Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Comparison of the effect of one-way and interactive SMS reminder on adherence to treatment regimen in the elderly with hypertension

Protocol summary

Study aim

to compare the effect of one-way and interactive SMS reminders on medication compliance in the elderly with hypertension.

Design

A randomized clinical trial, without blinding, on the elderly with high blood pressure under oral drug treatment, selecting 114 patients with easy primary sampling based on the purpose and dividing into three equal groups of 38 people randomly.

Settings and conduct

The study was done without blinding in Shahrekord blood pressure clinic. After completing the initial forms and the questionnaire, the average sitting and lying blood pressure are recorded. A text message is sent to the intervention groups daily for a month. Unlike group 1, group 2 is able to send messages. Group 3 do not receive messages and cannot send messages. The blood pressure of the three groups will be measured one and two months later and the questionnaire will be completed again.

Participants/Inclusion and exclusion criteria

Entry criteria: having a mobile phone and the ability to read text messages, consent, diagnosis of hypertension, age 60 years and older, taking oral hypertension medication Exclusion criteria: taking blood pressure injection drugs, having coronary artery disease, chronic kidney disease, controlled hypertension during previous visits, participation in other research projects.

Intervention groups

The one-way interactive group (1) receives a daily text message after completing the treatment compliance questionnaire and blood pressure measurement for one month. One and two months later, blood pressure is measured and the questionnaire is completed. Two-way interactive group (2) can send SMS in addition to receiving SMS. Control group (3) do not receive messages and cannot send SMS.

Main outcome variables

high blood pressure control; Improving adherence to drug therapy

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20231122060136N1**
Registration date: **2023-12-27, 1402/10/06**
Registration timing: **registered_while_recruiting**

Last update: **2023-12-27, 1402/10/06**
Update count: **0**

Registration date

2023-12-27, 1402/10/06

Registrant information

Name

Nasrin Malekmohammadi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 38 3452 3853

Email address

nasrin215malekmohammadi@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-12-22, 1402/10/01

Expected recruitment end date

2024-04-20, 1403/02/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date
empty

Scientific title
Comparison of the effect of one-way and interactive SMS reminder on adherence to treatment regimen in the elderly with hypertension

Public title
The effect of SMS on the use of blood pressure medication in the elderly with high blood pressure

Purpose
Other

Inclusion/Exclusion criteria

Inclusion criteria:
Having a mobile phone and the ability to read text messages Willingness to cooperate in the study Diagnosis of hypertension Age 60 years and older Taking at least one medication to control hypertension

Exclusion criteria:
Use of blood pressure injection drugs Having coronary artery disease chronic kidney disease Having controlled hypertension during previous visits Participation in other research projects

Age
From **60 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **114**

Randomization (investigator's opinion)
Randomized

Randomization description
114 selected samples are divided into 3 groups of 38 people, one-way, two-way and control interaction with the help of random allocation software. In this software, numbers between 1 and 114 are entered and then selected by this program in groups of 9. The first 9 numbers are in the one-way interaction group, the second 9 numbers are in the two-way interaction group, and the third 9 numbers are in the control group, and this is repeated again, and at the end, the remaining 6 numbers are grouped in pairs and in the same order in Groups are placed.

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 Shahid Sadoughi University of Medical Sciences, Yazd

Street address
No. 31, 75 Alley, West Saadi , Shahrekord

City
Shahrekord

Province
Chahar-Mahal-va-Bakhtiari

Postal code
8817845645

Approval date
1981-08-11, 1360/05/20

Ethics committee reference number
IR.SSU.REC.1402.079

Health conditions studied

1

Description of health condition studied
Hypertension

ICD-10 code
I15.8

ICD-10 code description
Secondary hypertension, unspecified

Primary outcomes

1

Description
The treatment adherence score is based on Moriski questionnaire, whose total score range is between 0 and 8. The lower the score, the more people will adhere to medication.

Timepoint
Completing the questionnaire at the beginning of work and two months after

Method of measurement
Morisky questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group 1: The one-way interaction group, after completing the treatment compliance questionnaire and blood pressure measurement, will receive daily text messages for one month. One and two months later, blood pressure is measured and the questionnaire is completed again.

Category
N/A

2

Description
Intervention group: The two-way interaction group will receive a daily SMS after completing the treatment compliance questionnaire and blood pressure measurement for one month. In addition to receiving text messages, this group can also send text messages to the researcher. One or two months later, the blood pressure will be measured and the questionnaire will be completed again.

Category
N/A

3

Description
Control group: In the control group, the treatment compliance questionnaire is completed and initial blood pressure is measured. This group does not receive messages during the study and cannot send SMS. One and two months later, blood pressure is measured and the questionnaire is completed again.

Category
N/A

Recruitment centers

1

Recruitment center

Name of recruitment center
Shahrekord blood pressure clinic

Full name of responsible person
Nasrin Malekmohammadi

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No. 31, 75 Alley, West Saadi St

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Yazd University of Medical Sciences

Full name of responsible person
Yazd University of Medical Sciences

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?
No

Title of funding source
Yazd University of Medical Sciences (Faculty of Nursing and Midwifery)

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
Yazd University of Medical Sciences

Full name of responsible person
Nsrin Malekmohammadi

Position
Student

Latest degree
Bachelor

Other areas of specialty/work
Nursery

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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
Information about the main outcome or similar
When the data will become available and for how long
The access period starts 6 months after the results are published
To whom data/document is available
For all
Under which criteria data/document could be used
Yazd University of Medical Sciences website Personal email: nasrin215malekmohammadi@gmail.com Phone 09132815336
From where data/document is obtainable
Yazd University of Medical Sciences website Personal email: nasrin215malekmohammadi@gmail.com Phone 09132815336
What processes are involved for a request to access data/document
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Comments