

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

16 Sep 2026

### The study of the effects of balance training on knee and ankle joint position senses and equilibrium time on single foot in healthy students (20-30 Y/O)

#### Protocol summary

##### Summary

This study was done to investigate the effect of balance training on single leg balance and amount of error in repositioning of joint angle. Healthy university students, aged 20-30 years, participated in this study. Thirty participants were recruited (15 in each group) to receive balance training for 6 weeks (3 times per week for 30 minutes) or no exercise. Single leg balance and amount of error were measured before and after the intervention.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT138806092391N1**

Registration date: **2010-09-07, 1389/06/16**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2010-09-07, 1389/06/16

##### Registrant information

###### Name

Zahra Rojhani Shirazi

###### Name of organization / entity

Shiraz University of Medical Sciences, School of Rehabilitation Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 71 1627 1552

###### Email address

rojhaniz@sums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Shiraz University of Medical Sciences

##### Expected recruitment start date

2009-09-01, 1388/06/10

##### Expected recruitment end date

2010-03-01, 1388/12/10

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The study of the effects of balance training on knee and ankle joint position senses and equilibrium time on single foot in healthy students (20-30 Y/O)

##### Public title

effect of exercise on equilibrium

##### Purpose

Prevention

##### Inclusion/Exclusion criteria

Inclusion criteria: healthy students (20-30 years old) of Shiraz faculty of rehabilitation Exclusion criteria: fracture in lower extremity, musculoskeletal diseases in lower extremity such as myopathy, sensory disorders such as position sense and proprioception, ankle and knee joints ligamentous injuries and history of doing exercise regularly (3 times a week 30-45 minute per session)

##### Age

From **20 years** old to **30 years** old

##### Gender

Female

##### Phase

N/A

**Groups that have been masked**

No information

**Sample size**

Target sample size: 30

**Randomization (investigator's opinion)**

Randomized

**Randomization description****Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Other

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Shiraz University of Medical Sciences

**Street address**

Ethics Committee

**City**

Shiraz

**Postal code**

2009/8/3

**Approval date**

2009-03-08, 1387/12/18

**Ethics committee reference number**

4621-88-CT

**Health conditions studied****1****Description of health condition studied**

balance disorder

**ICD-10 code**

G37

**ICD-10 code description**

Other demyelinating diseases of central nervous system

**Primary outcomes****1****Description**

equilibrium time

**Timepoint**

before and after 6 weeks exercise

**Method of measurement**

duration of standing on one leg (second)

**2****Description**

position sense

**Timepoint**

before and after 6 weeks exercise

**Method of measurement**

amount of error in repositioning(degree)

**Secondary outcomes**

empty

**Intervention groups****1****Description**

balance training for 6 weeks-3 times per week- each session 30 minutes

**Category**

Treatment - Drugs

**2****Description**

No exercise during 6 weeks for control group

**Category**

N/A

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

Shiraz University of Medical Sciences

**Full name of responsible person****Street address****City**

Shiraz

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

Shiraz University of Medical Sciences

**Full name of responsible person**

Zahra Rojhani Shirazi

**Street address**

Shiraz Faculty of Rehabilitation

**City**

Shiraz

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

Yes

**Title of funding source**

Shiraz University of Medical Sciences

**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*

Shiraz Faculty of Rehabilitation, Chamran blv.

**City**

Shiraz

**Postal code****Phone**

+98 71 1627 1552

**Fax****Email**

rojhaniz@sums.ac.ir

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

Shiraz University of Medical Sciences

**Full name of responsible person**

Zahra Rojhani Shirazi

**Position**

PhD

**Other areas of specialty/work****Street address**

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Shiraz University of Medical Sciences

**Full name of responsible person**

Zahra Rojhani Shirazi

**Position**

PhD

**Other areas of specialty/work****Street address****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*