



Fall Prevention in the Community Physiotherapy Exercise Series

Target Audience

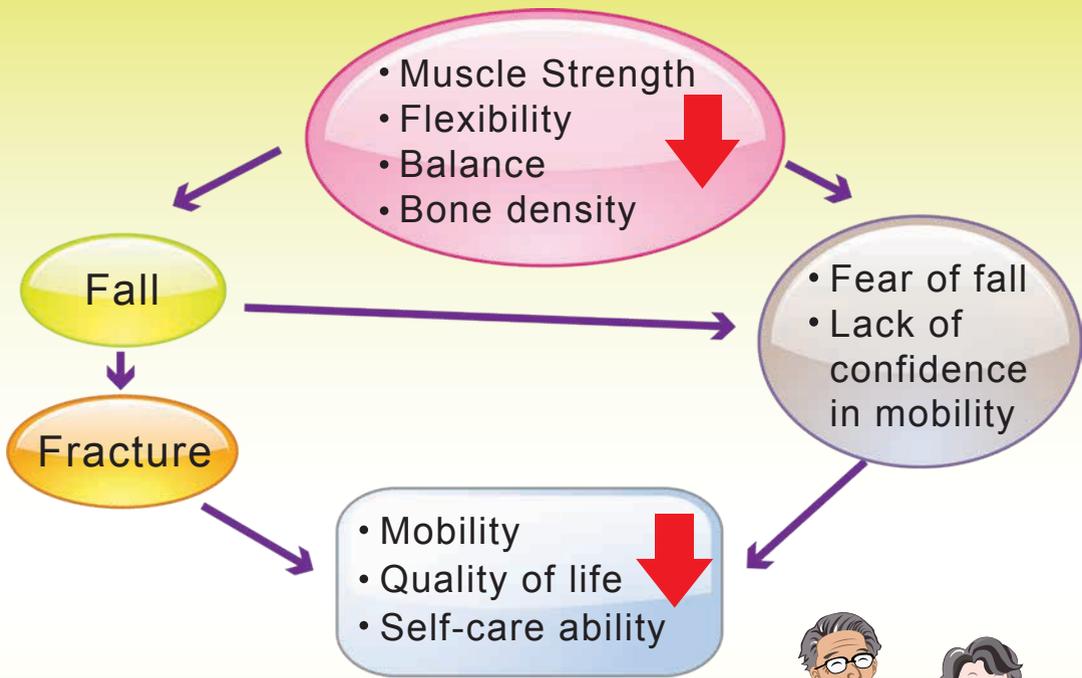
This set of exercise is designed for elderly who are able to walk outdoors independently and steadily. Elderly should consult a doctor or physiotherapist for advice if they have any queries on the exercises.



Department of Health



Elderly Health Service



This set of exercises helps to prevent falls in the elderly by improving their mobility and balance.



Key Points

1. Follow the sequence when doing the exercises
2. Perform the exercises according to your capability and progress gradually. Pay attention to safety, avoid moving too fast and over-exerting yourself
3. Don't perform the exercise on wet, dark or uneven ground
4. Use sturdy furniture or handrail for support
5. Practise the exercises 2 to 3 times a day, making sure to rest between each exercise
6. Exercising with peers can make it more fun. Encourage and take care of one another as you exercise together!

Equipment

1. Comfortable sportswear and a pair of non-slippery sport shoes
2. A sturdy chair with backrest
3. Handrail or furniture that is stable enough for support
4. A sandbag of 1 to 2 pounds

A. Warm Up Exercise — To improve joint mobility and flexibility

1. Calf Stretch



Starting Position:
Stand upright with hands holding onto a sturdy furniture or handrail

1. With your left foot, step forward and bend your knee. Keep your right leg straight and heel on the ground
2. Shift your weight forward until you can feel a mild stretch at your right calf
3. Hold for 10 seconds then stand up straight. Alternate between both legs and repeat 10 times in each leg

2. Ankle Rotation

Starting Position:
Sit upright, lift up your right foot until it is slightly off the ground



1. Slowly rotate your right ankle inward 10 times, then rotate it outward 10 times
2. Repeat the exercise with your left foot
3. Repeat the exercise two times in each foot

Move
Downward

Move
Inward

Move
Outward

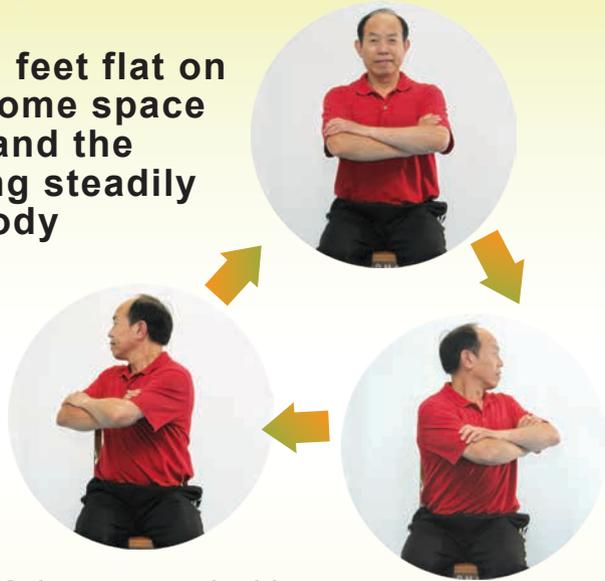
Move
Upward

3. Trunk Rotation

Starting Position:

Sit steadily, upright, feet flat on the ground. Leave some space between your back and the backrest, keep sitting steadily while allow upper body movement

1. Sit upright and fold your arms at the level of the chest
2. Turn your upper body to the left slowly, and hold for 10 seconds
3. Turn back to face forward and relax, then turn to your right. Change sides; repeat 10 times on each side



4. Forearm Stretch

Starting Position:

Sit upright, bend your elbows and interlock your fingers with palms facing your chest

1. Keeping fingers interlocked, turn your palms facing outward, push your palms forward slowly to straighten the elbows
2. Hold for 10 seconds when you feel a mild stretch along your forearm
3. Return to the starting position and relax the elbows. Repeat 10 times



B. Muscle Strengthening — To improve muscle strength

1. Sideway Leg Lift



Starting Position:
Stand upright with hands holding onto a sturdy furniture or handrail

1. Lift your right leg sideways until the right foot is slightly off the ground while keeping your right knee straight
2. Hold for 5 seconds, then lower it to the starting position slowly. Repeat 10 times on right leg
3. Repeat 10 times on left leg

*To enhance the strengthening effect if ability allows, secure a sandbag of 1 to 2 pounds over the ankles

Starting Position:
Stand upright with hands holding onto a sturdy furniture or handrail

2. Heels Raise From Semi-squat

1. Squat down slightly so that your body is lowered
2. Holding onto the sturdy furniture, slowly raise yourself into a standing position, then lift your heels off the ground and stand on your toes with both feet
3. Hold for 5 seconds, slowly return to the starting position. Repeat 10 times



3. Knee Strengthening

Starting Position:
Sit upright, secure a sandbag of 1 to 2 pounds over your right ankle



1. Straighten your right leg slowly and point your toes up
2. Hold for 5 seconds, relax and return to the starting position. Repeat 10 times on right leg
3. Secure the sandbag over the left ankle and repeat 10 times on left leg

Elderly who are weaker may try the exercise without any added weight. Elderly who are stronger may try the exercise with a sandbag of 1 to 2 pounds. Adjust the weight according to your ability and progress gradually (e.g. adding half of a pound of weight every two weeks). The weight of the sandbag should not cause any muscle discomfort or exhaustion.

C. Balance Exercise — To improve balance

1. Backward Knee Bend

Starting Position:
Stand with hands holding onto a sturdy furniture or handrail



1. Bend your right leg backward, and stand on your left leg
2. Hold for 5 to 10 seconds, relax and return to the starting position. Alternate between your legs and repeat 10 times in each leg

Incorporate exercise into daily living, fit in an exercise during your spare time

- Daily grooming
- Watching TV / Reading newspaper
- Chatting with family members
- Preparing food in the living room
- Doing simple house cleaning
- Waiting lift at lobby



Key Points on “Integrating Exercise into your Daily Life”

1. Do not exercise when you are cooking, carrying hot items or using sharp tools
2. Do not exercise on wet, dark or uneven ground

e.g. Semi-squat (You may gradually increase the intensity, as long as it is safe to do so)



Hold onto a backrest of a sturdy chair



Hold onto a sturdy table



Hold onto sturdy furniture with one hand and do some simple house cleaning with the other hand

1. If you suffer from these conditions, seek advice from doctors or physiotherapists before starting the exercise:
 - > Chronic illnesses, e.g. cardiovascular diseases, diabetes, high blood pressure, osteoporosis or arthritis
 - > Have had joint replacement surgery
 - > Have a tendency to fall, or use walking aids
 - > Have health concern
2. If you experience any difficulties or discomfort during exercise, stop immediately and consult healthcare professionals



If you have any questions regarding this leaflet, please consult physiotherapists or other healthcare professionals.



Elderly Health Service, Department of Health
Website: www.elderly.gov.hk
Elderly Health Infoline: 2121 8080

