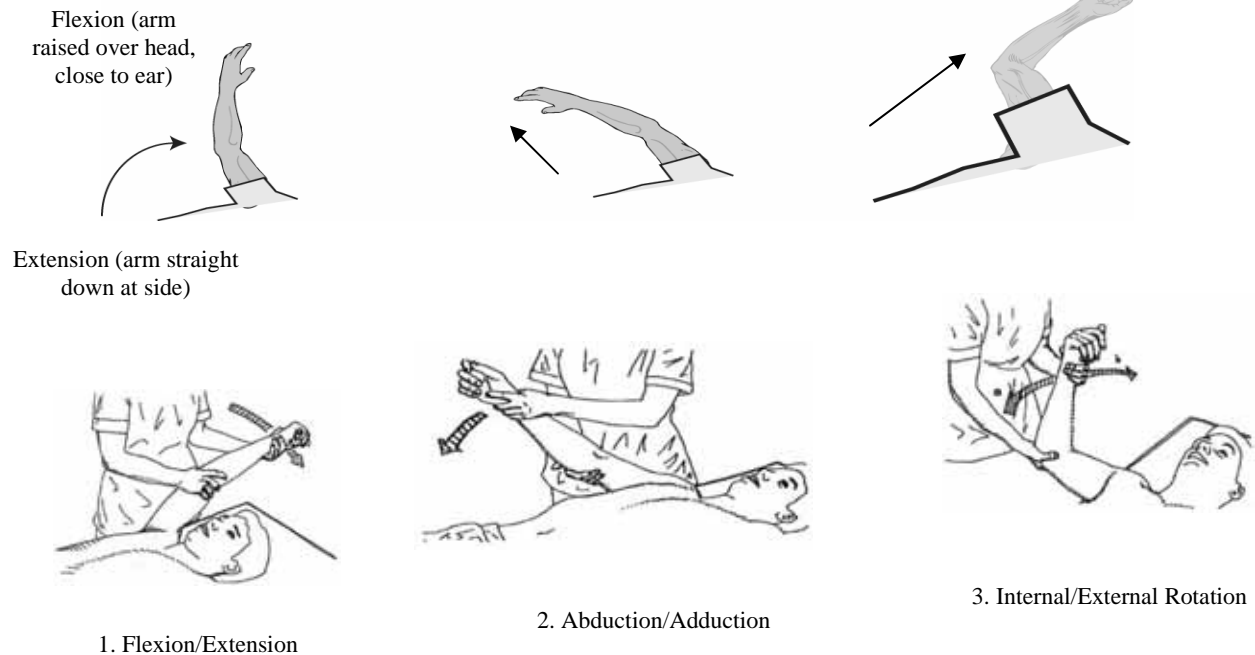
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PROCEDURE FOR GIVING RANGE OF MOTION EXERCISES:

NOTE: CHECK SERVICE PLAN FOR INSTRUCTIONS BEFORE PERFORMING RANGE OF MOTION EXERCISES.

1. Wash your hands.
2. Explain what you are going to do.
3. Provide privacy. Make sure client is wearing adequate clothing.
4. Raise bed to a comfortable working height if possible.
5. Assist client into supine position.
6. Shoulder (see Figure 28.1).

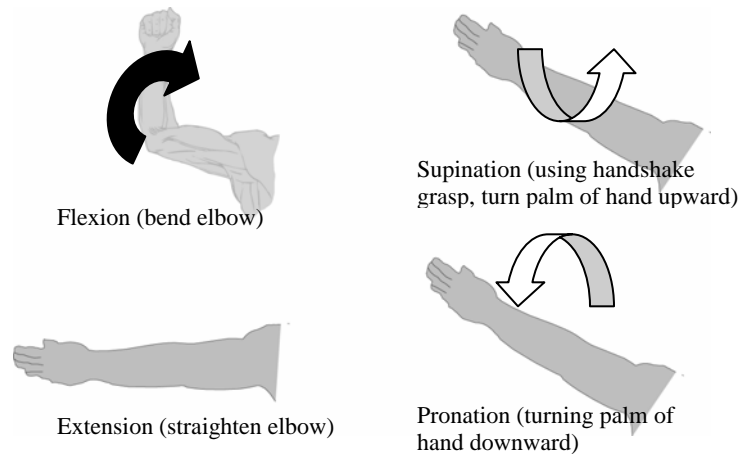


- a. Flexion/extension.
 - 1) Support the arm at the wrist and elbow and lift the arm toward the ceiling. Continue lifting the arm over the client's head until you feel resistance.
 - 2) Slowly lower the arm to the client's side.
- b. Abduction/adduction.

- 1) Support the arm at the elbow and shoulder and move the arm out to the side. Continue moving toward client's head.
 - 2) Slowly move the arm back toward the center of body.
- c. Internal/external rotation.
- 1) Move the arm away from the body to shoulder level.
 - 2) Bring the hand forward to touch the bed and then backward to touch the bed.

7. Elbow (see Figure 28.2).

*Figure 28.2
Elbow Exercises*



a. Flexion/extension.

- 1) Bend the arm at the elbow, touch the shoulder, and then straighten the arm.
- 2) Bend the arm at the elbow and touch the chin, then straighten the arm.

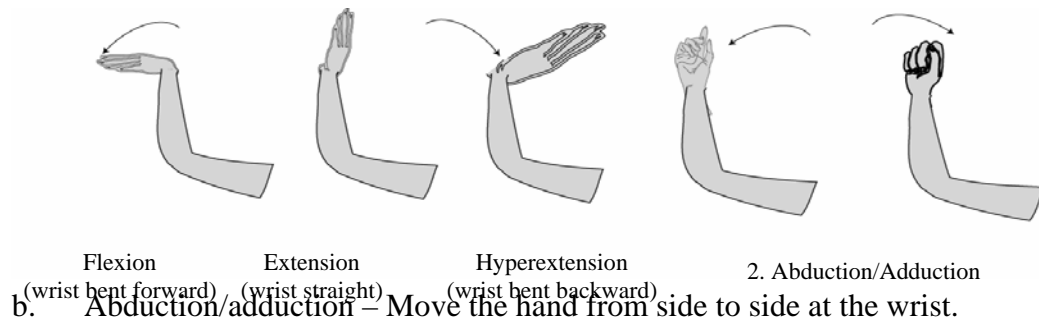
b. Supination/Pronation.

- 1) Hold the client's hand in a handshake position; support the arm at the elbow joint.
- 2) Turn palm of the hand toward the floor and then toward the ceiling.

8. Wrist (see Figure 28.3).

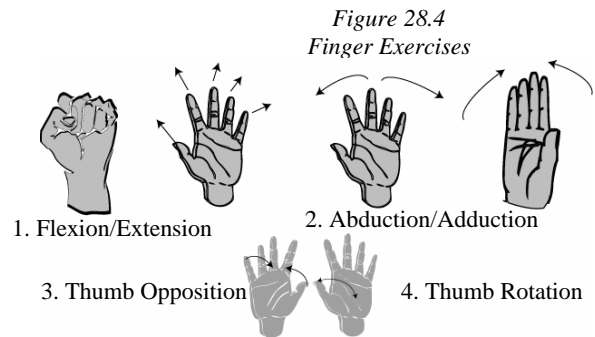
- a. Flexion/extension/hyperextension – Support arm and hand; bend the wrist forward, straighten it, and then bend it backward.

Figure 28.3
Wrist Exercises



9. Fingers (see Figure 28.4).

- a. Flexion/extension – support the hand at the wrist. Instruct client to make a clenched fist and then relax it. Make sure that the thumb is on top of the hand fully.



- b. Abduction/adduction – move each finger away from the nearest finger and then return it.
- c. Thumb opposition – bend the little finger toward inner hand and stretch the thumb toward the little finger and move it to the base of the little finger and back. Repeat with each finger.
- d. Thumb rotation – move the thumb in a circle one direction and then the other direction.

10. Hip and knee (see Figure 28.5).

- a. Flexion/extension
- 1) Support the leg at the knee and ankle joints and keep the knee straight. Raise and lower the leg.
 - 2) Bend the knee and move toward the chest; slowly straighten the knee.

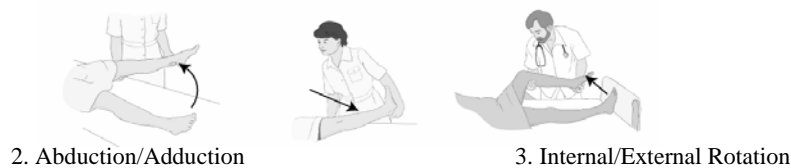
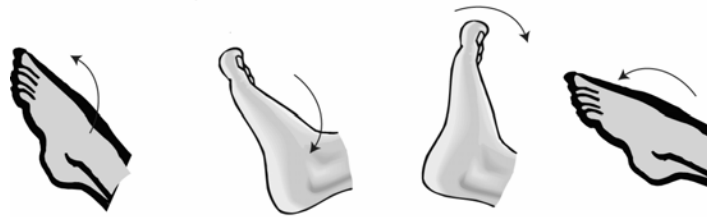


Figure 28.5
Hip and Knee Exercises

- b. Abduction/adduction.
 - 1) Move the leg straight out to the side of the body until you feel resistance.
 - 2) Slowly move the leg back toward the center of the body.
- c. Internal/external rotation – Support knee and ankle joints; move the ankle in toward the opposite leg and then outward.

11. Ankle (see Figure 28.6).

*Figure 28.6
Ankle Exercises*



1. Inversion/Eversion

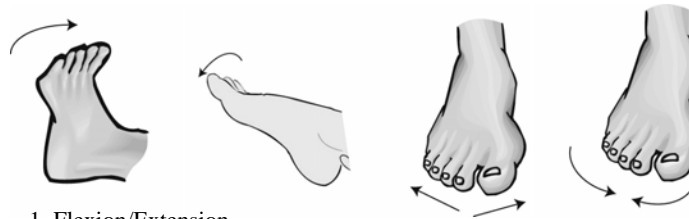
2. Dorsiflexion/Plantar flexion

- a. Inversion/eversion – support the foot at the ankle joint and turn the foot toward the opposite foot and then way from the opposite foot.
- b. Dorsiflexion/plantar flexion – bend the foot up toward the knee then down toward the floor.

12. Toes (see Figure 28.7).

- a. Flexion/extension – Bend and then straighten the toes.
- b. Abduction/adduction – Move each toe toward the next toe and then away from the next toe.

*Figure 28.7
Toe Exercises*



1. Flexion/Extension

2. Abduction/Adduction

- 13. Lower bed to a position of safety; raise side rails as directed by service plan.
- 14. Make the client comfortable; place call signal within reach.
- 15. Wash your hands.
- 16. Record and report.

Chapter Review

1. What are the purposes of range of motion exercises?
2. What are the types of range of motion exercises?
3. What are the In-Home Aide's responsibilities when giving range of motion exercises?
4. How do you give range of motion exercises according to proper procedure?

Student Exercise

Complete the following short answer questions.

1. List three purposes of range of motion exercises.
 - a.
 - b.
 - c.
2. List two types of range of motion.
 - a.
 - b.
3. List five responsibilities of the In-Home Aide in giving range of motion exercises.
 - a.
 - b.
 - c.
 - d.
 - e.

Circle the letter of the correct answer.

4. When giving range of motion exercises, the In-Home Aide should support the joint:
 - a. at the joint with a firm grip.
 - b. below the joint.
 - c. above and below the joint.
 - d. above the joint only.