

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparing the Effect of Two Methods of Corrective Movements, Janda's and Saharman's Approaches, in Correcting Lower Crossed Syndrome and Muscle Performance in Non- Athlete females aged 18 to 30.

Protocol summary

Study aim

Comparing the Effect of Two Methods of Corrective Movements, Janda's and Saharman's Approaches, in Correcting Lower Crossed Syndrome and Muscle Performance in Non- Athlete females aged 18 to 30.

Design

A clinical trial with a control group, with parallel groups, without blinding, randomized with the rand function of Excel software, on 75 subjects.

Settings and conduct

After the visual assessment of the students in Shahrekord University dormitories, the dormitory prayer room will be used to continue the evaluation of the subjects. Then the Qualified and volunteer people will be randomly placed in three groups (Two intervention groups and one control group). The intervention groups will do their exercises for eight weeks, three sessions a week and assessment will repeat after eight weeks.

Participants/Inclusion and exclusion criteria

- Inclusion criteria: Age range 18 to 30 years Voluntary participation and submission of consent Having lumbar lordosis greater than 54 degrees Having anterior pelvic tilt - Exclusion criteria: Having a history of regular exercise Taking certain medications Having surgery in the lumbar and pelvic region The presence of any type of injury in the lower limb during the last six months

Intervention groups

Two intervention groups including corrective exercise groups with Janda's approach and corrective exercise with Sohrman's approach and a control group

Main outcome variables

lordosis angle anterior pelvic tilt

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20230616058496N1**

Registration date: **2023-08-19, 1402/05/28**

Registration timing: **registered_while_recruiting**

Last update: **2023-08-19, 1402/05/28**

Update count: **0**

Registration date

2023-08-19, 1402/05/28

Registrant information

Name

Tahereh Niroomand

Name of organization / entity

The University of Shahrekord

Country

Iran (Islamic Republic of)

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Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-08-02, 1402/05/11

Expected recruitment end date

2023-10-04, 1402/07/12

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the Effect of Two Methods of Corrective

Movements, Janda's and Saharman's Approaches, in Correcting Lower Crossed Syndrome and Muscle Performance in Non- Athlete females aged 18 to 30.

Public title

Comparing the Effect of Two Methods of Corrective Movements, Janda's and Saharman's Approaches, in Correcting Lower Crossed Syndrome in Non- Athlete females

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age range from 18 to 30 years Voluntary participation and providing consent Having a lumbar lordosis greater than 54 degrees Having an anterior tilt of the pelvis Not having a history of regular exercise Not taking special drugs Not having surgery in the lumbar and pelvic area Not having any Abnormality in the lower limb The absence of any type of injury in the lower limb during the last six months

Exclusion criteria:

Any possible injury during exercises Two consecutive absent sessions Absence of more than 3 training sessions Unwillingness to continue cooperation Exacerbation of abnormality and doctor's diagnosis to withdraw from the study

Age

From **18 years** old to **30 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **75**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization method: Block randomization In this study, people with lower crossed syndrome in Shahrekord University girls' dormitories by one block randomization assigned to one of the three treatment groups and receive the intervention related to the same group. Randomization Unit: Individual Randomization tool: Lottery using cards and bowls How to make a random sequence and concealment: First, the names of 60 students with lower crossed syndrome were written on a sheet as a statistical population, and the names were folded and thrown into a bowl to hide them. Two unrelated people were asked to choose 20 cards each, leaving 20 cards in the bowl. The 20 names selected by the first person were chosen as Janda's corrective exercises group, the 20 names selected by the second person were selected as Saharman's corrective exercises group, and the remaining 20 names in the bowl were selected as the control group.

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 Shahrekord University

Street address

Shahrekord University Leader Blvd

City

Shahrekord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

8818634141

Approval date

2023-06-12, 1402/03/22

Ethics committee reference number

IR.SKU.REC.1402.011

Health conditions studied

1

Description of health condition studied

Lower Crossed Syndrome

ICD-10 code

13

ICD-10 code description

Diseases of the musculoskeletal system and connective tissue

Primary outcomes

1

Description

Lordosis angle

Timepoint

Pre-test and post-test

Method of measurement

Flexible ruler

2

Description

hip tilt

Timepoint

Pre-test and post-test

Method of measurement

tilt meter

Secondary outcomes

1

Description

Measurement of muscle function

Timepoint

Pre-test - post-test

Method of measurement

goniometer- Chronometer

Intervention groups

1

Description

Intervention group: corrective exercise with Janda's approach, It includes sensory-motor exercises, without special equipment, for eight weeks and three sessions per week.

Category

Rehabilitation

2

Description

Intervention group:corrective exercise with Saharman's Approaches, It includes stretching and strengthening exercises, without special equipment, for eight weeks and three sessions per week.

Category

Rehabilitation

3

Description

Control group: perform their usual daily activities.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahrekord University

Full name of responsible person

Tahereh Niroomand

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Rehbar Boulevard - Shahrekord University

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahrekord University

Full name of responsible person

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Street address

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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

Shahrekord University

Proportion provided by this source

50

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

shahrekord University

Full name of responsible person

tahereh niroomand

Position

University student

Latest degree

Bachelor

Other areas of specialty/work

Sports science

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Person responsible for scientific inquiries

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Latest degree

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Other areas of specialty/work

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Person responsible for updating data

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Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

People's information will remain confidential and I only have the right to publish the results as a group

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available