

Clinical Trial Protocol

Iranian Registry of Clinical Trials

28 Feb 2026

The effect of aquatic exercise program on pain, dryness, motor function, happiness, body composition and hip circumference of elderly men with osteoarthritis of the knee

Protocol summary

Study aim

Evaluation of the effects of aquatic exercise program on pain, dryness, motor function, happiness, body composition and hip circumference in elderly men with knee osteoarthritis

Design

The sample size in this study was 40 people who were randomly divided into 2 experimental groups (aquatic exercise) and control group. 48 hours before and after the aquatic exercise, the WOMAC and Happiness questionnaires were filled out by both groups, and measurements of body composition and hip circumference were completed and analyzed by all subjects.

Settings and conduct

The participants of the experimental group start the aquatic exercise training program for 6 weeks under the supervision of the researcher (in the Kosar pool in Rasht). The water aquatic program was performed three times a week for 50 minutes.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 1) Age over 65 years 2) Gender (Man) 3) Have a history of at least 6 months of knee osteoarthritis Exclusion criteria: 1) Inability to perform aquatic exercises 2) Taking supplements and medications to reduce knee pain during the month before the study

Intervention groups

Aquatic exercise training group (20 people), control group (20 people)

Main outcome variables

WOMAC Questionnaire Indices (including pain, dryness, motor function) and Happiness Questionnaire, body mass index and hip circumference

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180503039517N10**

Registration date: **2021-04-07, 1400/01/18**

Registration timing: **prospective**

Last update: **2021-04-07, 1400/01/18**

Update count: **0**

Registration date

2021-04-07, 1400/01/18

Registrant information

Name

Soleyman Ansari Kolachahi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 13 3375 2906

Email address

solomonansari@phd.iurasht.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-04-14, 1400/01/25

Expected recruitment end date

2021-04-25, 1400/02/05

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of aquatic exercise program on pain, dryness, motor function, happiness, body composition and hip circumference of elderly men with osteoarthritis of the knee

Public title

The effect of aquatic exercise program on pain, dryness, motor function, happiness, body composition and hip circumference of elderly men with osteoarthritis of the knee

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

Age over 65 years Gender (Man) Have a history of at least 6 months of knee osteoarthritis

Exclusion criteria:

Inability to perform aquatic exercises Taking supplements and medications to reduce knee pain during the month before the study

Age

From **65 years** old

Gender

Male

Phase

N/A

Groups that have been masked

- Outcome assessor
- Data analyser

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

40 males with osteoarthritis of the knee will be selected by available sampling method. Through a lottery (participants' names were written on paper and will be divided into experimental and control groups through random lottery)

Blinding (investigator's opinion)

Double blinded

Blinding description

In this research, responsible for collecting and processing the data, the type of intervention, and the participants in the research groups are unaware.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

The ethics committee of Islamic Azad University, Rasht Branch

Street address

Islamic Azad University, Rasht Branch, Lakan Blv

City

Rasht

Province

Guilan

Postal code

۴۱۳۷۶۵۴۹۱۹

Approval date

2020-08-17, 1399/05/27

Ethics committee reference number

IR.IAU.RASHT.REC.1399.036

Health conditions studied

1

Description of health condition studied

knee osteoarthritis

ICD-10 code

M17

ICD-10 code description

Osteoarthritis of knee

Primary outcomes

1

Description

Womak Questionnaire Indicators (including pain, dryness, motor function)

Timepoint

48 hours before and after the exercise intervention

Method of measurement

WOMAC Questionnaire

2

Description

Happiness and satisfaction of life

Timepoint

48 hours before and after the exercise intervention

Method of measurement

Oxford Happiness Questionnaire - Short Form

3

Description

Body composition (body mass index, fat percentage and hip circumference)

Timepoint

48 hours before and after the exercise intervention

Method of measurement

Measure height and weight, subcutaneous fat and hip circumference with scales, tape measure and caliper

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Intervention group: The experimental group starts the aquatic exercise training program for 6 weeks under the supervision of the researcher (in the Kosar pool in Rasht). The aquatic exercise program is done three times a week for 50 minutes. At the end of the sixth week, the final evaluation is performed and the participants complete the Womak questionnaire again and their weight, height, fat percentage and thigh circumference are measured again.

Category

Rehabilitation

2

Description

Control group: At the beginning and end of the study, they complete the Womak questionnaire and their weight, height, fat percentage and thigh circumference are measured again.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Zibaknar Sports Club

Full name of responsible person

Jamshid Ansari

Street address

Rasht - Zibaknar - Seyed Al-Shohada Street

City

Rasht

Province

Guilan

Postal code

4419865615

Phone

+98 13 3375 2906

Email

solomonansari@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

Alireza Seidavi

Street address

Islamic Azad University of Rasht Branch, Lakan Blv

City

Rasht

Province

Guilan

Postal code

۴۱۳۷۶۵۴۹۱۹

Phone

+98 13 3375 2906

Email

solomonansari@yahoo.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Islamic Azad 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

Islamic Azad University

Full name of responsible person

Soleyman Ansari Kolachahi

Position

Non faculty doctor

Latest degree

Specialist

Other areas of specialty/work

Sport Medicine

Street address

second floor, Adibsaber Apartment, next to Esparo restaurant, Prof. Samei Blv.

City

Rasht

Province

Guilan

Postal code

4193193933

Phone

+98 13 3375 2906

Email

solomonansari@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Islamic Azad University

Full name of responsible person

Soleyman Ansari Kolachahi

Position

Non faculty specialist

Latest degree

Specialist

Other areas of specialty/work

Sport Medicine

Street address

second floor, Adibsaber Apartment, next to Esparó restaurant, Prof. Samei Blv

City

Rasht

Province

Guilan

Postal code

4193193933

Phone

+98 13 3375 2906

Email

solomonansari@yahoo.com

Person responsible for updating data**Contact****Name of organization / entity**

Islamic Azad University

Full name of responsible person

Soleyman Ansari Kolachahi

Position

Non faculty specialist

Latest degree

Specialist

Other areas of specialty/work

Sport Medicine

Street address

2nd floor, Adibsaber Apartment,next to Esparó restaurant, Prof. Samei Blv.

City

Rasht

Province

Guilan

Postal code

4193193933

Phone

+98 13 3375 2906

Email

solomonansari@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 further information

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

Yes - There is 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

Title and more details about the data/document

Raw and processed data

When the data will become available and for how long

Start of access period from 1401

To whom data/document is available

Academic researchers, research colleagues and participants

Under which criteria data/document could be used

Use research results and data in future meta-analysis research

From where data/document is obtainable

Corresponding Author

What processes are involved for a request to access data/document

Request the researcher via email

Comments