

# 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)

##### Phone

+98 38 3232 2713

##### Email address

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 dyspnea 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 dyspnea 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

#### City

shahrekord

#### Province

Chahar-Mahal-va-Bakhtiari

#### Postal code

8816664353

#### Phone

+98 38 3232 2713

#### Email

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

#### City

shahrekord

#### 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

#### Other areas of specialty/work

Nursery

#### Street address

Shahr-e-Kher, Mahdieh Boulevard, Leader of Alley 45, Plain 215

#### City

shahrekord

#### Province

Chahar-Mahal-va-Bakhtiari

#### Postal code

8816664353

#### Phone

+98 38 3232 2713

#### Email

zahra.e.nurse@gmail.com

## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

Shahre-kord University of Medical Sciences

#### Full name of responsible person

zahra esmaeili

#### Position

master of student

#### Latest degree

Master

#### Other areas of specialty/work

Nursery

#### Street address

Shahr-e-Kher, Mahdieh Boulevard, Leader of Alley 45, Plain 215

#### City

shahrekord

#### Province

Chahar-Mahal-va-Bakhtiari

**Postal code**  
8816664353  
**Phone**  
+98 38 3232 2713  
**Email**  
zahra.e.nurse@gmail.com

8816664353  
**Phone**  
+98 38 3232 2713  
**Email**  
zahra.e.nurse@gmail.com

## Person responsible for updating data

### Contact

**Name of organization / entity**  
Shahre-kord University of Medical Sciences  
**Full name of responsible person**  
zahra esmaeili  
**Position**  
master of student  
**Latest degree**  
Master  
**Other areas of specialty/work**  
Nursery  
**Street address**  
Shahr-e-Kher, Mahdiah Boulevard, Leader of Alley 45,  
Plain 215  
**City**  
shahrekord  
**Province**  
Chahar-Mahal-va-Bakhtiari  
**Postal code**

## 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