

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Jun 2026

The effect of six weeks balance training program on kinematic of walking in elderly people

Protocol summary

Summary

The aim of this present study was to examine the effect of 6 weeks balance training on some of the kinematic features of walking in elderly woman. For this purpose, 20 elderly woman whose static and dynamic balance was at the standard level according to the results of BBS and TUG tests participated voluntarily in this study. They were randomly divided to control and experiment groups. Criteria to participate in research without affecting diseases such as walk orthopedic problems, cardiovascular, neurological, and visual and performing sports activities are not prohibited by the Physician. Exclusion criteria, subjects not participated in regular exercise, illness and death are considered. Subjects in each group took part in a walking test in a pre-test session followed by a post-test after 6 weeks. During this period, subjects in the experiment group did the balance training systematically for 3 sessions in a week, overall were trained for 18 sessions balance training until engage somatosensory, visual, vestibular systems such as (jumping out of the hole, gait by 8, crossing obstacle, walking with heel) which monitored by the scholar while the control group followed their ordinary lives. Whereas the control group the normal activities of daily follow-up. Research outcomes to improve the length and width of the steps, walking speed and double the time dependence of these factors could predict falls in the elderly says.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013061513672N1**

Registration date: **2013-12-14, 1392/09/23**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-12-14, 1392/09/23

Registrant information

Name

Sahar Mohammadzadeh

Name of organization / entity

Shahid Beheshti University

Country

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Email address

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Recruitment status

Recruitment complete

Funding source

Physical Education Faculty of Shahid Beheshti University and Reasercher individual

Expected recruitment start date

2012-05-21, 1391/03/01

Expected recruitment end date

2012-05-30, 1391/03/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of six weeks balance training program on kinematic of walking in elderly people

Public title

The effect balance training on gait

Purpose

Other

Inclusion/Exclusion criteria

(Inclusion criteria: no disease affecting gait such as diabetes meter bridge; Parkinson; Multiple sclerosis; Alzheimer's disease; neuropathy in the diabetes, stroke; depression; fatigue, bone or fracture in the lower extremity; extremity surgery; drug addiction; amputation as a result of an accident; psychotropic drugs; persistent dizziness and cardiovascular problems; neurological diseases; tumor Head; joint disorders, orthopedic, Exclusion criteria: not participate and cooperate in the exercise; illness and death of participants)

Age

From **60 years** old to **75 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **20**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Shahid Beheshti University

Street address

Daneshjou boulevard, Velenjak, Shahid Beheshti University

City

Tehran

Postal code

Approval date

2011-02-20, 1389/12/01

Ethics committee reference number

12929

Health conditions studied

1

Description of health condition studied

Aging

ICD-10 code

Z72.3

ICD-10 code description

Lack of physical exercise

Primary outcomes

1

Description

Knematic Gait

Timepoint

Before the intervntionention, Six weeks after the interven

Method of measurement

Motion Analysis System with 8 Cameras

Secondary outcomes

1

Description

Balance

Timepoint

Before the intervention, Six weeks after the interventions

Method of measurement

Balance Biodex System

2

Description

Kinematic Gait with Dual Task

Timepoint

Before the intervention and after six weeks the intervention

Method of measurement

Motion Analysis System with 8 cameras red madon

3

Description

Kinematic Gait with Crossing the Obstacle

Timepoint

Before the intervention and after six weeks the intervention

Method of measurement

Motion Analysis System with 8 cameras red madon

4

Description

Kinematic Gait in Obscure

Timepoint

Before the intervention and after six weeks the intervention

Method of measurement

Motion Analysis System with 8 cameras red madon

Intervention groups

1

Description

Balance training in intervention 1- Puddle juming 2- walk

up a few stairs or step over a few obstacle 3 – seated arm swings 4- Walking with arms swings 5- Keeping you on your toes 6-walking on your toes 7- Heel – touch and roll –up 8-walking with Country – western heel and toe 9- walking straight and narrow with eyes blocked 10- walking stare to picture 11- reach (reach with knees straight and feet parallel, reach with hip back and feet offset) 12- Rock forward , knee lift 13- walk up a few stairs or step over a few obstacle 14 – walk with pickup line 15- practice sit to stand and stand to sit 16- walk figure- eight obstacle course 17- head turns sitting 18- practice with jimball on wall 19-pull back on jimball 20- stand up and forward with jimball 21- place your best foot on the step Program intervention for six weeks three sessions per week for an hour(static exercise for 10 seconds or tens repetition and exercise dynamic walking 12 times in the six yards four times by looking at the sight, and 4 times with dual task (counting numbers) and 4 times with eyes closed)

Category

Other

2**Description**

Control Group

Category

Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

Velanjak Saray Mahalle

Full name of responsible person

Mrs. Faghihi

Street address

Velanjak Saray Mahalle, Negin park, Yasaman Place, Velenjak

City

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Shahid Beheshti University

Full name of responsible person

Fariborz Hovanlo

Street address

Daneshjo boulevard, Velenjak, Shaahid Beheshti University

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Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Shahid Beheshti University

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

empty

Person responsible for general inquiries**Contact****Name of organization / entity**

Shahid Beheshti University

Full name of responsible person

Sahar Mohammadzadeh

Position

Motor Behavior Master

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Full name of responsible person

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty