

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Investigation of the effect of training lumbar stabilization exercise training on the severity of low back pain in pre-hospital emergency personnel

Protocol summary

Study aim

Investigation of the effect of training lumbar stabilization exercise training on the severity of low back pain in pre-hospital emergency personnel

Design

Clinical trial with a control group, with parallel groups, randomized, on 50 patients (2 groups of 25 people). Excel software rand function was used for randomization.

Settings and conduct

Amol pre-hospital emergency

Participants/Inclusion and exclusion criteria

Inclusion criteria: At least one year of work experience; Existence of low back pain intensity 4 or higher on NRS scale; No history of back and spine trauma; Absence of abnormalities in the spine and inflammatory disease; Age 25-65 years. Exclusion criteria: Do not do exercises for more than two consecutive sessions; Body mass index more than 30 kg per square meter; Taking narcotics drugs to relieve pain; Surgery during the intervention.

Intervention groups

Intervention group: In this group, participants are asked to perform low back pain stabilization exercises designed by researchers for 6 weeks on a regular basis and a day in between for 20 minutes. Control group: There is no intervention and it is only for comparison with the intervention group.

Main outcome variables

Back pain intensity; Disability intensity.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20151228025732N59**

Registration date: **2020-10-26, 1399/08/05**

Registration timing: **registered_while_recruiting**

Last update: **2020-10-26, 1399/08/05**

Update count: **0**

Registration date

2020-10-26, 1399/08/05

Registrant information

Name

Alireza Emadi

Name of organization / entity

Semnan University of Medical Sciences, Semnan, Iran

Country

Iran (Islamic Republic of)

Phone

+98 23 3345 1336

Email address

are20935@semums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-09-22, 1399/07/01

Expected recruitment end date

2021-03-19, 1399/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigation of the effect of training lumbar stabilization exercise training on the severity of low back pain in pre-hospital emergency personnel

Public title

Investigation of the effect of training lumbar stabilization exercise training on the severity of low back pain in pre-hospital emergency personnel

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

At least one year of work experience Existence of low back pain intensity 4 or higher on NRS scale No history of back and spine trauma Absence of abnormalities in the spine and inflammatory disease Age 25-65 years

Exclusion criteria:

Do not do exercises for more than two consecutive sessions Body mass index more than 30 kg per square meter Taking narcotics drugs to relieve pain Surgery during the intervention

Age

From **25 years** old to **65 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **50**

Randomization (investigator's opinion)

Randomized

Randomization description

Participants will be randomly assigned to two groups of intervention and control with 25 members using block randomization with block sizes of 2. Randomized permutation blocks (block 2). Excel software rand function was used for randomization.

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 Semnan University of Medical Sciences

Street address

Semnan University of Medical Sciences, Basij Blvd, Semnan

City

Semnan

Province

Semnan

Postal code

3514799442

Approval date

2020-08-25, 1399/06/04

Ethics committee reference number

IR.SEMUMS.REC.1399.171

Health conditions studied

1

Description of health condition studied

Lumbago

ICD-10 code

M54.4

ICD-10 code description

Lumbago with sciatica

Primary outcomes

1

Description

Back pain intensity

Timepoint

Before and after the intervention

Method of measurement

Numeric Rating Scale for Pain (NRS Pain)

2

Description

Disability intensity

Timepoint

Before and after the intervention

Method of measurement

Oswestry Disability Questionnaire (ODQ)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: In this group, participants are asked to perform low back pain stabilization exercises designed by researchers for 6 weeks on a regular basis and a day in between for 20 minutes.

Category

Treatment - Other

2

Description

Control group: There is no intervention and it is only for comparison with the intervention group.

Category

Diagnosis

Recruitment centers

1

Recruitment center

Name of recruitment center

Amol pre-hospital emergency

Full name of responsible person

Mohammadreza Asgari

Street address

Amol pre-hospital emergency

City

Amol

Province

Mazandaran

Postal code

3519646592

Phone

+98 11 3234 5689

Email

are20935@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Semnan University of Medical Sciences

Full name of responsible person

Fatemeh Ehsani

Street address

Semnan University of Medical Sciences, Basij Blvd,
Semnan.

City

Semnan

Province

Semnan

Postal code

3514799442

Phone

+98 23 3345 1336

Email

fatemehehsani59@yahoo.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Semnan 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

Semnan University of Medical Sciences

Full name of responsible person

Mohammadreza Asgari

Position

Associate professor

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

Street address

Semnan University of Medical Sciences, Basij Blvd,
Semnan

City

Semnan

Province

Semnan

Postal code

3514799442

Phone

+98 23 3345 1336

Email

asgari5000@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Semnan University of Medical Sciences

Full name of responsible person

Mohammadreza Asgari

Position

Associate professor

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

Street address

Semnan University of Medical Sciences, Basij Blvd,
Semnan

City

Semnan

Province

Semnan

Postal code

3514799442

Phone

+98 23 3345 1336

Email

asgari5000@gmail.com

Person responsible for updating data

Contact

Name of organization / entity

Semnan University of Medical Sciences

Full name of responsible person

Houshang Abbasi Shirsavar

Position

Student

Latest degree

Master

Other areas of specialty/work

Nursery

Street address

Kowsar Hospital, Amin Street.

City

Semnan

Province

Semnan

Postal code

3514614172

Phone

+98 23 3365 4162

Email

are20935@gmail.com

Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be 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