Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

A comparison of the effect of education through social networks with face-to-face teaching on adherence to treatment in patients with hypertension

Protocol summary

Study aim

Comparing the effect of education through social networks with face-to-face teaching on adherence to treatment in patients with hypertension

Design

A clinical trial with a control group, with parallel groups, one-sided blind, randomized, will be conducted with the participation of 210 patients. A random distribution method with a block design will be used for randomization.

Settings and conduct

Sampling is done in the heart clinics of Ayatollah Mousavi and Valiasr hospitals in Zanjan city among patients with primary hypertension. Two intervention groups and one control group will be present in this study. Before the intervention, their demographic characteristics and treatment adherence will be checked. The patients of the experimental group who receive face-to-face training will receive face-to-face training from the researchers during four sessions in addition to receiving routine interventions. In the virtual educational group, in addition to routine interventions, the same educational information (with the face-to-face group) will be provided through the virtual facilities. The control group will only receive routine interventions. Immediately, one month, and three months after the intervention, the treatment adherence will be collected again from all three groups. In this study, the statistician will not know about the groups.

Participants/Inclusion and exclusion criteria

-Age above 18 years -Having a history of hypertension for at least six months, which a -cardiologist has confirmed. -Being literate in reading and writing -Not having secondary and treatment-resistant hypertension. -Absence of severe mental/psychological problem -Having the patient's smartphone and access to the Internet -Informed consent to participate in the study

Intervention groups

The virtual educational intervention group The face-to-face educational intervention group

Main outcome variables

Treatment adherence

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20140427017454N6**
Registration date: **2022-10-06, 1401/07/14**
Registration timing: **prospective**

Last update: **2022-10-06, 1401/07/14**
Update count: **0**

Registration date

2022-10-06, 1401/07/14

Registrant information

Name

kourosh Amini

Name of organization / entity

Zanjan university of medical sciences

Country

Iran (Islamic Republic of)

Phone

+98 243377251314

Email address

korosh@zums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-10-23, 1401/08/01

Expected recruitment end date

2023-01-21, 1401/11/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A comparison of the effect of education through social networks with face-to-face teaching on adherence to treatment in patients with hypertension

Public title

Comparison of the effect of education through social networks with face-to-face teaching on adherence to treatment in patients with hypertension

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

Over 18 years of age Having a history of hypertension for at least six months, which a cardiologist confirmed. Being literate in reading and writing Not having secondary, and treatment-resistant hypertension Absence of severe mental/psychological disturbances Having the patient's own smart cell phone and access to the Internet Having informed consent to participate in the study

Exclusion criteria:

Concurrent participation in another study or similar educational program Impossibility to continue participating in the study for any reason Not completing data gathering tools

Age

From **18 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Data analyser

Sample size

Target sample size: **210**

Randomization (investigator's opinion)

Randomized

Randomization description

The distribution of patients in three groups will be by using the randomized block design. Based on this, the patients who meet the inclusion criteria will be equally distributed into three groups; Intervention group A (virtual training), B (face-to-face training), and C (control group). Since we will have three groups in this study, it is planned to have blocks of six in number. In the random distribution of patients in three groups, all possible forms of blocks with the equal presence of all three groups will be determined and placed inside separate envelopes. The project manager will randomly select the envelopes and inform the sampler of each patient's grouping order. For example, Block NO one may be arranged as AABBCC; This means that the first and second eligible patients will be assigned to intervention group A (virtual education), the following two patients to the face-to-face education group (group B), and the subsequent two patients to the control group (group C).

Blinding (investigator's opinion)

Single blinded

Blinding description

Due to the study's design, only blinding will be possible for the statistical analysis stage of the data. In other words, the statistician will be unaware of the participating groups.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Shiraz University of Medical Sciences

Street address

Azadi boulevard

City

Zanjan

Province

Zanjan

Postal code

4513956184

Approval date

2022-09-29, 1401/07/07

Ethics committee reference number

IR.ZUMS.REC.1401.196

Health conditions studied

1

Description of health condition studied

Hypertension

ICD-10 code

I10

ICD-10 code description

Essential (primary) hypertension

Primary outcomes

1

Description

Treatment adherence

Timepoint

Before the intervention, immediately after the intervention, one month after the intervention, and three

months after the intervention

Method of measurement

The Medication Adherence Questionnaire (MAQ)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group (face-to-face): The way of conducting the educational intervention in the face-to-face group will be that it will be done once a week on Tuesday at the appointed time for four weeks with the coordination of the patients of this group. The patients of this group attend an educational class at the scheduled time in the heart clinics of Valiasr and Ayatollah Mousavi hospitals in Zanjan city. In the first session (first week), lectures, questions, and answers will give educational information related to the nature of high blood pressure disease and the effective factors to cause it. In the second session (second week), the content taught in the previous week is reviewed, and then the patients of this group are taught how to control high blood pressure and the importance of controlling it with the help of PowerPoint.In the third session (third week), while reviewing the contents of the previous two sessions and questions and answers related to the learned content, educational information regarding the importance of following the drug and behavioral regimen and its effect on blood pressure control in the form of a lecture and using It is presented from the lecture. In the fourth session (the last week), the content taught in the previous sessions will be summarized. Then the patients will be taught how to measure blood pressure using the blood pressure device. In the next step, the volunteers will be asked to measure the blood pressure of other peers in the researcher's presence. Finally, patients are advised to teach the learned method to their family members so that family members can regularly control their blood pressure.

Category

Behavior

2

Description

Intervention group (virtual): First, a group is created in one of the virtual software, such as WhatsApp, and sample members enter the group. Then, the educational content of the first session, which is related to the nature of hypertension and the factors affecting it, are sent to the group in the form of text and voice. The patients are told that they can discuss their problems in the group if they have any doubts or questions. Or they discuss it privately with the group manager (researcher). In the second session, educational information on how to control high blood pressure and the importance of controlling it will be sent in the form of a PowerPoint and pictures. In the third session, the importance of following the medication and behavioral regimen and its effect on controlling high blood pressure will be discussed, which will be sent to the group in the form of text, voice, and educational clips. In the last session, an educational clip related to the method of measuring systolic and diastolic blood pressure using a blood pressure device, along with additional explanations in the form of text and voice, will be sent to the group. At the end of the session, we will encourage the patients to teach the learned method to their family members so that their blood pressure can be controlled regularly by family members.

Category

Behavior

Recruitment centers

1

Recruitment center

Name of recruitment center

Zanjan Valieasr Hospital

Full name of responsible person

Dr. Mohammad Hassan Rostamkhani

Street address

Valiasr Hospital, Valiasr Square, Zanjan

City

Zanjan

Province

Zanjan

Postal code

4515777978

Phone

+98 24 3377 0801

Fax

+98 24 3377 0751

Email

valiasr@zums.ac.ir

2

Recruitment center

Name of recruitment center

Zanjan Mosavi Hospital

Full name of responsible person

Dr. Mostafa Azizi

Street address

Mousavi Hospital., Gavazang Road., Zanjan

City

Zanjan

Province

Zanjan

Postal code

4513956183

Phone

+98 24 3313 1199

Fax

+98 24 3313 1203

Email

mousavi@zums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Zanjan University of Medical Sciences

Full name of responsible person
Dr. Samad Nedri

Street address
Vice President of Research and Technology., Zanjan University of Medical Sciences., Azadi Square

City
Zanjan

Province
Zanjan

Postal code
4515613191

Phone
+98 24 3342 4770

Email
Research@zums.ac.ir

Grant name

Grant code / Reference number

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

Title of funding source
Zanjan 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
Zanjan University of Medical Sciences

Full name of responsible person
Kourosh Amini

Position
Associate professor

Latest degree
Ph.D.

Other areas of specialty/work
Nursery

Street address
Dr Sobouti (Gavazang) Blvd., Central Campus of Zanjan University of Medical Science., School of Nursing and Midwifery

City
Zanjan

Province
Zanjan

Postal code
4513956113

Phone
+98 24 3314 8318

Email
korosh@zums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity
Zanjan University of Medical Sciences

Full name of responsible person
Kourosh Amini

Position
Associate professor

Latest degree
Ph.D.

Other areas of specialty/work
Nursery

Street address
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City
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Province
Zanjan

Postal code
4513956113

Phone
+98 24 3314 8318

Email
korosh@zums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity
Zanjan University of Medical Sciences

Full name of responsible person
Kourosh Amini

Position
Associate professor

Latest degree
Ph.D.

Other areas of specialty/work
Nursery

Street address
Dr Sobouti (Gavazang) Blvd., Central Campus of Zanjan University of Medical Science., School of Nursing and Midwifery

City
Zanjan

Province
Zanjan

Postal code
4513956113

Phone
+98 24 3314 8318

Email
korosh@zums.ac.ir

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
Not applicable

Informed Consent Form
Yes - There is a plan to make this available

Clinical Study Report
Not applicable

Analytic Code
Not applicable

Data Dictionary
Not applicable

Title and more details about the data/document
All data will be shared after the de-identification of study participants and publication of results.

When the data will become available and for how long
The data availability period will start immediately after the results are published.

To whom data/document is available
Only researchers working in academic and scientific research centers and nurses working in hospitals can access the data of this study.

Under which criteria data/document could be used
Suppose the purpose of accessing the data is to develop research projects in the future or improve services to patients. The condition of access to the data will be a written and reasonable request of the applicant.

From where data/document is obtainable
Those who are interested in receiving the data can send an email to the project manager at Korosh@zums.ac.ir.

What processes are involved for a request to access data/document
The applicant can receive the data during an email while introducing himself and the purpose of accessing the data. The maximum response time to the requester will be one week.

Comments