

Clinical Trial Protocol

Iranian Registry of Clinical Trials

07 Jun 2026

The Impact Of Telenursing On Blood Pressure And Body Mass Index Of People With Pre-hypertension

Protocol summary

Summary

Objectives: The aim of this study was to determine the effect of telenursing on blood pressure (BP) in people with prehypertension. **Design:** In this clinical trial, 81 patients with prehypertension, discharged from one of the emergencies in Isfahan University of Medical Sciences (Iran), were selected by convenience sampling method. Then according to the random number table assigned to experimental (41 patients) and control (40 patients) groups. Data collection tools included questionnaire, BP measurement devices, weight and meter. **Setting and conduct:** At first, for both groups (in groups of 8 to 10 people), a training class was held. Informed consent was obtained. In the experimental group, two phone calls were made and 32 messages were sent. There was no intervention for the control group. At the beginning and at the end of the study, BP, weight and height were measured and questionnaire was completed for both groups. **Participants including major criteria:** Awareness about mobile phone usage, ability to read and write. **Exclusion criteria:** Pregnancy and lactation, diseases such as kidney failure and cancer. **Intervention:** In the experimental group, to determine and identify risk factors of hypertension, changing lifestyle, and reinforce patient's health behaviors, a phone call was made once in a month for each patient. Plus, four messages were sent each week. In addition, in the case of occurring a problem or question, patients could contact with researcher. **Main outcome measures:** Systolic blood pressure (SBP) and diastolic blood pressure (DBP), height, weight, body mass index and demographic data were measured and recorded.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201703127391N5**

Registration date: **2017-03-28, 1396/01/08**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2017-03-28, 1396/01/08

Registrant information

Name

Maryam Eghbali Babadi

Name of organization / entity

Isfahan University Of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 31 3792 7539

Email address

eghbali@nm.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for research, Isfahan University Of Medical Sciences

Expected recruitment start date

2016-07-22, 1395/05/01

Expected recruitment end date

2016-09-22, 1395/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Impact Of Telenursing On Blood Pressure And Body Mass Index Of People With Pre-hypertension

Public title

Telenursing And Pre-hypertension

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: At the time of discharge from emergency department, average SBP during two measurements within two minutes must be in the range of 120 to 139 or average DBP must be in the range of 80 to 89; age range should be 18 to 60; ability to communicate appropriately; not having trouble with hearing and speaking; access to mobile phone and awareness about its use; ability to perform daily activities; ability to read and write; not using blood pressure reducer drugs; no special diet for obesity and thinness; Exclusion criteria: Pregnancy and lactation; disease such as kidney failure and cancer; lack of accountability telephonic communication more than 3 times; unwillingness to continue the cooperation; using any drug during the study; using calming techniques such as yoga; confrontation with severe stress during the intervention period.

Age

From **18 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **81**

Randomization (investigator's opinion)

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

Ethics Committee Of Isfahan University Of Medical Sciences

Street address

Isfahan University Of Medical Science, Hezar Jerib Avenue, Isfahan, Iran.

City

Isfahan

Postal code

Approval date

2016-06-13, 1395/03/24

Ethics committee reference number

IR.MUI.REC.1395.3.234

Health conditions studied

1

Description of health condition studied

High blood pressure

ICD-10 code

R03.0

ICD-10 code description

Elevated blood-pressure reading, without diagnosis of hypertension

Primary outcomes

1

Description

Blood Pressure

Timepoint

Before and after Education

Method of measurement

blood pressure measurement device

2

Description

body mass index

Timepoint

pre and post education

Method of measurement

Weight and Meter

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Subjects participated in a two-hour session (using lecture, PowerPoint) regarding blood pressure, hypertension and its risk factors, and healthy lifestyle. Researcher's phone number was given to patients, in the experimental group. Phone calls and messages schedule were described to them. The time limit for phone calls and messages were between 8 am to 20 pm. A phone call was made for each patient in a month (call duration was about 15 minutes) ,for two months. Four messages were sent in a week (totally 32). Messages and phone calls were about risk factors of hypertension, reinforce patient's health behaviors, giving health recommendations. In addition, in the case of occurring a problem or question, patients could contact with researcher. At the end of the study, blood pressure, weight and height were measured and questionnaire was completed again.

Category
Lifestyle

2

Description

Control group: Subjects participated in a two-hour session (using lecture, PowerPoint) regarding blood pressure, hypertension risk factors, and healthy lifestyle. Then after eight weeks, the samples were invited again to complete the questionnaire and measure weight, height and blood pressure.

Category
Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center
Sahebalzaman Hospital Emergency in Shahreze
Full name of responsible person
Habib Sadeghi
Street address
Sahebzaman Hospital, Sahebzaman Avenue,
Shahreza, Isfahan, Iran
City
Shahreze

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice Chancellor for research of Isfahan University of
Medical Sciences
Full name of responsible person
Dr Mahdi Nematbakhsh
Street address
Isfahan University Of Medical Science, Hezar Jerib
Avenue, Isfahan, Iran.
City
Isfahan

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 of Isfahan 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

Name of organization / entity
Isfahan University Of Medical Sciences
Full name of responsible person
Maryam Eghbali Babadi
Position
Faculty Member
Other areas of specialty/work
Street address
Isfahan University Of Medical Science, Hezar Jerib
Avenue, Isfahan, Iran.
City
Isfahan
Postal code
Phone
+98 31 3792 7539
Fax
Email
eghbali@nm.mui.ac.ir
Web page address

**Person responsible for scientific
inquiries**

Contact

Name of organization / entity
Isfahan University Of Medical Science
Full name of responsible person
Maryam Eghbali Babadi
Position
Faculty Member
Other areas of specialty/work
Street address
Isfahan University Of Medical Science, Hezar Jerib
Avenue, Isfahan, Iran.
City
Isfahan
Postal code
Phone
+98 31 3792 7539
Fax
Email
eghbali@nm.mui.ac.ir
Web page address

Person responsible for updating data

Contact

Name of organization / entity
Isfahan University of Medical Science
Full name of responsible person
Maryam Eghbali Babadi
Position
Faculty Member
Other areas of specialty/work
Street address
Isfahan University Of Medical Science, Hezar Jerib

Avenue, Isfahan, Iran.

City

Isfahan

Postal code

Phone

+98 31 3792 7539

Fax

Email

eghbali@nm.mui.ac.ir

Web page address

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