

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 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

Name

Ahmadreza Asgari Ashtiani

Name of organization / entity

Country

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

City

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
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Sponsors / Funding sources

1

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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
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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