Clinical Trial Protocol
Iranian Registry of Clinical Trials

01 Jul 2026

Assessment the effects of implementation cardiac rehabilitation program using a mobile application on activity tolerance, fatigue and dyspnea of patients after acute myocardial infraction

Protocol summary

Study aim
Determining the Effect of Heart Rehabilitation Program Using Mobile App on ;activity tolerance; Fatigue, Dyspnea, Patients After Acute Myocardial Infarction.

Design
00 samples were randomly assigned to the intervention and control groups. Each sample was given a 3-digit code, referring to the table. The starting point was selected based on adjacent digit numbers moving along rows or columns. Ignore first digit number less than 100 as first sample of larger number control group Continue to 50 samples selected for control group to continue to 50

Settings and conduct
The researcher referred to the Hajar and Kashani hospitals of Shahrekord, selected patients who were included in the study and At the beginning of the intervention, the patients were evaluated for their dyspnea fatigue, and endurance. The intervention group received software installed on the patient's mobile phone and was given the necessary training in this area. They received cardiac routine, and after 8 weeks of evaluation, fatigue was again assessed dyspnea and activity tolerance were measured

Participants/Inclusion and exclusion criteria
log in Acute myocardial infarction; patient consent to participate; no psychotropic drugs; age range 35-75 years; no learning difficulties; Lack of hearing and vision impairment; Consent of one patient's family to cooperate with the plan; Patient and mobile dating; Family members' residence in the patient's place of residence, ability to communicate with patient and co-worker after discharge Exit Not having a sick and companion Android phone; over 75; not reading or writing about a patient or companion Learn to pronounce

Intervention groups
The control and test groups, the app test and installation group, and the control group, the routine training of the hospital, such as pamphlets, etc.

Main outcome variables
activity tolerance; fatigue ; dyspnea

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20190511043560N1**
Registration date: **2019-10-22, 1398/07/30**
Registration timing: **retrospective**

Last update: **2019-10-22, 1398/07/30**
Update count: **0**

Registration date
2019-10-22, 1398/07/30

Registrant information

Name
Zahra Esmaeili

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 38 3232 2713

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st-esmaeili.za@skums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-02-05, 1397/11/16

Expected recruitment end date
2019-06-06, 1398/03/16

Actual recruitment start date

2019-02-05, 1397/11/16

Actual recruitment end date

2019-06-05, 1398/03/15

Trial completion date

2019-06-15, 1398/03/25

Scientific title

Assessment the effects of implementation cardiac rehabilitation program using a mobile application on activity tolerance, fatigue and dyspnea of patients after acute myocardial infraction

Public title

Assessment the effects of implementation cardiac rehabilitation program using a mobile application on activitytolerance, fatigue and dyspnea of patients after acute myocardial infraction

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

The patient has an acute stroke The patient is willing to cooperate Not treated by a psychiatrist. Age over 35 and less than 75 Can not communicate and have difficulty learning There is no communicative problem such as hearing impairment and vision. At least one member of the patient's family is willing to cooperate with the research At least they are familiar with using the patient's mobile and one of the family members One family should know the status of the patient and have the power to make decisions. The residence of the family members is at the place where the patient lives or is near him. Possibility to communicate with members and patient after discharge

Exclusion criteria:

Not having a sick or mobile patient on your Android mobile phone Age over 75 Lack of education in reading or writing about the patient himself or herself

Age

From **35 years** old to **75 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **100**

Actual sample size reached: **100**

Randomization (investigator's opinion)

Randomized

Randomization description

The patients with inclusion criteria were divided into two intervention and control groups by random allocation method. In this way 100 patients were selected. Each of the individuals given a three-digit code 001 and 002 ..... 100 then referred to the table. Smaller than 100 was selected as the first sample and ignored larger numbers than 100 and this continued until 50 were selected as the intervention group and 50 as the control group.

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 Shahrekord University of Medical Sciences

Street address

Ayatollah Kashani Boulevard

City

shahrekord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

8815713471

Approval date

2019-02-05, 1397/11/16

Ethics committee reference number

IR.SKums.REC.1397.264

Health conditions studied

1

Description of health condition studied

MYOCARDIAL INFRACTION

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

activity tolerance score in the RAPA questionnaire and dyspenea score in the berg questionnaire and fatigue score in Fss questionnaire.

Timepoint

Before you start the intervention and after 8 weeks after using the app

Method of measurement

Using RAPA questionnaire for measuring activity tolerance and berg questionnaire for measuring dyspenea and Fss questionnaire for measuring fatigue

Secondary outcomes

empty

Intervention groups

1

Description
In the intervention group, the software was installed on a mobile phone or a patient, and for 8 weeks, the patients in the control group were evaluated
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
kashani and hajar haspital
Full name of responsible person
zahra esmaeili
Street address
No215.alley45.leader blvd.mahdie-shahrekord
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8816664353
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zahra.e.nurse@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shahre-kord University of Medical Sciences
Full name of responsible person
dr seayad kamal solati
Street address
Shahrekord-Ayatollah Kashani Blvd.-University of Science and Technology-Building No.2 Vice-Chancellor for Researc
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Province
Chahar-Mahal-va-Bakhtiari
Postal code
8815713471
Phone
+98 38 3334 2414
Fax
Email
kamal-solati@yahoo.com
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
zahra esmaeili
Position
master of student nursing
Latest degree
Master
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Nursery
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Latest degree
Master
Other areas of specialty/work
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Person responsible for updating data

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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