

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

The effect of corrective exercise on the severity of pain and prevalence of musculoskeletal disorders in elderly

Protocol summary

Study aim

Determining the effect of corrective exercise on musculoskeletal disorders in elderly

Design

Clinical controlled trial with a parallel group design, not blind

Settings and conduct

The research environment will be the nursing home of Rasht city. Elderly people who are eligible for inclusion in the study are randomly assigned to intervention and control groups.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age 60 and above; Good general health status (autonomy in day activities and the ability to perform the exercise protocol); The health of the elderly for cognitive, visual and auditory. Non-inclusion criteria: History of orthopedic surgery in the past year; Skeletal fractures in the last six months; Use of assistant devices such as cane and walker; Orthopedic and neuromuscular diseases in the last 5 years; Congenital anomalies and specific skeletal diseases such as rheumatoid arthritis; Having Heart/cardiovascular disease or acute illness that is incompatible with exercise

Intervention groups

The intervention group: In this group, the intervention of corrective exercises will be done through one-hour sessions, 3 times a week for 8 weeks. Sports exercises include eight types of physical activity (waist, neck, shoulder, knee, ankle and leg, pelvic and abdominal exercises, elbows, wrists and hands). Corrective exercises will be performed under the supervision of the researcher in a group setting as well as individually according to the condition of each sample. Control group: For this group, no specific training will be considered and they will carry out routine activities.

Main outcome variables

Musculoskeletal disorders; pain

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190315043062N1**

Registration date: **2019-09-06, 1398/06/15**

Registration timing: **registered_while_recruiting**

Last update: **2019-09-06, 1398/06/15**

Update count: **0**

Registration date

2019-09-06, 1398/06/15

Registrant information

Name

Azar Darvishpour

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 13 4256 5060

Email address

darvishpour@gums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-09-06, 1398/06/15

Expected recruitment end date

2019-11-21, 1398/08/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of corrective exercise on the severity of pain and prevalence of musculoskeletal disorders in elderly

Public title
The effect of exercise on musculoskeletal disorders in elderly

Purpose
Prevention

Inclusion/Exclusion criteria
Inclusion criteria:
Age of 60 years old and above Good general health status (autonomy in daily activities and the ability to perform the exercise protocol) The health of the elderly for cognitive, visual and auditory
Exclusion criteria:
History of orthopedic surgery in the past year Skeletal fractures in the last six months Use of assistive devices such as cane and walker Orthopedic and neuromuscular diseases in the last 5 years Congenital anomalies and specific skeletal diseases such as rheumatoid arthritis Having Heart - cardiovascular disease or acute illness that is incompatible with exercise Having diabetes Doing regular exercise other than the exercises that the researcher will be applied throughout the period of research Drug and Tobacco addiction Taking analgesics and sedatives drugs

Age
From **60 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **60**

Randomization (investigator's opinion)
Randomized

Randomization description
The method of replacing the subjects in the two groups would be as follow that at first the names of the elderly will be written on separate sheets and then put them in a packet and by removing them one by one from the packet, they will be placed in the intervention and control groups (one in the intervention group and one in the control group).

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 Guilan University of Medical Sciences
Street address
Vice Chancellor for Research and Technology, in front of the 17 Shahrivar Hospital, Shahid Siadati Street - Namjo Street
City
Rasht
Province
Guilan
Postal code
66949- 41466
Approval date
2019-06-26, 1398/04/05
Ethics committee reference number
IR.GUMS.REC.1398.131

Health conditions studied

1

Description of health condition studied
Diseases of the musculoskeletal system and connective tissue

ICD-10 code
M62.9

ICD-10 code description
Disorder of muscle, unspecified

Primary outcomes

1

Description
prevalence of musculoskeletal disorders

Timepoint
One week before and one week after the end of the 8 weeks of intervention (corrective exercise)

Method of measurement
Nordic instrument

2

Description
Severity of pain in musculoskeletal disorders

Timepoint
One week before and one week after the end of the 8 weeks of intervention (corrective exercise)

Method of measurement
VAS (Visual assessment scale) Questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: The intervention includes corrective exercises that will take place within 8 weeks and 3 sessions a week. The main purpose of these exercises is to increase the flexibility and strength of the muscles. Sports exercises include eight types of physical activity (waist, neck, shoulder, knee, ankle and leg, pelvic and abdominal exercises, elbows, wrists and hands). The exercises will start with 10 repetitions and will reach 30 times by the end of the eighth week. The class begins with 10 minutes of warming (including tensile and equestrian exercises), and for 30 minutes thereafter, the corrective exercises will be assigned by the researcher, both group and special, according to the conditions of each sample. At the end of the class, cooling and back to primary state will take about 10 minutes. A pretest will be performed one week before and post- test will take place one week after the end of the intervention. The research tools included demographic information questionnaire, Nordic- standardized questionnaire and Visual Analogue Pain Questionnaire (VAS) completed by the researcher.

Category

Prevention

2

Description

Control group: For the control group, no specific training will be considered and they will carry out routine activities.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Rasht Elderly Hospice

Full name of responsible person

Azar Darvishpour

Street address

Soleymandarab, Entezam square

City

Rasht

Province

Guilan

Postal code

۱۳۶۴۳- ۴۱۴۶۷

Phone

+98 13 3355 8135

Email

darvishpour_a@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Rasht University of Medical Sciences

Full name of responsible person

Azar Darvishpour

Street address

Vice Chancellor for Research and Technology, in front of the 17 Shahrivar Hospital, Shahid Siadati Street, Namjo Street

City

Rasht

Province

Guilan

Postal code

66949- 41466

Phone

+98 13 3333 5821

Email

darvishpour_a@yahoo.com

Web page address

<http://www.gums.ac.ir/research>

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Rasht 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

Rasht University of Medical Sciences

Full name of responsible person

Azar Darvishpour

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

Street address

School of Nursing and Midwifery, Shahid Yaghouh Sheikhi Street, Leylakoo road, Langeroud

City

Langeroud

Province

Guilan

Postal code

44771-66595

Phone

+98 13 4253 6263

Email

darvishpour_a@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Rasht University of Medical Sciences

Full name of responsible person

Azar Darvishpour

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

Street address

School of Nursing and Midwifery, Shahid Yaghoub
Sheikhi Street, Leylakoooh road, Langeroud

City

Langeroud

Province

Guilan

Postal code

44771-66595

Phone

+98 13 4253 6263

Email

darvishpour_a@yahoo.com

Web page address

Azar Darvishpour

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

Street address

School of Nursing and Midwifery, Shahid Yaghoub
Sheikhi Street, Leylakoooh road, Langeroud

City

Langeroud

Province

Guilan

Postal code

44771-66595

Phone

+98 13 4253 6263

Fax

Email

darvishpour_a@yahoo.com

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

No - There is not 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

No - There is not a plan to make this available

Analytic Code

Not applicable

Data Dictionary

Not applicable

Person responsible for updating data

Contact

Name of organization / entity

Rasht University of Medical Sciences

Full name of responsible person