

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

11 Jul 2026

### The Effect of Electronic Basic Cardio Pulmonary Resuscitation Training on the Knowledge and Practice of Red Crescent Student Center Volunteers

#### Protocol summary

Knowledge and practice of Adult Basic CPR

#### Study aim

Determining The Effect of Electronic Basic Cardio Pulmonary Resuscitation Training on the Knowledge and Practice of Red Crescent Student Center Volunteers

#### Design

This study is a randomized clinical trial and includes two groups of intervention and control, which will be assigned into two groups of 35 people by simple random allocation. This study is a single phase without blinding and is performed on 70 volunteers of the Red Crescent Student Association.

#### Settings and conduct

The researcher will invite the samples to the virtual group. First, the intervention will be performed in 3 one-hour online and continuous training sessions on the subject of Adult Basic CPR. The researcher will also answer the questions and ambiguities online. In addition, the files and videos recorded from the workshop will be available in the Skype group for up to 30 days, and learners can refer to them at the appropriate time to be reminded of the content again. All workshop materials are based on the AHA 2020 Adult Basic CPR Guidelines. To collect information, it will be done two times, before and one month after the intervention.

#### Participants/Inclusion and exclusion criteria

Inclusion criteria: Adolescents aged 12 to 18 years, a volunteer member of the Red Crescent Student Association, have a smartphone or tablet or laptop to install Skype software and have previous experience in training cardiopulmonary resuscitation at least 6 last months. Exclusion criteria: unwillingness to participating in research.

#### Intervention groups

For the experimental group, electronic adult basic cardiopulmonary resuscitation training will be performed on the Skype software platform. In the control group, members will receive routine training from the Red Crescent population during this period.

#### Main outcome variables

#### General information

##### Reason for update

Adequacy of sample size due to the impossibility of continuing sampling in corona pandemic conditions and significant results after analyzing the dissertation data, the sample size decreased from 42 in each group to 35.

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20210416050992N2**

Registration date: **2021-07-24, 1400/05/02**

Registration timing: **registered\_while\_recruiting**

Last update: **2022-04-20, 1401/01/31**

Update count: **1**

##### Registration date

2021-07-24, 1400/05/02

##### Registrant information

###### Name

Mohammad Salehpoor Emran

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 11 3533 9265

###### Email address

ms\_82820@yahoo.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2021-07-23, 1400/05/01

##### Expected recruitment end date

2021-10-23, 1400/08/01

##### Actual recruitment start date

empty

**Actual recruitment end date**  
empty

**Trial completion date**  
empty

**Scientific title**  
The Effect of Electronic Basic Cardio Pulmonary Resuscitation Training on the Knowledge and Practice of Red Crescent Student Center Volunteers

**Public title**  
Electronic Adult Basic Cardio-Pulmonary Resuscitation Training

**Purpose**  
Education/Guidance

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Being the volunteer member of the Red Crescent Society Student Association Having a smartphone or tablet or laptop to install Skype software Previous experience in cardiopulmonary resuscitation training for at least 6 months.  
**Exclusion criteria:**  
Unwillingness to participate in the study

**Age**  
From **12 years** old to **18 years** old

**Gender**  
Both

**Phase**  
N/A

**Groups that have been masked**  
*No information*

**Sample size**  
Target sample size: **70**

**Randomization (investigator's opinion)**  
Randomized

**Randomization description**  
The research samples will be selected among the volunteer members of the Red Crescent Society, their information is available. Therefore, by referring to the list in the center, the sampling framework will be determined and 70 eligible samples will be selected. After completing the informed consent, they will be assigned to two intervention and control groups in a simple randomization method using the Randomization.org website. The output of the software will be the number of people in the intervention and control group, which corresponds to the numbers intended for the same people in the sampling framework, and thus the group of people will be determined.

**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**

Joint Organizational Ethics Committee of the School of Nursing, Midwifery and Rehabilitation, Tehran

##### **Street address**

School of Nursing and Midwifery, Tohid Square

##### **City**

Tehran

##### **Province**

Tehran

##### **Postal code**

1419733171

#### **Approval date**

2021-06-30, 1400/04/09

#### **Ethics committee reference number**

IR.TUMS.FNM.REC.1400.057

## Health conditions studied

### 1

#### **Description of health condition studied**

Adult Basic CPR

#### **ICD-10 code**

#### **ICD-10 code description**

## Primary outcomes

### 1

#### **Description**

Adult Basic cardiopulmonary resuscitation knowledge

#### **Timepoint**

Before the intervention and one month later

#### **Method of measurement**

Adult Basic cardiopulmonary resuscitation knowledge questionnaire

### 2

#### **Description**

Adult Basic cardiopulmonary resuscitation Practice

#### **Timepoint**

Before the intervention and one month later

#### **Method of measurement**

Adult Basic cardiopulmonary resuscitation practice testing checklist

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: The intervention is in the form of e-learning. First, the members of the intervention group will learn the materials related to adult basic cardiopulmonary resuscitation in 3 sessions of one-hour continuous training online. The contents of the workshop are based on the American Heart Association (AHA) 2020 Adult Basic Cardiopulmonary Resuscitation Guidelines and include: 1- first Session: A history of basic CPR and the need to learn it, how to manage the accident scene, initial assessment of the casualty and survival chain steps with video and Photo 2: second Session: Familiarity with the anatomy of the heart and respiratory system, diagnosis of the necessary conditions to start resuscitation, characteristics of cardiac arrest and its consequences and stages of adult basic cardiopulmonary resuscitation (including features of chest compression / ventilation and Artificial respiration) with pictures, related videos and standard scenario design for home practice, and 3- third Session: Identify the necessary conditions for continued CPR and secondary assessment of the casualty, how to use an automatic external defibrillator (AED) and review previous content, all This content will be presented using a PowerPoint file; In addition, the researcher will provide online feedback on student activities and answer their questions. Also, after these three days of online workshop, uploaded files related to the subject, photos and videos will be used for offline training. These items will be available in the Skype group for up to 30 days, including the recorded video from the workshop, and the learner can refer to them and review them at the appropriate time to remind them of the content again.

#### Category

Prevention

### 2

#### Description

Control group: During this period, the control group will receive the Red Crescent Society's routine training, which is held every year on different occasions. These trainings can include education courses to improve the annual rank of rescuers in the form of one-hour sessions with the content of first aid, general rescue and relief for a week, Training courses to participate in competitions between schools of the Dadras plan at three levels of city, province and country with the theme of first aid and other retraining and educational webinars in the field of basic cardiopulmonary resuscitation, which are held by different branches.

#### Category

Prevention

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Babolsar Red Crescent Society

##### Full name of responsible person

Ali Roustaei

##### Street address

No.12, Sharifi Ave., Sharifi Blvd., Basij Sq

##### City

Babolsar

##### Province

Mazandaran

##### Postal code

4741849718

##### Phone

+98 11 3536 3888

##### Email

ms\_82820@yahoo.com

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Tehran University of Medical Sciences

##### Full name of responsible person

Mohammad Ali Sahraeian

##### Street address

No. 8, Unit 5, 7/35 Alley, Simetri Niroohavayie St, Damavand St.

##### City

Tehran

##### Province

Tehran

##### Postal code

1748953637

##### Phone

+98 21 6670 6142

##### Email

msahrai@tums.ac.ir

#### Grant name

#### Grant code / Reference number

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

Yes

#### Title of funding source

Tehran 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**

Tehran University of Medical Sciences

**Full name of responsible person**

Mohammad Salehpour Emran

**Position**

Postgraduate student of nursing

**Latest degree**

Bachelor

**Other areas of specialty/work**

Nursery

**Street address**

No. 5, Shahid Lotfian Alley., Imam St 31., Miandasht Town

**City**

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**Province**

Mazandaran

**Postal code**

4741133316

**Phone**

+98 11 3533 9265

**Email**

ms\_82820@yahoo.com

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Tehran University of Medical Sciences

**Full name of responsible person**

Mohammad Salehpour Emran

**Position**

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Bachelor

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## Person responsible for updating data

### Contact

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## Sharing plan

**Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Yes - There is a plan to make this available

**Informed Consent Form**

Yes - There is a plan to make this available

**Clinical Study Report**

Yes - There is a plan to make this available

**Analytic Code**

Yes - There is a plan to make this available

**Data Dictionary**

Yes - There is a plan to make this available

**Title and more details about the data/document**

Considering that the present study is an academic dissertation and a copy of it is provided to Tehran University of Medical Sciences; Therefore, all data can be shared after identifying individuals.

**When the data will become available and for how long**

The time period for accessing the documents of this study is 3 months after the publication of the results.

**To whom data/document is available**

The data and documentation of this study will be accessible to researchers working in the Red Crescent Society and academic institutions.

**Under which criteria data/document could be used**

All researchers working in the Red Crescent Society and academic centers, including professors, students of all levels of medicine, nursing and paramedical education, nurses working in hospitals and community health centers, doctors, Red Crescent Society educational and research officials and other paramedical disciplines, They are allowed to request unidentified data from this study. The use of the documents of this study can be used for all the mentioned groups only by mentioning the source and without any interference in its texts.

**From where data/document is obtainable**

Considering that a copy of the dissertation will be

provided to the library of the School of Nursing and Midwifery of Tehran University of Medical Sciences; Therefore, clients can visit the library of this center in person at the address: Tohid Square, Dr. Mirkhani St. (Eastern Nusrat), School of Nursing and Midwifery, Tehran University of Medical Sciences; Phone number: +982166927171; Or visit the library site of Tehran University of Medical Sciences in absentia at <http://lib.tums.ac.ir/> to benefit from the documents of this study.

**What processes are involved for a request to access data/document**

If you visit the library of the School of Nursing and Midwifery of Tehran University of Medical Sciences in person, the client can read the research documents in the library by introducing himself to the librarian and presenting a valid ID card. It should be noted that the client will not be allowed to take the document out of the library and take a photo of it. If you refer to the website of the library of Tehran University of Medical Sciences, the client will enter a part of the title of the study in the search box and a summary of the present study will be displayed for him.

**Comments**