Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 trail 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

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Iran (Islamic Republic of)

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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
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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
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
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Sedigheh Jelveh
Position
Student
Latest degree
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Other areas of specialty/work
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Person responsible for updating data

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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