

# 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)

##### Phone

+98 21 7714 6478

##### Email address

metti@ssrc.ac.ir

##### 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)

**Street address**

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

**City**

Tehran

**Province**

Tehran

**Postal code**

1587958711

**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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rh.ghaffari@gmail.com

##### Web page address

<https://shomal.ac.ir>

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Non-Profit University of Shomal

##### Full name of responsible person

Saeid Fallahian

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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  
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Assistant professor  
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## Person responsible for scientific inquiries

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## Person responsible for updating data

### Contact

**Name of organization / entity**  
Non-Profit University of Shomal  
**Full name of responsible person**  
Maryam Habibollahnataj Omran  
**Position**  
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**Latest degree**  
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**Other areas of specialty/work**  
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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