

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

The effect of sensorimotor training on proprioception and balance in orderly women

Protocol summary

Study aim

Investigating the effect of sensorimotor training on proprioception and balance of elderly women

Design

This clinical trial is a pre-test-post-test design. 30 samples of women aged 60 to 75 will be selected based on the inclusion criteria and will be divided into two experimental and control groups nonrandomly. There will be no blinding in this study.

Settings and conduct

The research protocol will be carried out in the sports clubs of Urmia city. The experimental group will perform sensorimotor exercises, and the control group will not receive any exercise intervention. Before and after the training intervention, knee proprioception will be measured using photography, static balance using the Sharpand-Romberg test, and dynamic balance using the standing and sitting time tests.

Participants/Inclusion and exclusion criteria

Inclusion criteria: women with the age range of 60 to 75 years, menopause Exclusion criteria: history of stroke, limitation of range of motion, History of diseases of the vestibular system

Intervention groups

Experimental group: includes the group that receives sensorimotor exercises. Control group: includes a group that is only involved in daily activities and does not receive any intervention.

Main outcome variables

Knee proprioception; static balance; dynamic balance.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200125046250N2**

Registration date: **2023-01-16, 1401/10/26**

Registration timing: **retrospective**

Last update: **2023-01-16, 1401/10/26**

Update count: **0**

Registration date

2023-01-16, 1401/10/26

Registrant information

Name

Sajad Roshani

Name of organization / entity

Urmia University

Country

Iran (Islamic Republic of)

Phone

+98 44 3345 8110

Email address

srowshani@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-01-20, 1400/10/30

Expected recruitment end date

2022-03-05, 1400/12/14

Actual recruitment start date

2022-03-05, 1400/12/14

Actual recruitment end date

2022-03-05, 1400/12/14

Trial completion date

2022-03-19, 1400/12/28

Scientific title

The effect of sensorimotor training on proprioception and balance in orderly women

Public title

The effect of sensorimotor training on proprioception and balance in orderly women

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:
Women with an age range of 60 to 75 years

Exclusion criteria:
Unwillingness to participate in the study Having diseases affecting the balance History of surgery

Age
From **65 years** old to **75 years** old

Gender
Female

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **33**
Actual sample size reached: **30**

Randomization (investigator's opinion)
Not 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

Ethics Committee of Sport Science Research Institute

Street address

Mirdamad St

City

Tehran

Province

Tehran

Postal code

1587958711

Approval date

2021-08-22, 1400/05/31

Ethics committee reference number

IR.SSRI.REC.1400.1218

Health conditions studied

1

Description of health condition studied

Elderly

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Degree of knee proprioception

Timepoint

Week 1, Week 8

Method of measurement

The degree of proprioception of the knee joint at angles between 40 and 60 degrees is determined using photography.

2

Description

Static Balance

Timepoint

Week 1, Week 8

Method of measurement

Static balance is measured using the Sharpend-Romberg test.

3

Description

Dynamic balance

Timepoint

Week 1, Week 8

Method of measurement

Dynamic balance is measured using the sit-to-stand time test.

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: This group includes 15 elderly women who will receive the sensorimotor training program during 8 weeks, 3 sessions per week and each session for about 50 minutes.

Category

Rehabilitation

2

Description

Control group: This group consists of 15 elderly women who will not receive any exercise intervention during the study.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Body Corrective Wellness Center

Full name of responsible person

Nasim Shahravan

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Sponsors / Funding sources

1

Sponsor**Name of organization / entity**

Urmia University

Full name of responsible person

Sajad Roshani

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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

Urmia University

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

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

Academic

Person responsible for general inquiries

Contact**Name of organization / entity**

Urmia university

Full name of responsible person

Sajad Roshani

Position

Assistant Professor, Department of Exercise Physiology and Corrective Exercises

Latest degree

Ph.D.

Other areas of specialty/work

Corrective Exercise & Sport Injury

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

The purpose of this research is to increase the sense of proprioception and balance of the elderly and prevent them from falling. This project can be used by sports medicine researchers and students.

When the data will become available and for how long

Next month the project is defensible. Data can be shared after defense through legal channels

To whom data/document is available

After defending the thesis, universities and students can access the project.

Under which criteria data/document could be used

For use by future researchers in this field and by the use of sports medicine coaches and specialists

From where data/document is obtainable

Graduate of Urmia University

What processes are involved for a request to access data/document

Through graduate studies at Urmia University and University Central Library

Comments