

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Compare the effect of corrective exercise training and ergonomics education on service forces and care aids with low back pain

Protocol summary

Study aim

Compare the effect of corrective exercise training and ergonomics education on service forces and care aids with low back pain

Design

Randomized trial with community based and pragmatic control group, with parallel groups, one-way blind

Settings and conduct

The present study in Isfahan hospitals will be face-to-face for each person and blind on one side and the data analyst will be unaware of the grouping.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Employment in Hospitals in Isfahan Have at least reading and writing skills Having a back pain in more than three months Present written consent for participation in the research Non-Inclusion criteria: Specific low back pain such as infection, rheumatoid diseases, congenital anomalies, history of cancer according to history and health Having a history of vertebral surgery, spinal tumor, history of spinal fracture and multiple sclerosis Having a health ban to do sports exercises

Intervention groups

The corrective exercises for 8 weeks, 3 sessions 40 to 60 minutes a week, will include 5 to 10 minutes of general warm-up, 20 to 40 minutes of tensile and reinforcement training and 5-10 minutes of cooldown. The ergonomic intervention group will receive 8 weeks of interventions based on the Ministry of Labor and Health regulations on the state of the body and body movements. By avoiding unnecessary or excessive stresses on the muscles, joints, ligaments, respiratory system and cardiovascular system. The exact details of the exercise program and ergonomic intervention will be presented in an educational pamphlet and will be delivered to any assistant and service personnel and will be faced with the delivery of face-to-face training. The control group will not receive any intervention.

Main outcome variables

The amount of pain and disability in people with low back pain

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20171230038142N4**

Registration date: **2018-12-19, 1397/09/28**

Registration timing: **registered_while_recruiting**

Last update: **2018-12-19, 1397/09/28**

Update count: **0**

Registration date

2018-12-19, 1397/09/28

Registrant information

Name

Khosro Tavakol

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 31 3792 9134

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-12-06, 1397/09/15

Expected recruitment end date

2019-01-10, 1397/10/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Compare the effect of corrective exercise training and ergonomics education on service forces and care aids with low back pain

Public title

The effect of corrective exercise training and ergonomics education on service forces with low back pain

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

Employment in Al-Zahra, Kashani and Khorshid Hospitals in Isfahan Have at least reading and writing skills Having a back pain in more than three months Present written consent for participation in the research

Exclusion criteria:

Specific low back pain such as infection, rheumatoid diseases, congenital anomalies, history of cancer according to history and health Having a history of vertebral surgery, spinal tumor, history of spinal fracture and multiple sclerosis Having a health ban to do sports exercises

Age

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

Gender

Both

Phase

2-3

Groups that have been masked

- Data analyser

Sample size

Target sample size: **75**

Randomization (investigator's opinion)

Randomized

Randomization description

Assistants and Service Providers will be selected by easy and accessible sampling method according to the entry and exit criteria, so that sample size reaches 75, then using computer encoding into groups of 25, including receiving group Corrective exercises, the group receiving the ergonomic interventions and the control group will be divided.

Blinding (investigator's opinion)

Single blinded

Blinding description

Information will be available to the data analyst after naming and naming.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Isfahan University of Medical Sciences

Street address

Isfahan University of Medical Sciences, HezarJereyb St.

City

Isfahan

Province

Isfahan

Postal code

81746-73461

Approval date

2018-12-02, 1397/09/11

Ethics committee reference number

IR.MUI.MED.REC.1397.144

Health conditions studied

1

Description of health condition studied

low back pain

ICD-10 code

M54.5

ICD-10 code description

Low back pain

Primary outcomes

1

Description

Compare the effect of corrective exercise training and ergonomics education on service forces and care aids with low back pain Using the Visual Analogue Scale (VAS)

Timepoint

Before and after intervention and eight weeks after the end of intervention, in each of the three groups, the pain intensity was measured using VAS pain scale.

Method of measurement

Using a 10-point VAS pain scale, this scale indicates zero pain and the number 10 indicates a high pain.

2

Description

The Effect of Rehabilitation Exercise Training and Training on the Principles of Ergonomics in Helping Surveyors and Service Persons with Back Pain by Using the Ossourist Disability Questionnaire

Timepoint

Before the intervention and eight weeks after the intervention, all of the three groups will be asked about the disability by using the osoestory disability inventory questionnaire.

Method of measurement

The Osustory Disability Questionnaire was questioned

and evaluated in 10 sections (each section containing 6 questions) including pain intensity, personal work, lifting, walking, sitting, standing, sleeping, sexual activity, social life, and travel. Gives.

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: corrective exercise training will be received in this group for 8 weeks, weekly 3 sessions and 40-60 minutes each session. Each training session includes 5 to 10 minutes of general warm-up, 20 to 40 minutes of specialized training (tensile and reinforcement training) and 5-10 minutes of cooling. The exact details of the exercise program are presented in a pamphlet (localized based on the work environment) and will be delivered to any assistance and service personnel and will face face-to-face delivery.

Category

Rehabilitation

2

Description

Intervention group: Ergonomics education that will receive their interventions for 8 weeks based on the health and safety regulations of the Ministry of Labor on the state of the body and body movements. By avoiding unnecessary or excessive stresses on the muscles, joints, ligaments, respiratory system and cardiovascular system. In this group, detailed details of the ergonomic intervention will be presented in a pamphlet (localized based on the work environment) and will be delivered to any assistance and service personnel and will face face-to-face delivery.

Category

Rehabilitation

3

Description

Control group: this group will not receive special intervention.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Al-Zahra Hospital in Isfahan

Full name of responsible person

Alireza Safaeian

Street address

Al Zahra Hospital, Sufeh Street.

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2

Recruitment center

Name of recruitment center

Isfahan Khorshid Hospital

Full name of responsible person

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3

Recruitment center

Name of recruitment center

Isfahan Ayatollah Kashani Hospital

Full name of responsible person

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Esfahan University of Medical Sciences

Full name of responsible person

Mansour Siavash

Street address

Research Assistant, School of Medicine, Isfahan
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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

Esfahan University of Medical Sciences

Proportion provided by this source

100

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

Esfahan University of Medical Sciences

Full name of responsible person

Alireza Safaeian

Position

Assistant Professor

Latest degree

Specialist

Other areas of specialty/work

Public Health/Community Medicine

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Esfahan University of Medical Sciences

Full name of responsible person

Alireza Safaeian

Position

Assistant Professor

Latest degree

Specialist

Other areas of specialty/work

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Person responsible for updating data

Contact

Name of organization / entity

Esfahan University of Medical Sciences

Full name of responsible person

Alireza Safaeian

Position

Assistant Professor

Latest degree

Specialist

Other areas of specialty/work

Public Health/Community Medicine

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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	study.
Analytic Code	Under which criteria data/document could be used
Yes - There is a plan to make this available	In case of using similar supportive and therapeutic methods in patients with low back pain and comparing with current methods.
Data Dictionary	From where data/document is obtainable
Yes - There is a plan to make this available	After sending an email to Ar.Safaeian@med.mui.ac.ir and obtaining permission from the research deputy of the Isfahan University of Medical Sciences, information is available.
Title and more details about the data/document	What processes are involved for a request to access data/document
All information can be given to the applicants after being unidentifiable and can be dismissed by the research deputy of Isfahan University of Medical Sciences.	Send an email to Ar.Safaeian@med.mui.ac.ir and get permission from the Vice-Chancellor of Research in Isfahan University of Medical Sciences
When the data will become available and for how long	Comments
Information is available two years after the publication of the results.	
To whom data/document is available	
Researchers in Rehabilitation Sciences, Physical Medicine and Social Medicine can benefit from the results of this	