Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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)
Street address
No. 3, 5th Alley, Miremad Street, Motahhari Street, Tehran, Iran.
City
Tehran
Province
Tehran
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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
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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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Student

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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