

Practical Session: Neurological Assessment Methods for Elderly Patients

Duration: 1 hour and 30 minutes

Target Group: Undergraduate physiotherapy students

Session Objectives

By the end of the session, students will be able to:

- Demonstrate commonly used neurological assessment tools in elderly patients.
- Identify abnormal neurological findings related to common geriatric conditions (e.g., stroke, Parkinson's disease, peripheral neuropathy).
- Interpret assessment results and formulate a physiotherapy diagnosis.

Materials Needed

- Printed case scenarios
- Neurological assessment forms/checklists
- Reflex hammers
- Sensory testing tools (cotton wool, tuning fork 128 Hz, safety pin)
- Stopwatches
- Chairs with back support
- Tape for marking walking path
- Video resources for demonstration

Session Structure

Students rotate through 3 stations, spending 15 minutes each.

Station 1: Assessing Motor Function (Strength, Tone, Reflexes)

Tools/Methods:

- Manual Muscle Testing (MMT) for key muscle groups
- Modified Ashworth Scale (for tone assessment)
- Deep Tendon Reflexes (biceps, triceps, patellar, Achilles) using reflex hammer

Resource: <https://www.youtube.com/watch?v=PEJJv3gJh74>

Station 2: Assessing Sensory Function

Tools/Methods:

- Light touch (cotton wool)
- Pain (safety pin – sharp/dull discrimination)
- Vibration (tuning fork at bony prominences)
- Proprioception (joint position sense at fingers/toes)

Resource: <https://www.youtube.com/watch?v=5ob5uJMgZOo>
<https://www.youtube.com/watch?v=PEJJv3gJh74>

Station 3: Assessing Coordination & Gait

Tools/Methods:

- Finger-to-nose test, heel-to-shin test (coordination)
- Rapid alternating movements (dysdiadochokinesia)
- Gait assessment: Observe walking pattern, speed, base of support, use of aids
- Functional test: 10-Meter Walk Test / Observation of Parkinsonian gait features

Resource: https://www.youtube.com/watch?v=Qo0_8PzMX08
<https://www.youtube.com/watch?v=jKZcQM5PGq8>
<https://www.youtube.com/watch?v=alGXuF1aB14>

Group Discussion & Reflection (30 min)

- Each group demonstrates the neurological assessment techniques.
- Peer feedback on assessment technique and interpretation.
- Q&A session with facilitator.

