

Clinical Trial Protocol

Iranian Registry of Clinical Trials

05 Jul 2026

A comparison between the effectiveness of short message service and reminder cards regarding medication adherence in patients with hypertension: A randomized controlled clinical trial

Protocol summary

Summary

Objectives: This study aims to compare the effectiveness of short message service (SMS) to reminder cards with regard to medication adherence in patients with hypertension. **Design:** The present study is a randomized controlled clinical trial. **Major inclusion and exclusion criteria:** Uncontrolled hypertension confirmed by doctor; being on medication for hypertension; living in the city of Urmia; having access to a mobile phone in patient or a member of his family; being able to use the text messaging function in patient or a member of his family (reading and composing a text message); not being on medication for prostate in the male patients; and willingness to participate in the study will be entry requirements. The exclusion criteria will be: being hospitalized in the duration of the study, unwillingness to participate further; moving to another city; and loss of contact with the patient through his/her mobile phone. **Setting and conduct:** The subjects consisted of 123 of the patients with hypertension at the clinical-educational center of Sayyed-AI Shohada, Urmia, who met the study criteria. Will select based on the convenience method, the samples will be randomly divided into three groups: the SMS group, the reminder-cards group, and the control group. **Intervention:** The subjects in the SMS group will sent 6 text messages a week for three months, and the subjects in the reminder-cards group will train in how and in what order to use their cards. **Outcome measures:** Adherence to treatment

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015110917059N2**

Registration date: **2015-12-13, 1394/09/22**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-12-13, 1394/09/22

Registrant information

Name

Masoume Hemmati Maslakpak

Name of organization / entity

Urmia University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 44 1365 9031

Email address

hemmati_m@umsu.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Urmia University of Medical Sciences

Expected recruitment start date

2014-03-03, 1392/12/12

Expected recruitment end date

2014-07-03, 1393/04/12

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A comparison between the effectiveness of short message service and reminder cards regarding medication adherence in patients with hypertension: A randomized controlled clinical trial

Public title

SMS and reminder cards for improving medication adherence

Purpose

Health service research

Inclusion/Exclusion criteria

Major inclusion and exclusion criteria: Uncontrolled hypertension confirmed by doctor; being on medication for hypertension; living in the city of Urmia; having access to a mobile phone in patient or a member of his family; being able to use the text messaging function in patient or a member of his family (reading and composing a text message); not being on medication for prostate in the male patients; and willingness to participate in the study will be entry requirements. The exclusion criteria will be: being hospitalized in the duration of the study, unwillingness to participate further; moving to another city; and loss of contact with the patient through his/her mobile phone.

Age

From **20 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **143**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features

Using colored bags

Secondary Ids**1****Registry name**

no

Secondary trial Id

no

Registration date

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Urmia Medical University

Street address

Urmia, Seru Road. Pardis Nazlu

City

Urmia

Postal code**Approval date**

2013-09-23, 1392/07/01

Ethics committee reference number

192

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

hypertension

ICD-10 code

I10, I15

ICD-10 code description

Essential (primary) hypertension, Secondary hypertension

Primary outcomes**1****Description**

Adherence to treatment

Timepoint

Two times

Method of measurement

Hill-Bone medication adherence scale

Secondary outcomes**1****Description**

Hypertension

Timepoint

Two times

Method of measurement

Mercury sphygmomanometer

Intervention groups**1****Description**

Intervention group 1: In the reminder cards group, cards in four different colors with the content of the medication regimen (30 cards), diet (30 cards), physical activities (30 cards) and blood pressure monitoring (30 cards) will be designed. Patients will be educated about how to properly use the card (every day of every educational content 1 card). So that the end of the first month 120 card will be read by patients, and in the second and third month reading cards will be repeated two more times. The patients will be expected to inform the researchers if they failed to check their blood pressure or have to visit the clinical center again in the duration of the intervention. Also, all the patients will be asked to

visit the clinical center on alternate weeks (6 times in total during the 3-month intervention) and have their blood pressure checked for free.

Category

Treatment - Drugs

2**Description**

Intervention group 2: The patients in the text messaging group will be sent 6 messages a week. Educational content of text messaging is same to educational content of reminder cards and contains medication regimen, diet, physical activities and blood pressure monitoring. Send messages will continue for 3 months. The patients will be expected to inform the researchers if they failed to check their blood pressure or have to visit the clinical center again in the duration of the intervention. Also, all the patients will be asked to visit the clinical center on alternate weeks (6 times in total during the 3-month intervention) and have their blood pressure checked for free.

Category

Treatment - Drugs

Recruitment centers**1****Recruitment center****Name of recruitment center**

Clinical-Educational Center of Sayyed-Al Shohada

Full name of responsible person

Iraj Mohebi

Street address

Postal Code: 571478334, Orjhans Street, Resalat Blvd, Urmia

City

Urmia

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Vice chancellor for research, Urmia University of Medical Sciences

Full name of responsible person

Iraj Mohebi

Street address

Postal Code: 571478334, Orjhans Street, Resalat Blvd, Urmia

City

Urmia

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, Urmia University of Medical

Sciences

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**

empty

Person responsible for general inquiries**Contact****Person responsible for scientific inquiries****Contact****Name of organization / entity**

Urmia Medical University

Full name of responsible person

Masumeh Hemmati Maslakkpak

Position

Ph.D

Other areas of specialty/work**Street address**

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City

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Postal code**Phone**

+98 44 3365 9031

Fax**Email**

hemmatma@yahoo.com

Web page address**Person responsible for updating data****Contact****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