Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

A comparison between the effects of modified pilates exercises and general exercises on lumbopelvic motor control ,lumbar and abdominal muscles endurance, pain and disability in women with non specific chronic low back pain

Protocol summary

Study aim
The goal of this study is a comparison between the effects of modified pilates exercises and general exercises on lumbopelvic motor control , lumbar and abdominal muscles endurance, pain and disability in women with non specific chronic low back pain

Design
Controlled clinical trial, randomized,not blinded,two arm parallel groups .

Settings and conduct
In every session, patients will receive electrotherapy then will do exercises under supervision phisiotherapist and continues about 50 minutes, Razmejo Moghadam Physiotherapy clinic in Zahedan

Participants/Inclusion and exclusion criteria
Inclusion criteria: women18-50 years old women with chronic non-specific low back pain suffering of pain 3months or more. pain area between T12 and buttocks, soreness or stiffness lower lumbar without refer to lower limb. Exclusion criteria: a history of vertebra fracture, pregnancy, tumor, spinal surgery, spinal deformity, cardiovascular, vestibular, visual, central nervous systemdisorders, rheumatic, neurological diseases.

Intervention groups
Group1: Pilates exercises Group2:general exercises

Main outcome variables
Lumbopelvic motor control ;lumbar and abdominal muscles endurance; pain ; functional disability

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20180909040975N1**
Registration date: **2019-01-17, 1397/10/27**
Registration timing: **retrospective**

Last update: **2019-01-17, 1397/10/27**
Update count: **0**

Registration date
2019-01-17, 1397/10/27

Registrant information

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Ahmadreza Asgari Ashtiani

Name of organization / entity

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Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2018-04-04, 1397/01/15

Expected recruitment end date
2018-08-23, 1397/06/01

Actual recruitment start date
2018-04-04, 1397/01/15

Actual recruitment end date
2018-07-09, 1397/04/18

Trial completion date
2018-08-25, 1397/06/03

Scientific title
A comparison between the effects of modified pilates exercises and general exercises on lumbopelvic motor control ,lumbar and abdominal muscles endurance, pain and disability in women with non specific chronic low

back pain

Public title
"A comparison between the effects of modified pilates exercises and general exercises in treatment low back pain"
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Women aged 18-50 with chronic nonspecific low back pain More than 3 months or more, they suffer from back pain Chronic lumbar pain between the region of the 12th rib and buttock or stiffness in the lower lumbar without referral to the lower limb
Exclusion criteria:
People with a history of vertebral fracture, pregnancy, tumor or infection, previous surgery of the spine and deformation serious spine disorders, cardiovascular, vestibular system, central nervous system, vision problems), neurological symptoms such as sensory deficits or paralysis of motion, neurological and rheumatologic diseases
Age
From **18 years** old to **50 years** old
Gender
Female

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **30**
Actual sample size reached: **30**
Randomization (investigator's opinion)
Randomized
Randomization description
A simple randomization is done with sealed envelope tools in such a way that the letters A and B are inserted in the envelopes and patients are asked to select an envelope that the intervention group A and the group B they will be tested
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

1

Registry name
Secondary trial Id
Registration date
empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Zahedan University of Medical Sciences
Street address
Janat Blve,Dr Hesabi Squ, Zahedan University of Medical Sciences
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Zahedan
Province
Sistan-va-Balouchestan
Postal code
9816743463
Approval date
2017-07-09, 1396/04/18
Ethics committee reference number
IR.ZAUMS.REC.1396.85

Health conditions studied

1

Description of health condition studied
Non- specific chronic low back pain
ICD-10 code
M54.5
ICD-10 code description
Low back pain

Primary outcomes

1

Description
lumbopelvic motor control
Timepoint
Before the intervention begins , after completion of the intervention
Method of measurement
Motor control patterns of pelvic- lumbar region using a pressure biofeedback will be evaluated.

2

Description
lumbar and abdominal muscles endurance
Timepoint
Before the intervention begins , after completion of the intervention
Method of measurement
Sorensen test

3

Description
Back pain
Timepoint
Before the intervention begins , after completion of the

intervention

Method of measurement

Pain Numeric Rating Scale

Secondary outcomes

1

Description

Functional disability index

Timepoint

Before the intervention, after the intervention

Method of measurement

Oswestry Low Back Pain Disability Questionnaire

Intervention groups

1

Description

Pilates intervention group will receive an electrotherapy treatment including a Burst TENS and a hot pack for 20 minutes and a continuous mode ultrasound for 5 minutes and a package of selective Pilates exercises for 18 sessions.

Category

Rehabilitation

2

Description

General intervention group Intervention group will receive an electrotherapy treatment including a low frequency TENS and a hot pack for 20 minutes and a continuous mode ultrasound for 5 minutes and a package of general exercises for 18 sessions.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Razmjoo Moghadam clinic

Full name of responsible person

AhmadReza Askari Ashtiani

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Sponsors / Funding sources

1

Sponsor

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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

Zahedan University of Medical Sciences

Proportion provided by this source

90

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

Zahedan University of Medical Sciences

Full name of responsible person

Ahmad Reza Askari Ashtiani

Position

Assistante professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

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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
Yes - There is a plan to make this available
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
Information related to the main outcome will be published in the form of a scientific - research paper.
When the data will become available and for how long
Start access to information is the main consequence after the article is printed.
To whom data/document is available
After accepting and printing the article,data will be available to those who need it under certain conditions.
Under which criteria data/document could be used
The data can be used as scientific use or as a valid document for screening and executive work.
From where data/document is obtainable
published articles are available through journals.
What processes are involved for a request to access data/document
An individual can access to articles through magazine subscriptions.
Comments