

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jul 2026

A Comparison of the Effect of Water and Land-based Exercises on Bio-Motor Capabilities of Elder Men

Protocol summary

Summary

Objectives: The aim of this study was to compare the effect of water-based and land-based exercises on bio-motor capabilities of elder men's. Design: This study was a randomized clinical trial with two groups (water and land-based exercises), pre and post-test design, and not-blinded. Setting and conduct: This study was conducted on 60 elder men who referred to Emamat and Daneshamouz health Center of Mashhad that were randomly divided into two groups (n = 30). Participants: Inclusion criteria: Over 60 years old. Exclusion criteria: Having the cardiac disease. Intervention: in experimental group (water-based exercises) was conducted exercise for 6 weeks (3 sessions per week) in the baths and in control group (land-based exercises) was conducted for this period in the coliseum, too. The main outcome variables in this study included: bio-motor capabilities of elder men's that in both groups was assessed before the intervention and the end of sixth week with bio-motor capabilities researcher-made questionnaire.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016101824845N3**

Registration date: **2017-01-12, 1395/10/23**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2017-01-12, 1395/10/23

Registrant information

Name

Akhtar Nejat Mohammad

Name of organization / entity

Mashhad Faculty of Nursing and Midwifery, Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 51 3523 2319

Email address

nejatma1@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Mashhad University of Medical Sciences, Vice chancellor for research

Expected recruitment start date

2016-04-20, 1395/02/01

Expected recruitment end date

2016-09-22, 1395/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A Comparison of the Effect of Water and Land-based Exercises on Bio-Motor Capabilities of Elder Men

Public title

The Effect of Exercise on Bio-motor Capabilities of Elders

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: Willingness to participate in the study; Over 60 years old. Exclusion criteria: Having the cardiac disease.

Age

From **60 years** old

Gender

Male

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: 60

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features

The elders divided to intervention (water-based exercises) and control (land-based exercises) group with simple randomization method.

Secondary Ids

empty

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

Ethics committee of Mashhad University of Medical Sciences

Street address

Mashhad University of Medical Sciences, Vice chancellor for research, Ghoraiшы Building, University St

City

Mashhad

Postal code**Approval date**

2016-02-29, 1394/12/10

Ethics committee reference number

IR.MUMS.REC.94.877

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

Bio-motor Capabilities

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

Bio-motor capabilities

Timepoint

Before the intervention and the end of sixth week

Method of measurement

Bio-motor capabilities researcher-made questionnaire

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group: in intervention group, exercise was conducted for 6 weeks (3 sessions per week) in the baths.

Category

Prevention

2**Description**

Control group: in control group, exercise was conducted for 6 weeks (3 sessions per week) in the coliseum, too.

Category

Prevention

Recruitment centers**1****Recruitment center****Name of recruitment center**

Daneshamouz Health Center

Full name of responsible person

Elham Rezaee

Street address

Elder Department, Daneshamouz Health Center, Ebne Sina St, Imam Reza Square, Mashhad

City

Mashhad

2**Recruitment center****Name of recruitment center**

Emamat Health Center

Full name of responsible person

Nahid Ebrahimi

Street address

Elder Department, Emamat Health Center, Ayatollah Bahjat St, Mashhad

City

Mashhad

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Mashhad University of Medical Sciences, Vice chancellor for research

Full name of responsible person

Mohsen Tafaghodi

Street addressMashhad University of Medical Sciences, Vice
chancellor for research, Ghoraiшы Building,
University St**City**

Mashhad

Grant name**Grant code / Reference number****Is the source of funding the same sponsor
organization/entity?**

Yes

Title of funding sourceMashhad University of Medical Sciences, Vice chancellor
for research**Proportion provided by this source**

100

Public or private sector*empty***Domestic or foreign origin***empty***Category of foreign source of funding***empty***Country of origin****Type of organization providing the funding***empty***Person responsible for general inquiries****Contact****Name of organization / entity**

School of Nursing and Midwifery

Full name of responsible person

Mojtaba Askari

Position

Master of Science Student in Gerontology

Other areas of specialty/work**Street address**Mashhad Faculty of Nursing and Midwifery, Ebn-e Sina
St, Doktora Crossroads**City**

Mashhad

Postal code**Phone**

+98 51 3607 8926

Fax**Email**

Askarim1@mums.ac.ir

Web page address**Person responsible for scientific
inquiries****Contact****Name of organization / entity**

School of Nursing and Midwifery

Full name of responsible person

Seyed Reza Mazloum

Position

Master of Science in Nursing

Other areas of specialty/work**Street address**Mashhad Faculty of Nursing and Midwifery, Ebn-e Sina
St, Doktora Crossroads**City**

Mashhad

Postal code**Phone**

+98 51 3852 8512

Fax**Email**

Mazlomr@mums.ac.ir

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

School of Nursing and Midwifery

Full name of responsible person

Mojtaba Askari

Position

Master of Science Student in Gerontology

Other areas of specialty/work**Street address**Mashhad Faculty of Nursing and Midwifery, Ebn-e Sina
St, Doktora Crossroads**City**

Mashhad

Postal code**Phone**

00

Fax**Email**

Askarim1@mums.ac.ir

Web page address**Sharing plan****Deidentified Individual Participant Data Set (IPD)***empty***Study Protocol***empty***Statistical Analysis Plan***empty***Informed Consent Form***empty***Clinical Study Report***empty***Analytic Code***empty***Data Dictionary***empty*