

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Effect of Yoga Exercises on Spinal Flexibility, Pain and Functional Disability in Women with Chronic Lumbar Disk Herniation: A Randomized Controlled Trial study

Protocol summary

Summary

The purpose of this study was to investigate the effect of Yoga exercises on spinal flexibility, pain and functional disability in women with chronic lumbar disk herniation. This randomized controlled trial was performed in Zahedan University of Medical Sciences, in 2010. Twenty-eight patients with chronic lumbar disk herniation were participated through simple non probability sampling. Patients were selected based on following inclusion criteria: Radicular low back pain for a period of at least 3 months, participants aged over 18 and less than 80 years old, appropriateness of exercise in accordance with clinical assessment, patients who have not been contraindicated from doing exercise based on Physical Activity Readiness Questionnaire, participants diagnosed with lumbar disc herniation by specialist and radiography. Patients were excluded if they had suspected or confirmed for serious spinal pathology, suspected or confirmed for pregnancy, spinal column surgery, insufficient treatment, using other therapeutic modalities during the study. Subjects were randomly assigned to either a Yoga exercises group (N=14) or a general exercises group (N=14). Before and after intervention, we assessed pain (ordinal) through Visual Analogue Scale, depression (Ordinal) with Beck Depression Inventory II, lumbar lordosis (degree) with flexible ruler, range of lumbar flexion (centimeter) using Modified Schober test, and disability (ordinal) with The Oswestry Disability Index. A 16 session's exercise program which lasted 8 weeks, twice per week, and 45 minutes per session was performed for both groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201109181675N7**

Registration date: **2011-11-22, 1390/09/01**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-11-22, 1390/09/01

Registrant information

Name

Asghar Akbari

Name of organization / entity

Zahedan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 54 1322 8445

Email address

akbaria@zdmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research of Zahedan University of Medical Sciences

Expected recruitment start date

2010-05-22, 1389/03/01

Expected recruitment end date

2010-12-22, 1389/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of Yoga Exercises on Spinal Flexibility, Pain and

Functional Disability in Women with Chronic Lumbar Disk Herniation: A Randomized Controlled Trial study

Public title

Effect of Yoga Exercises on Spinal Flexibility, Pain and Functional Disability in Women with Chronic Lumbar Disk Herniation: A Randomized Controlled Trial

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Radicular LBP for a period of at least 3 months; Participants aged over 18 and less than 80 years old; Appropriateness of exercise in accordance with clinical assessment; Patients who have not been contraindicated from doing exercise based on Physical Activity Readiness Questionnaire; and Patients diagnosed with lumbar disc herniation by specialist and radiography. Exclusion criteria: Patients suspected or confirmed for serious spinal pathology; Suspected or confirmed for pregnancy; Spinal column surgery; Insufficient treatment; Using other therapeutic modalities during the study.

Age

From **18 years** old to **60 years** old

Gender

Female

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **28**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

1

Registry name

No registration

Secondary trial Id

No trial id

Registration date

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Zahedan University of Medical Sciences

Street address

Deputy for Research, Zahedan University of Medical Sciences, Jannat Blvd., Dr. Hesabi Sq., Zahedan.

City

Zahedan

Postal code

987-98155

Approval date

2011-10-30, 1390/08/08

Ethics committee reference number

90-1540

Health conditions studied

1

Description of health condition studied

Chronic Lumbar Disk Herniation

ICD-10 code

M51.1+

ICD-10 code description

Lumbar and Other Intervertebral Disc Disorders with Radiculopathy

Primary outcomes

1

Description

Back pain

Timepoint

Before intervention, 8 weeks after intervention

Method of measurement

Visual Analogue Scale

2

Description

Depression

Timepoint

Before intervention, 8 weeks after intervention

Method of measurement

Beck Depression Inventory II Questionnaire

3

Description

Angle of lumbar lordosis

Timepoint

Before intervention, 8 weeks after intervention

Method of measurement

Flexible ruler

4

Description

Range of lumbar flexion

Timepoint

Before intervention, 8 weeks after intervention

Method of measurement

Modified Schober test

5

Description

Disability

Timepoint

Before intervention, 8 weeks after intervention

Method of measurement

The Oswestry Disability Index

Secondary outcomes

empty

Intervention groups

1

Description

Yoga exercises including 14 specific Yoga exercises: A 16 session's exercise program which lasted 8 weeks, twice per week, and 45 minutes per session.

Category

Rehabilitation

2

Description

General Exercises: Including classic abdominal and back exercises: : A 16 session's exercise program which lasted 8 weeks, twice per week, and 45 minutes per session.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Razmejo-Moghadam Physiotherapy Clinic

Full name of responsible person

Dr. Asghar Akbari

Street address

Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St., Zahedan

City

Zahedan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research of Zahedan University of Medical Sciences

Full name of responsible person

Dr. Hamidreza Mahmoudzadeh Sagheb

Street address

Deputy of Research, Zahedan University of Medical Sciences, Jannat Blvd., Dr. Hesabi Sq., Zahedan.

City

Zahedan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice Chancellor for Research of Zahedan University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Zahedan University of Medical Sciences

Full name of responsible person

Dr. Asghar Akbari

Position

Ph.D in Physiotherapy, Head of Dept. of Physiotherapy.

Other areas of specialty/work

Street address

Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St., Zahedan.

City

Zahedan

Postal code

64855-98136

Phone

+98 54 1325 8445

Fax

+98 54 1325 8445

Email

akbari_as@yahoo.com; akbaria@zaums.ac.ir

Web page address

www.zaums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Zahedan University of Medical Sciences

Full name of responsible person

Dr. Asghar Akbari

Position

Ph.D in Physiotherapy, Head of Dept. of

Physiotherapy

Other areas of specialty/work

Street address

Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St., Zahedan.

City

Zahedan

Postal code

64855-98136

Phone

+98 54 1322 8445

Fax

+98 54 1322 8445

Email

akbari_as@yahoo.com; akbaria@zaums.ac.ir

Web page address

www.zaums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

Zahedan University of Medical Sciences

Full name of responsible person

Dr. Asghar Akbari

Position

Head of Dept. of Physiotherapy, Ph.D in Physiotherapy

Other areas of specialty/work

Street address

Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St., Zahedan.

City

Zahedan

Postal code

64855-98136

Phone

+98 54 1322 8445

Fax

+98 54 1322 8445

Email

akbari_as@yahoo.com; akbaria@zaums.ac.ir

Web page address

www.zaums.ac.ir

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty