

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 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

saeedghorbani\_ur@yahoo.com

##### 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

Sari

### 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

##### Street address

No. 3, South Samangan Ave, Narmak, Tehran

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##### Province

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##### Fax

##### Email

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## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Islamic Azad University of Islamshahr

##### Full name of responsible person

Pezhman Hosseini

##### Street address

No. 6, Islamic Azad University of Islamshahr, shahid sayad shirazi St, namaz Sq, Islamshahr

##### City

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info@iiiau.ac.ir  
**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**  
Islamic Azad University  
**Full name of responsible person**  
Saeed Ghorbani  
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Associate Professir  
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**Other areas of specialty/work**  
Sport Medicine  
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## Person responsible for scientific inquiries

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## Person responsible for updating data

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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