

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

19 Jun 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 Sharpand-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  
**Street address**  
Bahonar St  
**City**  
Urmia  
**Province**  
West Azarbaijan  
**Postal code**  
5719316417  
**Phone**  
+98 44 3343 2954  
**Email**  
nshahravan2@gmail.com

### Sponsors / Funding sources

## 1

### Sponsor

**Name of organization / entity**  
Urmia University  
**Full name of responsible person**  
Sajad Roshani  
**Street address**  
Road nazlo, Urmia University, Faculty of Physical  
Education and Sport Sciences  
**City**  
Urmia  
**Province**  
West Azarbaijan  
**Postal code**  
5756151818  
**Phone**  
+98 918 143 4527  
**Email**  
srowshani@yahoo.com  
**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  
**Street address**  
Golshahr  
**City**  
Urmia  
**Province**  
West Azarbaijan  
**Postal code**  
5719316417  
**Phone**  
+98 44 3343 2954  
**Email**  
srowshani@yahoo.com

### Person responsible for scientific 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 and Sport Injury  
**Street address**  
Golshahr2  
**City**  
Urmia  
**Province**  
West Azarbaijan  
**Postal code**  
5719316417  
**Phone**  
+98 44 3343 2954  
**Email**  
srowshani@yahoo.com

### Person responsible for updating data

#### Contact

**Name of organization / entity**  
Urmia University  
**Full name of responsible person**  
Sajad Roshani

**Position**

Assistant Professor, Department of Exercise  
Physiology and Corrective Exercises, Faculty of Sport  
Sc

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Corrective Exercise & Sport Injury

**Street address**

Golshahr2

**City**

Urmia

**Province**

West Azarbaijan

**Postal code**

5719316417

**Phone**

+98 44 3343 2954

**Email**

srowshani@yahoo.com

**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**