Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The Effect of Education through Ecotherapy on Medication Adherence and Exercise Capacity of Patients with Ischemic Heart Diseases

Protocol summary

Study aim
Determining the Effect of Education through Ecotherapy on Medication Adherence and Exercise Capacity of Patients with Ischemic Heart Diseases

Design
This clinical trial is performed without blinding and with parallel groups. Allocationing of persons to two groups will be done randomly in this study. 58 Patients are divided into intervention and control groups with random sequence method by website.

Settings and conduct
The ecotherapy program will be held in Koh Sangi Park of Mashhad. The content of the ecotherapy sessions includes walk, exercise and talk in nature. In the control group, training and exercises are same. But training will be held in the form of class sessions.

Participants/Inclusion and exclusion criteria
Patients with ischemic heart disease, having reading and writing ability, aging 18 to 70 years, who are not in the acute phase of the disease or invasive diagnostic method are participating in this study with confirmation of cardiologist. Also, having physical or mental disabilities affecting the educational process is an exclusion criterion.

Intervention groups
In the intervention group, the ecotherapy program will be held in four weekly sessions in Koh Sangi Park, and patients will be given advice on medications, diet, stress control, and exercise. In control group, four training sessions will be held at the Mashhad Nursing and Midwifery College. The researcher will teach the patients about medication, diet, stress control, and exercise face-to-face.

Main outcome variables
exercise capacity, Medication Adherence

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20240226061114N1**
Registration date: **2025-02-16, 1403/11/28**
Registration timing: **prospective**

Last update: **2025-02-16, 1403/11/28**
Update count: **0**

Registration date
2025-02-16, 1403/11/28

Registrant information

Name
elahe karazhian

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 51 3870 1075

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karazhiane4001@mums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2025-02-19, 1403/12/01

Expected recruitment end date
2025-04-21, 1404/02/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The Effect of Education through Ecotherapy on Medication Adherence and Exercise Capacity of Patients with Ischemic Heart Diseases

Public title
The Effect of Education through Ecotherapy on Patients with Ischemic Heart Diseases
Purpose
Education/Guidance
Inclusion/Exclusion criteria
Inclusion criteria:
Ischemic heart disease patients (class 1 or 2) Having reading and writing ability Age between 18-70 years Having a written consent forn for participating in the study Being aware of time, place and person Having permission from a cardiologist to do physical activity such as walking outdoors Passing at least two weeks since heart attack Having walking ability for more than 6 minutes
Exclusion criteria:
Having physical or mental disabilities affecting the educational process
Age
From **18 years** old to **70 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **58**
Randomization (investigator's opinion)
Randomized
Randomization description
Allocationing of persons to two groups will be done randomly in this study. All patients who have entry criterias of the study and visit the cardiologist on time, will be included in the study. Patients are divided into intervention and control groups with random sequence method by website. Quadruple blocking without replacement will be used . The randomization sequencefor 58 patients in control and intervention groups will be designed by the randomization website. The sequence will be written on small cards and will keep in the envelope in the order obtained. On the sampling day, the envelope will be opened and the card in the same order will exit. Then placing patients in research groups will be determined. This will be done for allocation concealment .
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 Mashhad University of Medical Sciences
Street address
Central Organization of Mashhad University of Medical Sciences, Science and Health City, Between Shahid Al Shahidi Square and Shahid Javan Square, Shahid Fakuri Blvd, Mashhad
City
Mashhad
Province
Razavi Khorasan
Postal code
9177899191
Approval date
2024-09-07, 1403/06/17
Ethics committee reference number
IR.MUMS.NURSE.REC.1403.048

Health conditions studied

1

Description of health condition studied
Ecotherapy, Chronic ischaemic heart disease
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Exercise capacity based on the six-minutes walk test score
Timepoint
Measuring exercise capacity at the beginning of the study and four weeks later
Method of measurement
Measuring exercise capacity based on six-minutes walk test

Secondary outcomes

1

Description
The score of patients' medication adherence in Moriski's questionnaire
Timepoint
Measuring patients' medication adherence at the beginning of the study and four weeks later
Method of measurement
Measuring patients' medication adherence based on Moriski questionnaire

Intervention groups

1

Description
In the intervention group, theoretical and practical training is required regarding medications, diet, stress control, and exercise and their practical practice. The nature therapy program will be held in four sessions weekly in Mashhad's Koh Sangi Park from 8 am to 12 am. The training program will be conducted by a nurse (researcher) and a physiotherapist. The content of the ecotherapy session will be pre-designed and will include walk and talk to teach about medications and diet, nature meditation to control stress, and green exercise to teach exercise.

Category
Rehabilitation

2

Description
Control group: Holding four face to face training sessions in the Mashhad School of Nursing and Midwifery, about drugs, diet, stress control and exercise by researcher.

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Cardiologist's office

Full name of responsible person
Elahe Karazhian

Street address
Sinohe Building., Mohtashmi Ave., Ahmedabad Ave

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Mashhad

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Mashhad University of Medical Sciences

Full name of responsible person
Seyyed Reza Mazlom

Street address
Knowledge and Health City, In the end of Shahid Fakouri Blvd (In front of Fakouri 94)

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https://www.mums.ac.ir/

Grant name

Grant code / Reference number

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

Title of funding source
Mashhad 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
Mashhad University of Medical Sciences

Full name of responsible person
Seyyed Reza Mazlom

Position
Consultant

Latest degree
Ph.D.

Other areas of specialty/work
Nursery

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Daneshgah Ave

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Person responsible for scientific inquiries

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Name of organization / entity

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Position
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Latest degree
Ph.D.

Other areas of specialty/work
Nursery

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Person responsible for updating data

Contact

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Position
Master student

Latest degree
Bachelor

Other areas of specialty/work
Nursery

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

Study Protocol
Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available

Analytic Code
Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available