

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

The effect of mobile-based education on anxiety and physiological indices of candidates for coronary artery angiography

Protocol summary

Study aim

Determining the Effect of Mobile Based Education on Anxiety Reduction and Changes in Physiological Indices in Candidate Patients for Coronary Angiography

Design

It's clinical trial. The research sample consisted of 94 patients who were candidates for coronary artery angiography who were selected from the research community based on entry criteria, then random allocation, and non-probabilistic, easy-to-target and goal-based method, and were divided into two groups of 47 students with software and control software Routine training will be divided.

Settings and conduct

Initially refer to the angiographic section and select patients based on the criteria of entry and then obtain informed consent. Patients will be divided into two treatment groups with software downloads and control group with routine training. Random assignment is done to prevent contact between patients in two groups and the samples are placed in the test and control group one day. Then, the physiological and spill-burger indices are obtained in the following way. 1- when the patient is nominated by a doctor. 2- half an hour after entering the department and performing routine pre-angiography operations in bed rest. 3-immediately before angiography.

Participants/Inclusion and exclusion criteria

Would like to participate in the research project Have a mobile phone with application software. Have the ability to read, or have a family member who is close to the patient. Not having a history of chronic mental illness (such as depression and chronic anxiety, psychosis, etc.) before performing angiography. The patient is not angiographed as an emergency candidate. Do not complain of chest pain.

Intervention groups

Patients who receive training through mobile software

Main outcome variables

Improvement of patient's educational level and

consequently reduce patient anxiety and maintain physiological parameters within normal range

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190119042407N1**

Registration date: **2019-03-05, 1397/12/14**

Registration timing: **retrospective**

Last update: **2019-03-05, 1397/12/14**

Update count: **0**

Registration date

2019-03-05, 1397/12/14

Registrant information

Name

ehsan zafari

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 61 4263 3716

Email address

eh.zafari@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-01-26, 1397/11/06

Expected recruitment end date

2019-02-25, 1397/12/06

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of mobile-based education on anxiety and physiological indices of candidates for coronary artery angiography

Public title

The effect of mobile-based education on anxiety and physiological indices of candidates for coronary artery angiography

Purpose

Education/Guidance

Inclusion/Exclusion criteria**Inclusion criteria:**

All patients undergoing coronary artery angiography For the first time candidate for angiography

Exclusion criteria:

Patients who do not have access to smart phones
Patients who do not read and write

Age

No age limit

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **94**

Randomization (investigator's opinion)

Randomized

Randomization description

The method of assigning the intervention was randomized and random blocked blocks with block size 4

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 Ahwaz Jundishapor University of Medical Sciences

Street address

Academic City, Adjacent to Central Office of Jundishapur University of Medical Sciences and Health Services, Ahwaz, Deputy of Research and Technology Development.

City

Ahwaz

Province

Khouzestan

Postal code

15794 - 61357

Approval date

2019-01-05, 1397/10/15

Ethics committee reference number

IR.AJUMS.REC.1397.748

Health conditions studied**1****Description of health condition studied**

A Study of Mobile Based Learning Strategy on Reducing Anxiety in Candidate Patients for Coronary Angiography

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

The open and hidden anxiety variables are made up of 40 questions by the Spielberger questionnaire. This questionnaire is used to measure the amount of anxiety. The first 20 questions were the anxiety state (apparent anxiety) and 20 questions of the anxiety tract (hidden anxiety). puts. In answering subjects to anxiety, there are a number of options for each statement, which they should select the option that best expresses their emotion. These options are: 1. Altogether 2. Altogether 3. Medium 4. Altogether. Options to respond to the anxiety tract scale include: 1. Almost never 2. Sometimes 3. Often 4. Almost always. In order to obtain an individual's anxiety score in each of the two scales, the total score of all twenty words of each scale is computed with respect to the fact that some of the phrases are translated verbatim and some of the terms are scored in reverse order. Therefore, the scores of each of the two state scales and the anxiety trap can range from 20 to 80. Scoring weights are inverse for non-anxiety expressions. The terms that are scored in reverse order when scoring, that is, in these questions the answer of a score of 3, the response of the two scores 2, and the response of a score of 1, are: the scale of the anxiety state: 20, 19, 16, 15, 11, 10, 8, 5, 2, 1 Anxiety Tract Scale: 39, 36, 34, 33, 30, 27, 26, 23, 21 The rest of the questions are scored directly, so that the answers to these questions A score of 1, a double response, and a three-point response score of 3. According to the scale of the case, scores 20-30 represent no apparent anxiety, scores 42-31 indicate a clear, mild anxiety, scores 53-43 represent moderate anxiety and scores of 54 and more indicate severe anxiety. According to the vein scale, scores of 34-20 did not indicate or the lowest amount of hidden anxiety, scores of 45-35 representing mild anxiety, scores 56-46 representing moderate anxiety and scores of 57 and

more indicate severe anxiety, this factor is mild, moderate Or the severity of the level of apparent and hidden anxiety is measured.

Timepoint

The first turn is when the patient is angiographed by the candidate. A second shift takes place half an hour after entering the department and performing routine routine pre-angiography at rest in the bed. The third appointment is immediately investigated as soon as the patient is called to perform angiography. Further, the data will be taken through the statistical analysis methods described in the next section and will be carefully evaluated.

Method of measurement

Spielberger Questionnaire, Physiological Indicator Questionnaire, Rossmax Manometer Device Made in Taiwan, CE Certificate

Secondary outcomes

1

Description

بهبود نمره پرسشنامه اسپیلبرگر، کاهش اضطراب، شاخص های فیزیولوژیک در محدوده نرمال

Timepoint

The first turn is when the patient is angiographed by the candidate. A second shift takes place half an hour after entering the department and performing routine routine pre-angiography at rest in the bed. The third appointment is immediately investigated as soon as the patient is called to perform angiography. Further, the data will be taken through the statistical analysis methods described in the next section and will be carefully evaluated.

Method of measurement

Spielberger Questionnaire, Physiological Indicator Questionnaire, Rossmax Manometer Device Made in Taiwan, CE Certificate

Intervention groups

1

Description

Intervention group: In the intervention group, educational content is presented using mobile software. To this end, the educational materials including familiarity of the patient with the process of angiography and its adaptation, its complications, familiarity with the angiography, anxiety control methods based on psychological references in a face-to-face meeting were developed as a program and Certification supervisors are displayed to the patient as software on a mobile phone and expressed by the researcher on how to use it.

Category

Other

2

Description

Control group: The patient will receive the educational

content routinely in the Angiography ward

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Golestan Hospital

Full name of responsible person

Ehsan Zafari

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

Deputy of Research and Technology University

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Ahvaz 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
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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