Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Investigating the effect of aerobic exercises, yoga, and spirituality on the participation of the elderly in physical activity and sports

Protocol summary

Study aim
The purpose of this study is to investigate the effect of aerobic exercises, yoga, and spirituality on the participation of the elderly in physical activity and sports.

Design
This study is a randomized and not-blinded trial with a parallel-group design, including 120 older adults over 60 years old.

Settings and conduct
Older adults over 60 years who are living in Tehran's community-dwelling centers during the study will be included in the study if they are eligible and will be randomly assigned to the intervention and control groups by lottery. This study will be conducted in an "not blinded" manner in which the purpose of the research will be explained to the instructors, participants, and the analyst.

Participants/Inclusion and exclusion criteria
Inclusion criteria were men and women over 60 years old, without cognitive impairment, and without physical disability. Exclusion criteria included participation in aerobics, yoga, or spirituality classes in the past six months, and any changes in the participant’s general health during exercise that would prevent them from continuing exercise.

Intervention groups
The intervention program for Group 1 consisted of eight weeks of aerobic exercises, including brisk walking, jogging, and running. Group 2 participated in an eight-week yoga program, including stretching exercises, meditation, and mindfulness practices. Group 3 underwent an eight-week spirituality program, including prayer, meaning-making activities, and self-awareness exercises. The control group continued their usual daily activities at the residential care facility, such as routine social and cultural programs, and did not receive any intervention.

Main outcome variables
Intention to participate in physical activity and exercise, depression, anxiety

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20260105068555N1**
Registration date: **2026-02-05, 1404/11/16**
Registration timing: **registered_while_recruiting**

Last update: **2026-02-05, 1404/11/16**
Update count: **0**

Registration date
2026-02-05, 1404/11/16

Registrant information

Name
Saeed Ghorbani

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 21 5635 8105

Email address
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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2026-01-20, 1404/10/30

Expected recruitment end date
2026-04-20, 1405/01/31

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date

empty

Scientific title
Investigating the effect of aerobic exercises, yoga, and spirituality on the participation of the elderly in physical activity and sports

Public title
The effect of physical exercise and spirituality on sports participation of the elderly

Purpose
Supportive

Inclusion/Exclusion criteria

Inclusion criteria:
Men and women over 60 years old No mental disorder No physical disorder

Exclusion criteria:
participating in aerobic, yoga, or spirituality classes since in the past six months Any change in the general state of the patient's body during exercise so that he is not able to exercise

Age
From **60 years** old to **90 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **120**

Randomization (investigator's opinion)
Randomized

Randomization description
Simple randomization was performed based on the inclusion and exclusion criteria. Assignment to the intervention and control groups was done by drawing lots. The labels "Aerobics," "Yoga," "Spirituality," and "Control (no exercise)" were written on separate slips of paper, placed in a container in quantities corresponding to the number of participants, and then participants were assigned to their respective groups according to the list.

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 Islamic Azad University - Sari Branch

Street address
Islamic Azad University - Sari Branch, 7th Km Darya Road, Sari

City
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Province
Mazandaran

Postal code
48164-194

Approval date
2024-07-30, 1403/05/09

Ethics committee reference number
IR.IAU.SARI.REC.1403.203

Health conditions studied

1

Description of health condition studied
Physical activity and exercise, depression, anxiety

ICD-10 code
Z02.5

ICD-10 code description
Encounter for examination for participation in sport

Primary outcomes

1

Description
Intention to participate in physical activity and exercise

Timepoint
One week before and after intervention

Method of measurement
"Intention to Participate in Sports" questionnaire by Gill, Gross, and Huddleston (1983)

2

Description
Depression

Timepoint
One week before and after intervention

Method of measurement
The Depression, Anxiety and Stress Scale - 21 Items (DASS-21) by Beck (1993)

3

Description
Anxiety

Timepoint
One week before and after intervention

Method of measurement
The Depression, Anxiety and Stress Scale - 21 Items (DASS-21) by Beck (1993)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention Group 1 will participate in a group aerobic exercise program for eight weeks, with three sessions per week, each lasting 30–50 minutes. Each session will consist of three parts: warm-up, main exercise, and cool-down. During the warm-up, participants will walk at a normal pace and perform stretching and flexibility exercises to prepare the body and reduce the risk of injury. The main exercise will consist of brisk walking, jogging, and running, aiming to improve cardiovascular endurance, enhance overall physical fitness, and strengthen muscles. Participants will be guided by a trained instructor, who will ensure correct technique and provide support to maximize both safety and effectiveness. The cool-down will include walking at a slower pace and additional stretching and flexibility exercises to relax muscles, prevent stiffness, and facilitate recovery. Participants will be encouraged to actively engage in all exercises, reflect on their experiences, and gradually integrate these activities into their daily routines, with the goal of progressively improving physical fitness and comfort with aerobic exercise over the eight-week program.

Category

Lifestyle

2

Description

Intervention Group 2 will participate in a group yoga program for eight weeks, with three sessions per week, each lasting 30–50 minutes. Each session will consist of three parts: warm-up, main exercise, and cool-down. The warm-up will include stretching and flexibility exercises to prepare the body and reduce the risk of injury. The main exercise will consist of yoga breathing exercises, meditation, and mindfulness practices, focusing on breath control, body awareness, and mental relaxation. Participants will be guided step-by-step by a trained instructor to ensure correct technique and active engagement. The cool-down will include additional stretching and flexibility exercises to promote relaxation and recovery. Participants will be encouraged to actively engage in all exercises, reflect on their experiences, and discuss insights with the group, with the goal of gradually improving physical flexibility and mental focus over the eight-week program.

Category

Lifestyle

3

Description

Intervention Group 3 will participate in a group spirituality program for eight weeks, with three sessions per week, each lasting approximately 30 minutes. Each session will include structured training and practice in prayer, gratitude exercises, and self-awareness activities. During the prayer component, participants will learn short prayers and focus on positive words and feelings. In the gratitude component, they will write or share three things they are grateful for and discuss with the group how this affects their emotions. In the self-awareness component, participants will practice mindful breathing, observe their thoughts and feelings, and reflect on personal experiences. Sessions will be guided by a trained facilitator who will provide step-by-step instructions. Participants will be encouraged to actively engage in the exercises, reflect on their experiences, and discuss insights with the group, with the aim of progressively enhancing their skills and comfort with the practices over the eight-week program.

Category

Lifestyle

4

Description

Control group: Control group subjects do not participate in any intervention and participate in the daily affairs and activities, such as educational, cultural, and social activities, during the research.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center
Golbarg Residential Care Facility

Full name of responsible person
Saeed Ghorbani

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
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Full name of responsible person
Pezhman Hosseinion

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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Islamic Azad University of Islamshahr
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
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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 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
No - There is not 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