Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

Effects of Home-Based Cardiac Rehabilitation Using Telenursing on Quality of Life and Treatment Adherence in Patients with Acute Coronary Syndromes

Protocol summary

Study aim
Effects of Rehabilitation on Quality of Life and Treatment Adherence in Patients with Acute Coronary Syndromes

Design
A single-blind, parallel-group randomized clinical trial involving 78 patients.

Settings and conduct
The samples will be selected consecutively and based on the inclusion criteria among patients with acute coronary syndrome hospitalized in the cardiac care units and cardiology ward of Hajar teaching hospital of Shahrekord; then will be randomly allocated to the intervention and control groups.

Participants/Inclusion and exclusion criteria
Inclusion criteria: age 18-80 years, informed consent, confirmed diagnosis of acute coronary syndromes, ejection fraction≥20, ability to communicate in Persian, and having a mobile phone; Exclusion criteria: dysrhythmias and diseases preventing exercise, severe psycho-cognitive disorders, class IV of heart failure, and need for coronary artery bypass surgery

Intervention groups
Intervention group: In the first stage, the necessary information for developing the rehabilitation program content for the participants will be collected. In the second stage, participants will undergo six 40-minute rehabilitation sessions. The sessions will be conducted weekly by a trained researcher and virtually through telephone calls and educational videos. The content of the rehabilitation sessions include 4 main areas of lifestyle changes (including management of dietary and medication regimen, comorbidities, and physical activity), control of signs and symptoms, care after invasive coronary procedures and psychological support. In this group, an educational brochure will also be provided to participants at the beginning of the sessions. Patients in the control group will receive only the routine care and education provided before the study.

Main outcome variables
Quality of Life, Adherence to Treatment

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20250123064495N3**
Registration date: **2026-10-08, 1405/07/16**
Registration timing: **prospective**

Last update: **2026-10-08, 1405/07/16**
Update count: **0**

Registration date
2026-10-08, 1405/07/16

Registrant information

Name
Majid Heidary Farsani

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 38 3322 2646

Email address
st-heidary@skums.ac.ir

Recruitment status
Not yet recruiting

Funding source

Expected recruitment start date
2026-11-20, 1405/08/29

Expected recruitment end date
2027-03-20, 1405/12/29

Actual recruitment start date
empty

Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Effects of Home-Based Cardiac Rehabilitation Using Telenursing on Quality of Life and Treatment Adherence in Patients with Acute Coronary Syndromes

Public title
Effects of cardiac rehabilitation in patients with acute coronary syndromes
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria:
Age: 18-80 years Written informed consent for participate in study Confirmed medical diagnosis of acute coronary syndromes according to the diagnosis of a cardiologist and the clinical and paraclinical findings recorded in the patients' medical records Ejection fraction ≥ 20% according to patients echocardiography Ability to communicate in Persian Having a mobile phone and ability to use it
Exclusion criteria:
Having class IV heart failure according to NYHA index Having severe valvular heart disorders or aortic dissection based on the diagnosis of a cardiologist, findings recorded in the medical records and echocardiography of the patients Presence of dysrhythmias preventing the safe performance of the cardiac rehabilitation program based on the assessment of a cardiologist Having other diseases preventing exercise such as severe musculoskeletal, neurological, renal or respiratory disorders based on medical assessment and patients' records Having severe psychiatric disorders based on information recorded in the medical records and the treating physician's opinion Need for coronary artery bypass surgery according to the angiography results
Age
From **18 years** old to **80 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Data analyser

Sample size
Target sample size: **78**
Randomization (investigator's opinion)
Randomized
Randomization description
Eligible participants in this study will be allocated to two intervention and control groups with a ratio of 1.1 using random allocation. To generate the random allocation sequence, an independent researcher not involved in conducting of the study will use the website https://www.random.org/. For this purpose, a random sequence including 78 letters (A: intervention and B: control) will be generated. To conceal the generated allocation sequence, each of the A or B codes of the generated sequence will be separately placed in opaque and sealed envelopes and the envelopes will be numbered consecutively from 1 to 78. After selecting eligible participants and obtaining informed consent, the envelopes will be opened in numerical order by the ward nurses who have no role in the study process, and individuals will be assigned to the intervention or control group based on the letter contained in the envelope.
Blinding (investigator's opinion)
Single blinded
Blinding description
Considering the nature of the intervention, the participants, the principal researcher and the researchers who are responsible for implementing the intervention, collecting data and assessing outcomes, will not be blinded to the allocation of individuals to the study groups. The ward nurses will only assist in opening the allocation envelopes and have no role in the other stages of the study. On the other hand, the data analyst will be blinded to the allocation of the participants in the study.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Shahrekord & Borujen School of Nursing & Midwifery & Shahrekord School of Health
Street address
Shahrekord University of Medical Sciences, Central Headquarters, Ayatollah Kashani Blvd.
City
Shahrekord
Province
Chahar-Mahal-va-Bakhtiari
Postal code
8815713471
Approval date
2026-08-17, 1405/05/26
Ethics committee reference number
IR.SKUMS.NUMHE.REC.1405.058

Health conditions studied

1

Description of health condition studied
Myocardial infarction
ICD-10 code

I21

ICD-10 code description

ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarction

2

Description of health condition studied

Unstable angina

ICD-10 code

I20.0

ICD-10 code description

Unstable angina

Primary outcomes

1

Description

Treatment Adherence

Timepoint

Before, immediately and 6 months after intervention

Method of measurement

Coronary Artery Disease Treatment Adherence Scale

2

Description

Quality of life

Timepoint

Before, immediately and 6 months after intervention

Method of measurement

Seattle angina questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Seven weekly rehabilitation sessions, each lasting 40 minutes, will be conducted by a trained researcher. In the first session, the necessary assessments and review of the patients medical records will be conducted in person at the patients bedside. The next six sessions of the rehabilitation program will be conducted in groups through sending videos. These trainings will include 4 main areas of lifestyle changes (including management of dietary and medication regimen, comorbidities, and physical activity), control of signs and symptoms, care after invasive coronary procedures and psychological support. At the end of the 30-minute rehabilitation session, patients' questions will be answered for 10 minutes. The main contents will also be provided to patients' families, and the content of the rehabilitation sessions will be provided to participants in the form of a brochure at the beginning of the sessions. After completion of the rehabilitation sessions, monthly 20-minute follow-up sessions will be conducted for three months to review the training content, answer patients' questions, and assess their adherence to the training.

Category

Rehabilitation

2

Description

Control group: Patients in the control group will receive routine care as before the study by the nurses and staff of the ward. The educational brochure prepared by the hospital will be provided to these patients at discharge, but the patients will not receive educational recommendations after discharge.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Hajar Hospital

Full name of responsible person

Majid Heidary Farsani

Street address

Hajar Hospital, Parastar Avenue, Shahrekord

City

Shahrekord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

8816854633

Phone

+98 38 3225 2416

Email

Hajar-Hospital@SKUMS.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahre-kord University of Medical Sciences

Full name of responsible person

Dr. Ali Hasanpour Dehkordi, Research Deputy of Shahrekord University of Medical Sciences

Street address

Shahrekord University of Medical Sciences, Ayatolah Kashani Avenue

City

Shahrekord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

8815713471

Phone

+98 38 3334 2414

Email

vcrt@skums.ac.ir

Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shahre-kord 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
Shahre-kord University of Medical Sciences
Full name of responsible person
Majid Heidary Farsani
Position
Master student
Latest degree
Bachelor
Other areas of specialty/work
Nursery
Street address
Faculty of Nursing and Midwifery, Shahrekord University of Medical Sciences, Rahmatiye, Shahrekord
City
Shahrekord
Province
Chahar-Mahal-va-Bakhtiari
Postal code
8815713471
Phone
+98 38 3322 3893
Email
Majidheidary1378@gmail.com

Person responsible for scientific inquiries

Contact
Name of organization / entity
Shahre-kord University of Medical Sciences
Full name of responsible person
Jaefar Moghaddsi
Position
Assistant professor
Latest degree
Ph.D.
Other areas of specialty/work
Nursery
Street address
Faculty of Nursing and Midwifery, Shahrekord University of Medical Sciences, Rahmatiye, Shahrekord
City
Shahrekord
Province
Chahar-Mahal-va-Bakhtiari
Postal code
8815713471
Phone
+98 38 3334 1219
Email
moghaddasi@skums.ac.ir

Person responsible for updating data

Contact
Name of organization / entity
Shahre-kord University of Medical Sciences
Full name of responsible person
Maryam Fathollahi
Position
Master student
Latest degree
Bachelor
Other areas of specialty/work
Nursery
Street address
Hajar Hospital, Parastar Avenue, Shahrekord
City
Shahrekord
Province
Chahar-Mahal-va-Bakhtiari
Postal code
8816854633
Phone
+98 38 3225 2416
Email
maryamfathollahy79@gmail.com

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