





## Rehabilitation in Geriatric Care

#### For MO























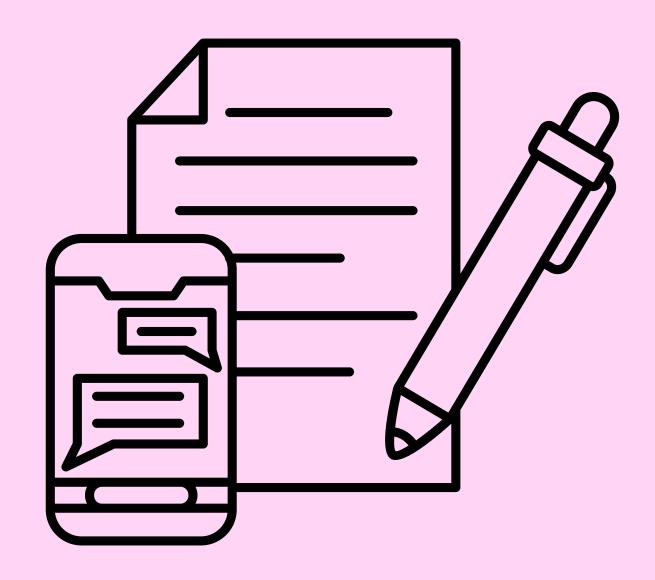






## CONTENTS

- Introduction
- Approach
  - Prevention
  - Accommodation
  - Restorative
- Summary













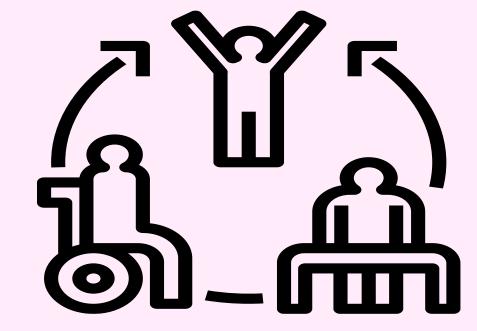






#### REHABILITATION

- The root word is 'habilitate' (Latin 'habitare') means 'make fit. 'The Latin prefix 're-' gives the meaning 'again'
- 'Rehabilitation' means 'to restore to a former position or status'
- Rehabilitation (WHO) is defined as "a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment".



















# REHABILITATION IN THE OLDER PERSON

#### Goals

- Improve mobility
- Inculcate self-care independence
- Improve quality of life

#### Assess

- Premorbid functioning
- Cognitive status
- Vision, hearing and joint position sense
- Caregiver input

















### INTERDISCIPLINARY TEAM

A rehabilitation program is a combination of :

- Physical
- Occupational
- Speech therapy
- Psychological counseling
- Social work services to help persons maintain or recover physical capacities















#### **APPROACH**

#### **Prevention Approach**

- Accident preventiona) Home assessment and home hazard checklist b) Environment
  - c) Fall prevention
- Activity promotion

   a) Activity configuration
   b)Environmental
   familiarity

# Accommodation Approach

- Assistive technology
- Leisure
- Psychological support
- Caregiver training
- Palliative care

#### Restorative Approach

- Strengthening
- Endurance
- Gait
- Balance
- Coordination



















### HEALTHY AGEING

#### Lifestyle modification:

- Patient education
- Leisure
- Neck, back, shoulder and knee strengthening exercises













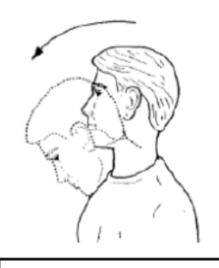


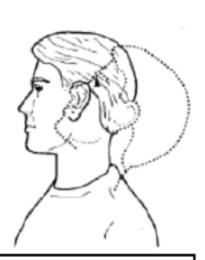


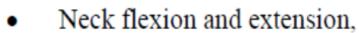
#### NECK

#### 1) NECK RANGE OF MOTION EXERCISES

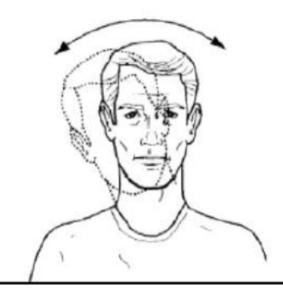
These exercises can be done while sitting or standing



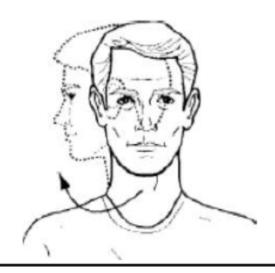




- Repeat 5 times, 2 to 3 times daily
- Can be increased to 10 times after a week.



- Neck bending sideways.
- Repeat 5 times, 2 to 3 times daily.
- Can be increased to 10 times after a week.



- Neck rotation sideways.
- Repeat 5 times. 2 to 3 times daily
- Can be increased to 10 times after a week.











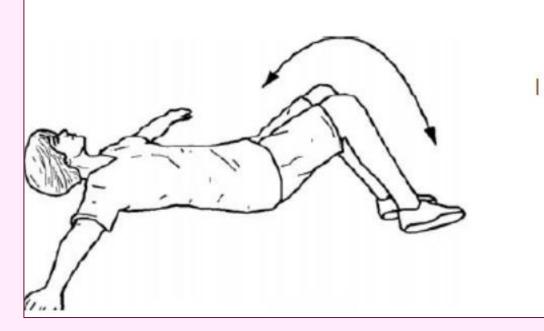






#### BACK

#### Lumbar Flexion with Rotation



- Lie on your back with your hands at your side and your knees bent.
- Rotate your knees towards right and left side. Repeat exercise 5 times each side.
- Two to three times daily.
- This can be increased to 10 times after a week.

#### **Bridging**



- Tighten your abdominal muscles to keep your back in the neutral position.
- Use your buttock muscles to slowly rise off the surface without bending your lower back.
- Hold position for 5 seconds
- Repeat exercises 5 times, repeat2 to 3 times daily can

be increased to 10 times after a week.











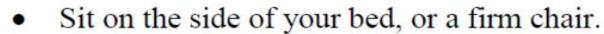






#### **KNEE**

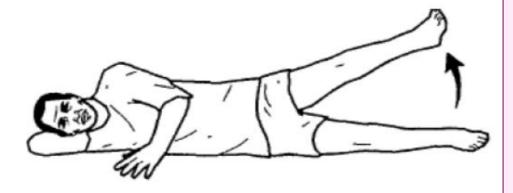
#### **Dynamic Quads**



- Raise your foot until the knee is straight.
- Hold position for 5 seconds. Slowly lower your foot and relax.
- Repeat exercises 5 times, 2 to 3 times daily
- This can be increased to 10 times after a week.

#### **Hip Abduction**

- Lie on your side.
- Bend your arm closest to the bed to support your head as shown.
- Place your other hand in front of your trunk for balance.
- With legs straight, lift your leg straight up (as shown) to raise your heel about 10 inches off the bed.
- Hold position for 5 seconds. Slowly lower your leg and relax.
- Repeat exercises 5 times, 2 to 3 times daily
- This can be increased to 10 times after a week.



















### 1. ACTIVITY PROMOTION

- Link older adults with activities that have a meaning
- Connect them with others, who have the same preferences

- Ascertain what specific self-care activities are perceived as vital to the individual
- Use memory boxes or go down memory lane with them as reminiscence therapy



















#### Activity configuration and environmental familiarity

- Routine activity spaces independent
- Occasional activity spaces dependent

#### Daily Schedule Wednesday Thursday Time Monday Tuesday Friday Saturday 8:30 9:30 10:30 11:30 12:30pm 1:30 2:30 3:30 4:30 5:30 6:30 7:30 8:30 9:30 10:30 11:30 12:30am

















#### 2. ACCOMMODATION APPROACH

Use of compensatory strategies:

- Smart phones with speed dial to a relative/close friend/emergency service.
- One can use a bell, which the patient can ring when he or she wants anything.
- Screen magnification for reading on the computer/laptop/i-pad etc
- Wheelchairs and commode chairs
- Leisure activities











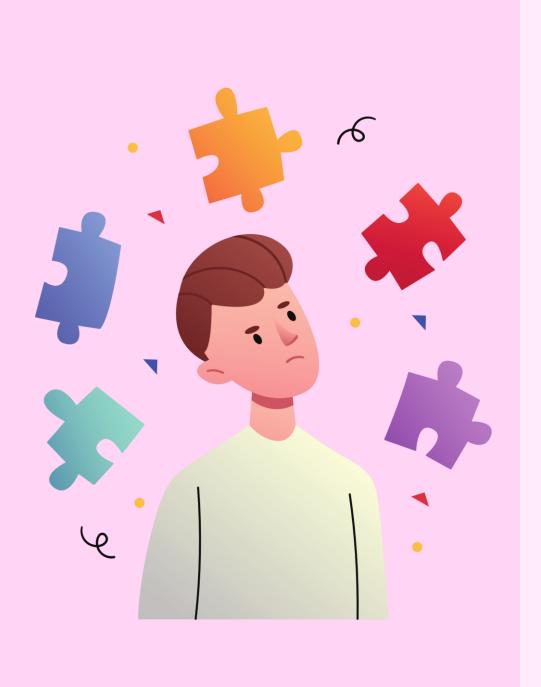






# PATIENTS WITH COGNITIVE PROBLEMS

- Do not make any major modifications
- Reduce clutter
- Label drawers and cabinets by their contents
- Arrange commonly used objects in the same place
- Jot down important appointments
- Orientation



















### PATIENTS WITH VISUAL PROBLEMS

- Lighting
- Contrast
- Bold print
- Flooring/Background
- Regular reviews optometrist/ophthalmologist

















### PATIENTS WITH HEARING PROBLEMS

- Approach the older adult from the front
- Face the older adult directly
- Check that hearing aids are fitted properly and that batteries are in working order
- Ensure adequate lighting
- Avoid background noise
- Speak clearly using a low tone voice and moderate rate of speech
- Write a message, if necessary
- Refer to an ENT specialist and a Speech and Language therapist for a complete evaluation

















# PATIENTS WITH NEUROMUSCULAR, MOTOR OR MOBILITY PROBLEMS

- Environment is free of hazards
- Appropriate height of chairs, beds, dresses, clothes and toilet seats



















### CARDIAC FAILURE

- Endurance
- Activities of daily living











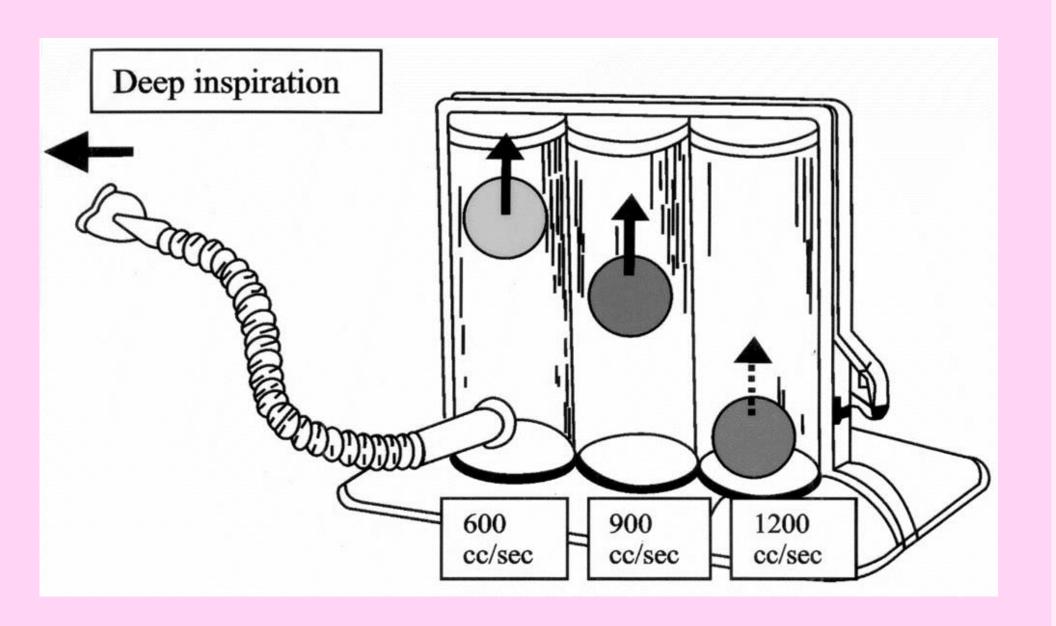






## **LUNG PATHOLOGY**

- Incentive spirometry
- Chest physiotherapy
- Breathing exercises
- Lifestyle modification















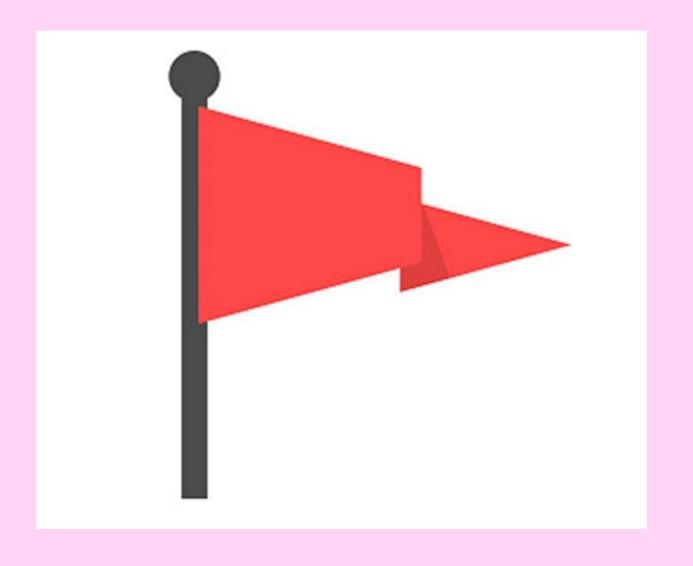




## STROKE - RED FLAGS

#### Red Flags:

- Altered consciousness
- Poor swallow
- Poor communication
- Poor sitting balance
- Dislocation of shoulder



















#### STROKE

#### Bed exercises:

- Transfers check if patient lie on bed
- Assessment of care givers
- Muscle strengthening Graded
- Prevention of shoulder dislocation
- Hand functions holding tumbler to hand to mouth rom, ADL activities











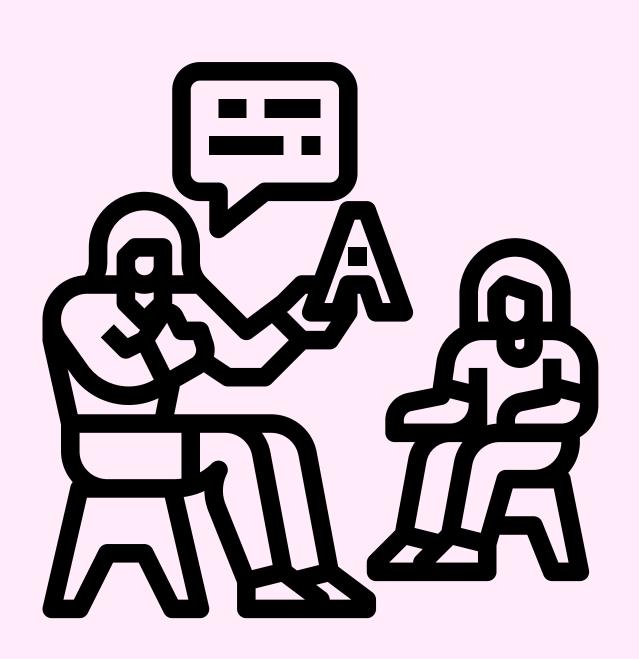






### STROKE - SPEECH PATHOLOGIST

- Communication
- Communication board
- Eye closure, grunts
- Monosyllables
- Read/Repeat
- Encourage
- Care Education
- Frustration/ Tiring out



















### STROKE - SPEECH PATHOLOGIST

- Check if the patient can obey commands
- Assess if the patient can be made to sit up
- Check oral cavity for any lesions in the mouth, drooling of saliva, pocketing of food, absence of teeth
- Pooling of secretions
- Check for gurgle-y voice
- Gag reflex



















#### WHEN NOT TO ASSESS

- Patient is drowsy and not able to obey commands
- Patient cannot made to sit up
- Absence of gag reflex













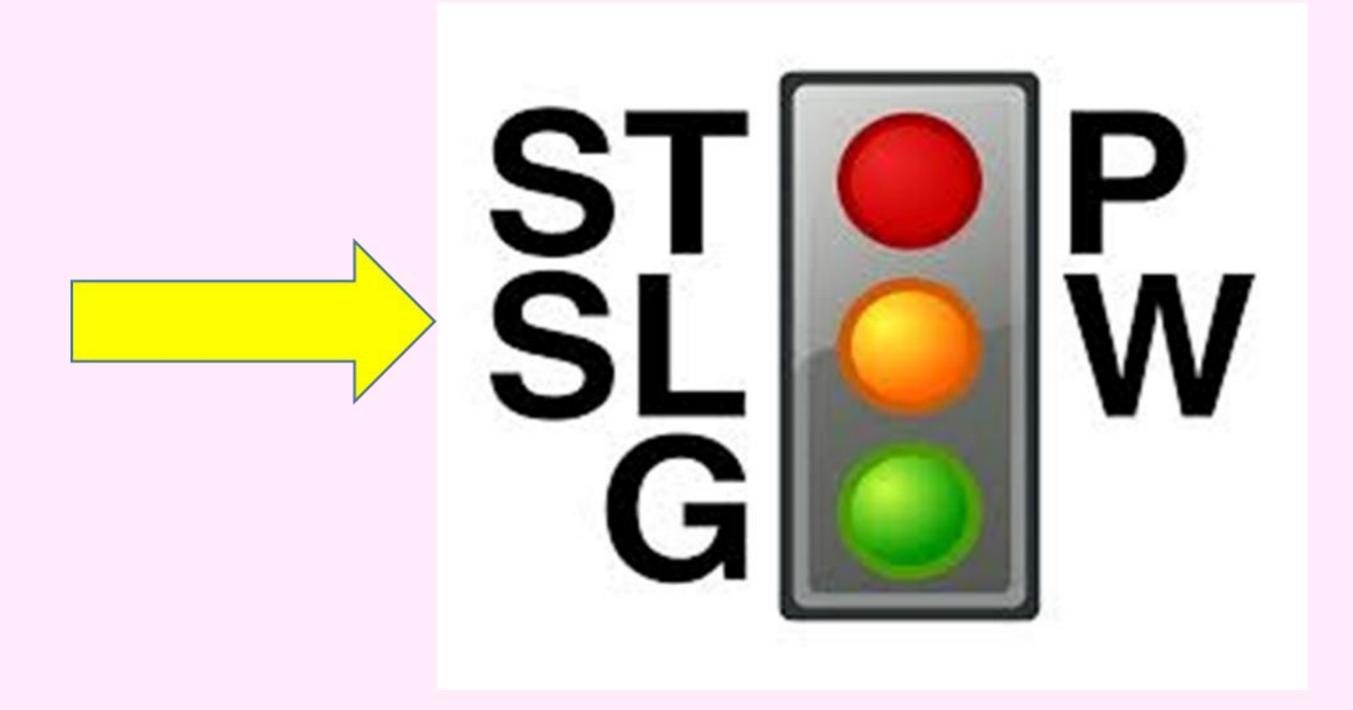






### WAIT

Patient swallows a few sips and then coughs













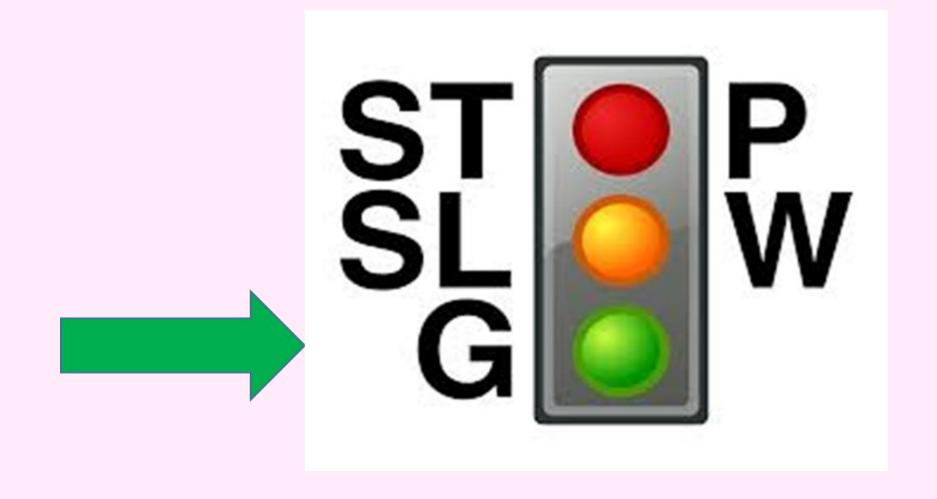






#### GO

- Tolerates pureed feeds
- Tolerates liquids
- Tolerates that day's calorie requirement (eg.1500kcal/day)



















# **TOILET SEATS**

#### Commode chair



#### Toilet seat raiser



















# OSTEOARTHRITIS - HIP AND KNEE

- Pain relief hot or cold
- Use of aids offloading





















# WALKING AIDS



















### **WALKING AIDS**

- Single point cane: Can help redistribute weight, and to provide tactile information about the ground
- Multiple point cane: It provides more stability for individuals who require more assistance with balancing
- Quadripod cane: Gives a wide base of support and extra stability
- Standard Walker: Improves upper extremity strength and coordination
- Wheeled walker: Increased manoeuvrability, when compared with a standard walker













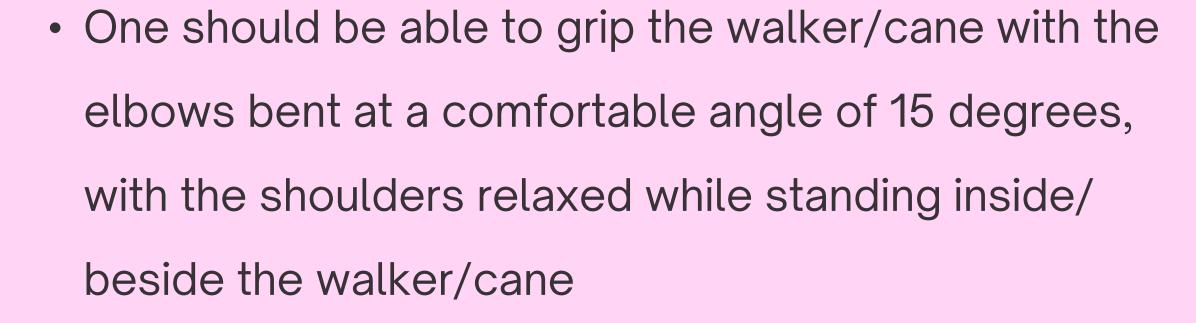






# IDEAL HEIGHT OF WALKER/CANE

· The height of the walker/cane needs to be adjusted





 The height could be also adjusted to the level of the greater trochanter of the patient

















### HOW TO WALK INTO A WALKER

- The patient stands with the walker in front of him/her and grips it with both hands
- Ensure all four ferrules or wheels of the walker are well grounded before taking a step
- The elbows should be bent at a comfortable angle
- Next, place the weaker foot into the walker. The foot should land squarely inside the walker area
- Do not step too close to the front of the walker. The patient's body should be in the center of the walker

















- Standing too far away from the walker can cause it to tip backward, NB If both legs were operated, step into the walker with the leg that feels weaker.
- Then step forward with the other leg, placing it in front of the weaker leg



















### **USE OF A CANE**

- Right knee osteoarthritic pain:
  - The patient should hold the cane in their left hand, and weight bear on the left leg
  - Move the cane and the right leg forward simultaneously
  - If they cannot do this simultaneously, they can move the cane first followed by the right leg (affected leg) and then move their left leg (unaffected leg) forward

















## USE OF A CANE

- To go up one step or a curb:
  - Step up with the unaffected leg first
  - Balance the weight of the body on the unaffected leg
  - Bring the cane and affected leg up to meet the unaffected leg

Use the cane to aid in balance



















# 3. RESTORATIVE APPROACH - BED EXERCISES

- Active range of motion exercises upper and lower limbs
- Sitting with maximal assistance
- Approach patient from affected side
- Limb exercises and chest physiotherapy









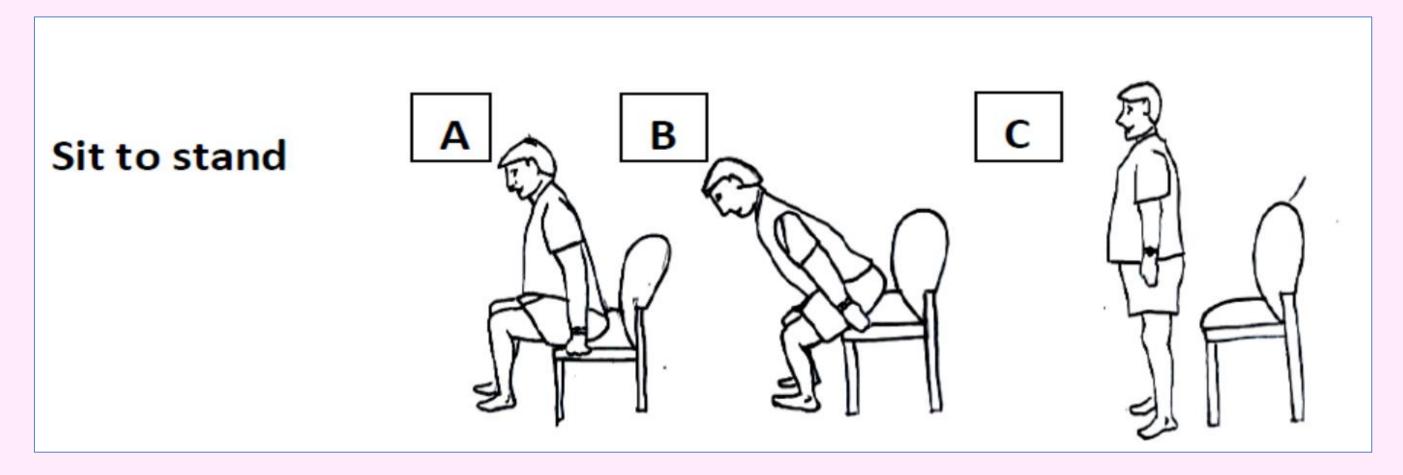








#### GAIT AND BALANCE



- A. Sit on the edge of the chair, feet apart. Lean slightly forwards
- B. Stand up slowly. Do not use your arms. Keep looking forwards, not down
- C. Stand upright before slowly sitting down. Repeat this 5 times
- D. Gradually increase this every few days until you can do 10 times at each sitting

Progression: Gradually try to decrease the amount of support your hands are giving you, until you can stand up and sit down without using your arms









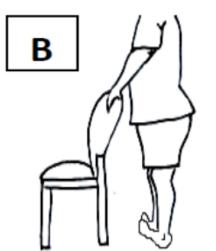






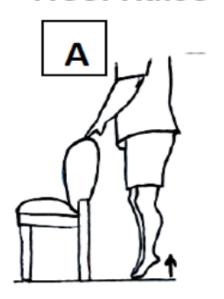


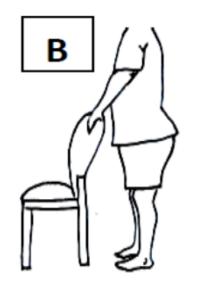




- A. Rest your hands on the back of a chair.
- B. Lift both foot toes off the floor as far as is comfortable. The movement should be slow and controlled.
- C. Repeat 5 times at each sitting.
- D. Gradually add one more repetition every few days until you can do this 10 times at each sitting.

#### **Heel Raise**





- A. Rest your hands on the back of a chair.
- B. Lift both heels slowly off the floor, as far as possible
- C. Repeat 5 times at each sitting.
- D. Gradually add one more repetition every few days until you can do this 10 times at each sitting.











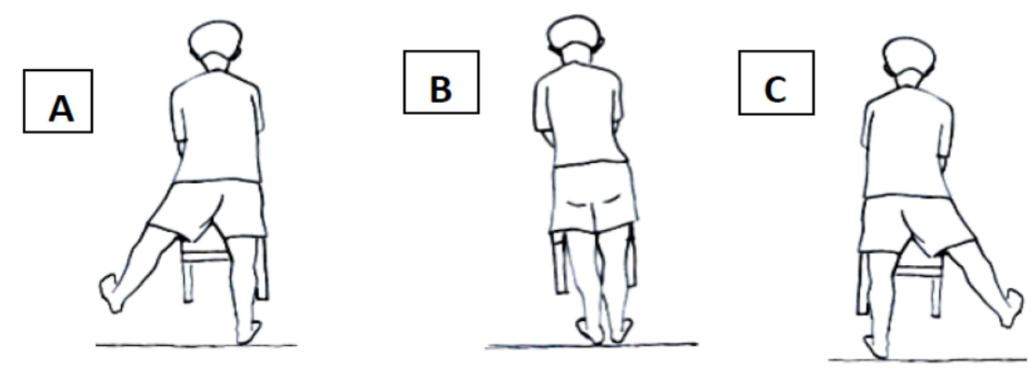








#### Side Leg Lift



- A. Rest your hands on the back of a chair.
- B. Raise your left leg to the side as far as possible, keeping your back and hips straight. Avoid tilting to the right.
- C. Return to the starting position.
- D. Now raise your right leg to the side as far as possible and then return to the starting position
- E. Repeat the exercise 3 to 5 times with each leg, at each sitting.
- F. Gradually increase this every few days until you can do it 10 times with each leg at each sitting.









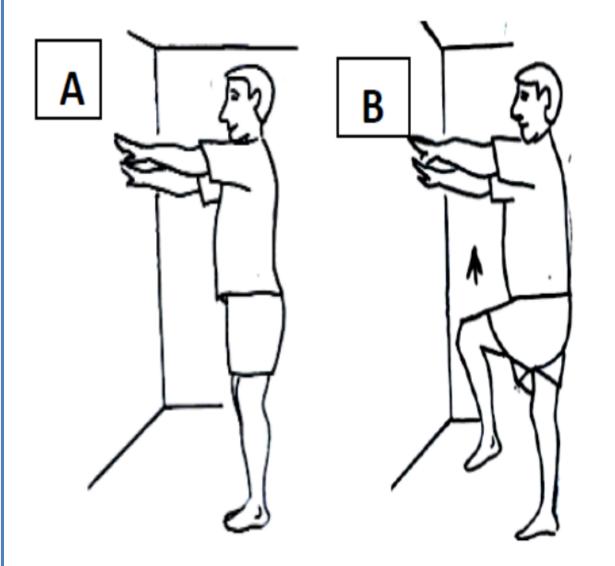








#### One Leg Stand



- A. Stand facing the wall, with arms outstretched and your fingertips touching the wall.
- B. Lift your left leg, gently place your foot back on the floor.
- C. Hold the lift for 3 seconds. Repeat this with the other leg.
- D. Do it 5 times on each side at each sitting.

















### SUMMARY

- Identify strengths
- Floor plans
- "Take the patient home with you"
- Set goals
- Rewards
- Repetition
- Patient and career education
- Improvise/innovate









# Thank You











