

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Designing and evaluating the Efficacy of mobile Cardiac Dysrhythmia Simulator Application on Critical Care Nurses' knowledge and Satisfaction in Comparison With Handout.

Protocol summary

Summary

The purpose of this study is to Designing and evaluating the efficacy of Mobile Cardiac Dysrhythmia Simulator Application On Critical Care Nurses' Knowledge and satisfaction in comparison with handout. This is a Quasi-experimental study. Two selected hospitals affiliated to Social Security organization (shahid lavasani and 15 khordade varamin hospitals) will be randomly assigned to the mobile application and educational Booklet groups. These hospitals are similar in recruitment aspects and nursing performance. 72 nurses who work in these hospitals will be participated in this study by convenience sampling. Inclusion Criteria are: Bachelor's degree or higher, having at least 2 year of work experience, having at least 1 year of work experience in critical care, Non-participation in similar research, Full-time nurse in the mentioned hospital, Having a mobile phone with Ability to install electronic content training program. Before the intervention The application and educational booklet about dysrhythmia interpretation are designed as educational content. At first nurses' learning in dysrhythmia interpretation will be evaluated by the Learning Assessment Questionnaire. The participants will be divided in two groups (application and educational booklet groups). Booklet of educational material about dysrhythmia interpretation will be given to the booklet group and dysrhythmia interpretation mobile application will be installed on mobile phones of application group. All two groups, learning in dysrhythmia interpretation will be evaluated by the Learning Assessment Questionnaire four week after intervention. A nurse satisfaction questionnaire about educational method will be completed at the end of the fourth week by the Booklet and application groups. Finally all two groups reports will be compared.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017053034231N1**

Registration date: **2017-08-05, 1396/05/14**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2017-08-05, 1396/05/14

Registrant information

Name

Mansoor Mohsenabadi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 919 339 0132

Email address

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences- Research deputy

Expected recruitment start date

2017-07-23, 1396/05/01

Expected recruitment end date

2017-10-07, 1396/07/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Designing and evaluating the Efficacy of mobile Cardiac Dysrhythmia Simulator Application on Critical Care Nurses' knowledge and Satisfaction in Comparison With Handout.

Public title

Designing and evaluating the Efficacy of mobile Cardiac Dysrhythmia Simulator Application on Critical Care Nurses' knowledge and Satisfaction in Comparison With Handout.

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion Criteria: Bachelor's degree or higher; having at least 2 year of work experience; having at least 1 year of work experience in critical care; Non-participation in similar research; Full-time nurse in the mentioned hospital; Having a mobile phone with Ability to install electronic content training program. Exclusion criteria: Not willing to continue participation in study.

Age

From **18 years** old to **75 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **72**

Randomization (investigator's opinion)

Not randomized

Randomization description

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

Ethic Committee-Tehran University of Medical Sciences

Street address

Vice Chancellor for Research, Tehran University of Medical Sciences. Ghods St. Keshavarz Bv.

City

Tehran

Postal code

Approval date

2017-07-16, 1396/04/25

Ethics committee reference number

IR.TUMS.VCR.REC.1396.2858

Health conditions studied

1

Description of health condition studied

Critical Care Nurses' Knowledge and satisfaction

ICD-10 code

E9

ICD-10 code description

Cardiac arrhythmia

Primary outcomes

1

Description

Knowledge

Timepoint

Before intervention, four week after intervention

Method of measurement

Knowledge Questionnaire that consisting 25 multiple choice questions about cardiac dysrhythmia.

2

Description

satisfaction

Timepoint

four week after intervention

Method of measurement

satisfaction Questionnaire that consisting 10 questions in likert scale.

Secondary outcomes

empty

Intervention groups

1

Description

Research subjects are divided into two groups (application and educational booklet. in application Group, the application were designed on their mobile phones to be installed and To learn how to work with application, explanations will given to the subjects. A communication channel for asking questions in subjects about this application will be designed.

Category

Other

2

Description

In the control group (educational booklet), written content will be provided in the form of a text file as a handout.

Category

Other

empty

Recruitment centers1**Recruitment center****Name of recruitment center**

Shahid Lavasani Hospital

Full name of responsible person

Raheleh Abdolhoseini

Street address

Shahid Lavasani Hospital- Tehranpars

City

Tehran

2**Recruitment center****Name of recruitment center**

Shohadaye 15 Khordade Varamin Hospital

Full name of responsible person

Zahra Tabatabayi

Street address

Shohadaye 15 Khordade Varamin Hospital- Varamin

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Sponsors / Funding sources1**Sponsor****Name of organization / entity**

Vice Chancellor for Research, Tehran University of Medical Science

Full name of responsible person

Akbar Fotouhi

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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

Vice Chancellor for Research, Tehran University of Medical Science

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding****Person responsible for general inquiries****Contact****Name of organization / entity**

Virtual School of Tehran University of Medical Sciences

Full name of responsible person

Mansoor Mohsenabadi

Position

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty