

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The effect of 8 weeks of an exercise battery including stretching, isometric and strengthening exercises on the disability, quality of life, pressure pain intensity and threshold of female employees with non-specific chronic neck pain

Protocol summary

Study aim

The effect of 8 weeks of an exercise battery including stretching, isometric and strengthening exercises on the disability, quality of life, pressure pain intensity and threshold of female employees with non-specific chronic neck pain

Design

24 female employees suffering from non-specific chronic neck pain in Amol city will be randomly divided into two groups (experimental = combined exercises) and (control = no exercises) according to the inclusion and exclusion criteria, and the available sampling method. Participants will be participating at the study for eight weeks.

Settings and conduct

The current research is a clinical trial. All the participants in the intervention group will carry out the exercises for 8 weeks under the supervision of a corrective exercise specialist in person and online at a specific place.

Participants/Inclusion and exclusion criteria

Criteria for entering the research: female employees suffering from non-specific chronic neck pain with an age range between 30 and 55 years - neck pain for more than three months - having general health Exclusion criteria from the research: people who have a history of surgery on the neck - people who have a history of sports and championships - people who have uncontrolled heart disease - people who are suspected and infected with Corona

Intervention groups

Exercise group intervention: The exercises in this exercise intervention is included a series of stretching, isometric and strengthening exercises in the neck, shoulders and shoulders for eight weeks and three sessions per week. Control group intervention: The subjects in the control group will not receive any

exercise intervention.

Main outcome variables

Reducing neck muscle pain, reducing shoulder pain, restoring muscle balance by strengthening weakened muscles and stretching shortened muscles, increasing mobility, reducing mechanical load.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20201030049193N5**

Registration date: **2024-01-18, 1402/10/28**

Registration timing: **prospective**

Last update: **2024-01-18, 1402/10/28**

Update count: **0**

Registration date

2024-01-18, 1402/10/28

Registrant information

Name

Mahdi Hosseinzadeh

Name of organization / entity

Sport Sciences Research Institute of Iran

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-05-21, 1403/03/01

Expected recruitment end date

2024-08-20, 1403/05/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of 8 weeks of an exercise battery including stretching, isometric and strengthening exercises on the disability, quality of life, pressure pain intensity and threshold of female employees with non-specific chronic neck pain

Public title

The effect of 8 weeks of an exercise battery including stretching, isometric and strengthening exercises on non-specific chronic neck pain

Purpose

Other

Inclusion/Exclusion criteria**Inclusion criteria:**

Age range from 30 to 55 years A female employee of Amol city offices Having general health Having chronic neck pain: it means pain that has been going on for three months and has no specific cause.

Exclusion criteria:

Having a regular history of sports and championships Having background and joint diseases Using any kind of medicine or pain reliever and treatment strategy to solve neck pain problems People who are suspected or infected with Corona History of neck surgery Uncontrolled heart disease

Age

From **30 years** old to **55 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Participant
- Outcome assessor

Sample size

Target sample size: **24**

Randomization (investigator's opinion)

Randomized

Randomization description

People are randomly assigned to one of the two study groups with the help of a table of random numbers and receive the intervention related to the same group

Blinding (investigator's opinion)

Single blinded

Blinding description

In order to create blinding of a blind strain, first, general information regarding how to test and how to perform the exercise will be given to the two groups, and no information will be provided to the controllers in which

exercise group and placement. The outcome assessor will be blinded to the group the participants would be assigned.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Research ethic committee of sport sciences research institute of Iran (SSRI)

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No. 3, 5th Alley, Miremad Street, Motahhari Street, Tehran, Iran.

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Approval date

2023-11-22, 1402/09/01

Ethics committee reference number

IR.SSRC.REC.1402.196

Health conditions studied**1****Description of health condition studied**

Chronic non-specific neck pain

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

intensity of pain

Timepoint

Pre-test (before the start of the study) and post-test (at the end of the study)

Method of measurement

Pain intensity variable is measured by visual pain intensity measurement scale.

Secondary outcomes

1

Description

disability

Timepoint

Pre-test (before starting the study) and post-test (at the end of the study)

Method of measurement

Persian neck disability index questionnaire will be used to evaluate functional disability in daily activities.

2

Description

quality of life

Timepoint

Pre-test (before starting the study) and post-test (at the end of the study)

Method of measurement

The short form of the health survey questionnaire will be used to evaluate the quality of life in daily activities.

3

Description

Pressure pain threshold

Timepoint

Pre-test (before starting the study) and post-test (at the end of the study)

Method of measurement

Digital dynamometer will be used for 3-point pain threshold test, pressure pain test and 36-point pain threshold test.

Intervention groups

1

Description

Intervention group: After the pre-tests, they will be entered the training phase. The exercises in this training intervention includes stretching, isometric and strengthening exercises. The exercises consists of a set of movements for 8 weeks, 3 sessions per week, and 1-3 sets, and each set intends for 1-18 repetitions for the subjects. The duration of each session lasts from 45 minutes to 1 hour, the first and last 10 minutes of which includes warming up and cooling down, respectively. The progress in the exercises will be determined based on the pain intensity of each subject.

Category

Treatment - Other

2

Description

Control group: After the pre-tests, this group will be asked not to participate in any training or treatment program.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

North Non-Profit University

Full name of responsible person

Dr. Raheleh Ghafari

Street address

Shomal Faculty of Physical Education and Sports Sciences, Imamzadeh Abdullah crossroads , 5 km of Haraz road , Amol

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Non-Profit University of Shomal

Full name of responsible person

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Grant name

Grant code / Reference number

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

No

Title of funding source

Shomal University

Proportion provided by this source

100
Public or private sector
Private
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

Sport Sciences Research Institute of Iran

Full name of responsible person

Mahdi Hosseinzadeh

Position

Assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

Sport Medicine

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Person responsible for updating data

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Latest degree

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Other areas of specialty/work

Sport injuries

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

There is no more information.

Study Protocol

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

Statistical Analysis Plan

Not applicable

Informed Consent Form

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

Clinical Study Report

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

Analytic Code

No - There is not a plan to make this available

Data Dictionary

Not applicable