

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of two methods of yoga and pilates exercise training on pain and selected indicators of physical fitness, body composition and disability in women with chronic mechanical low back pain

Protocol summary

Study aim

Comparison of two methods of yoga and pilates exercise training on pain and selected indicators of physical fitness, body composition and disability in women with chronic mechanical low back pain

Design

Randomized clinical trial with control group, with 30 participants

Settings and conduct

The present research is a semi-experimental study on women with chronic mechanical low back pain in Rasht city clubs which will participate in exercise training three days a week for 8 weeks. The exercises include Yoga and Pilates. Measurements is performed before and after 8 weeks of training.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Having age range 30 to 45 years, women with chronic mechanical low back pain, Not having exercise training Exclusion criteria: Having congenital abnormalities Having cardiovascular and respiratory disease

Intervention groups

Intervention group: Eight weeks of yoga exercises with 3 sessions per week will be done. Yoga exercise lasts for 45 minutes between 5 to 9 times. Intervention group: Pilates exercise: Eight weeks of pilates exercises with 3 sessions per week will be done. Between the sets have two minutes of dynamic rest and stretching. Control group: Without any intervention

Main outcome variables

Physical fitness, low back pain, functional disability

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20150531022498N27**

Registration date: **2018-11-05, 1397/08/14**

Registration timing: **retrospective**

Last update: **2018-11-05, 1397/08/14**

Update count: **0**

Registration date

2018-11-05, 1397/08/14

Registrant information

Name

Ramin Shabani

Name of organization / entity

Islamic Azad University

Country

Iran (Islamic Republic of)

Phone

+98 13 3375 2715

Email address

shabani@iaurasht.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2016-05-20, 1395/02/31

Expected recruitment end date

2016-07-21, 1395/04/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of two methods of yoga and pilates exercise training on pain and selected indicators of physical

fitness, body composition and disability in women with chronic mechanical low back pain

Public title

Comparison of two methods of yoga and pilates exercise training in women with chronic mechanical low back pain

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

Having age range 30 to 45 years women with chronic mechanical low back pain Not having exercise training

Exclusion criteria:

Having congenital abnormalities Having cardiovascular and respiratory diseases

Age

From **30 years** old to **45 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **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 Rasht Azad University

Street address

Islamic Azad University Rasht Branch, Taleshan Bridge, Rasht

City

Rasht

Province

Guilan

Postal code

4147654919

Approval date

2017-01-17, 1395/10/28

Ethics committee reference number

IR.IAU.RASHT.REC.1395.60

Health conditions studied

1

Description of health condition studied

chronic low back pain

ICD-10 code

M54.5

ICD-10 code description

Low back pain

Primary outcomes

1

Description

physical fitness

Timepoint

Before and after eight weeks of exercise

Method of measurement

Using by measuring balance, flexibility and aerobic power

2

Description

Quality of Life

Timepoint

Before and after eight weeks of exercise

Method of measurement

Using Quality of Life Questionnaire

3

Description

Low back pain

Timepoint

Before and after eight weeks of exercise

Method of measurement

Using the back pain questionnaire (Quebec)

4

Description

Functional disability

Timepoint

Before and after eight weeks of exercise

Method of measurement

Using the Oswestry questionnaire (ODI)

Secondary outcomes

1

Description

Body composition

Timepoint

Before and after eight weeks of exercise

Method of measurement

Using by measurement of weight , body mass index (BMI) and fat percentage

Intervention groups

1

Description

Intervention group: Eight weeks of yoga exercises with 3 sessions per week will be done. Yoga exercise lasts for 45 minutes between 5 to 9 times.

Category

Prevention

2

Description

Intervention group: Pilates exercise: Eight weeks of pilates exercises with 3 sessions per week will be done. Between the sets have two minutes of dynamic rest and stretching.

Category

Prevention

3

Description

Control group: Without any intervention

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Gilana Sports gym

Full name of responsible person

Sedighe jelveh

Street address

Rasht Branch, Islamic Azad University, Taleshan Bridge

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

Ali Delpasand

Street address

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Email

shabani_msn@yahoo.com

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Islamic Azad University

Proportion provided by this source

100

Public or private sector

Private

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

Islamic Azad University

Full name of responsible person

Sedigheh Jelveh

Position

Student

Latest degree

Master

Other areas of specialty/work

Exercise physiology

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Islamic Azad University

Full name of responsible person

Dr ramín shabani

Position

Associate Professor

Latest degree

Ph.D.

Other areas of specialty/work

Exercise physiology

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Person responsible for updating data

Contact

Name of organization / entity

Islamic Azad University

Full name of responsible person

Marzieh nazari

Position

ph.D student

Latest degree

Master

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

No decision has been made yet.

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