Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Nov 2026

Cost-effectiveness of peer education on treatment adherence among elderly hypertensive client

Protocol summary

Study aim
Cost-effectiveness of peer education on treatment adherence among elderly hypertensive clients

Design
Randomized clinical trial

Settings and conduct
This study performed in health center no.3 of Mashhad University of Medical Sciences. At first, samples divided two groups randomly. In intervention group, 45-minute training sessions be held by peers on Blood Pressure Control for six weeks on Saturday for elderly people. During the implementation of the study, the direct costs of implementing peer education included human resource costs, including peer education costs, consumables and estimated training space, as well as the cost of passage and caregiver costs and the cost effectiveness of interventions in relation to the amount of mmHg reduction Blood pressure is calculated. In the control group only routine health care will be held for sixty weekly sessions for 45 minutes by the nurse. in control group direct costs of training sessions held by health center staff are estimated and per mmHg reduction in blood pressure is calculated and compared in intervention group. Blood pressure and Murisky questionnaire and researcher-made questionnaire will be completed before, after the end of the intervention, and three to six weeks later in the both groups.

Participants/Inclusion and exclusion criteria
History of at least 6 months of hypertension; hypertension grade 2 and above; lack of Cyrus hypertension; age 60 and older; ability to speak Persian; reading and writing literacy; treatment with anti hypertensive drugs; Iranian& resident of Mashhad; lack of medical education associated with hypertension over the past 6 months; has suffered from any physical illness or severe mental disorders that prevented the intervention.

Intervention groups
peer education group

Main outcome variables
Comparison of the cost-effectiveness of peer education and routine training

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20180519039710N1**
Registration date: **2018-07-29, 1397/05/07**
Registration timing: **prospective**

Last update: **2018-07-29, 1397/05/07**
Update count: **0**

Registration date
2018-07-29, 1397/05/07

Registrant information

Name
Kobra Sadeghivazin

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 51 3713 5892

Email address
sadeghivk951@mums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2018-08-01, 1397/05/10

Expected recruitment end date
2018-11-01, 1397/08/10

Actual recruitment start date
empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Cost-effectiveness of peer education on treatment adherence among elderly hypertensive client

Public title

Cost-effectiveness of peer education on treatment adherence among elderly hypertensive client

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

The desire to participate in the study History of at least 6 months of hypertension GRID 2 and higher hypertension Lack of Cyrus hypertension Age 60 and older Ability to speak Persian Literacy reading and writing Treated with anti hypertensive drugs Iranian and resident of Mashhad Lack of physical and cognitive disorder preventing intervention Lack of training in hypertension education over the past 6 months

Exclusion criteria:

Missing more than 1 session at training sessions Deaths of research units Acute illness or hospitalization Unwillingness to cooperate or refuse to attend training sessions

Age

From **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **50**

Randomization (investigator's opinion)

Randomized

Randomization description

Assigned with random spss numbers, in intervention or control groups, randomly

Blinding (investigator's opinion)

Single blinded

Blinding description

Elderly people with Hypertension Grade 2 and above who take anti-hypertensive medications for 6 months are randomly divided into intervention and control groups. While they are in the group, they do not know.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Regional Research Ethics Committee Mashhad University of Medical Sciences

Street address

Department of Medical-Surgical Nursing, Nursing and Midwifery Faculty, Doctra Crossroad, Daneshgah Street, Mashhad, Iran

City

Mashhad

Province

Razavi Khorasan

Postal code

9137913199

Approval date

2018-06-30, 1397/04/09

Ethics committee reference number

IR.MUMS.REC.1397.086

Health conditions studied

1

Description of health condition studied

treatment adherence among Elderly Hypertensive client

ICD-10 code

I10

ICD-10 code description

Essential (primary) hypertension

Primary outcomes

1

Description

Cost-effectiveness of peer education

Timepoint

three month after intervention

Method of measurement

Measuring Adherence to treatment using the Murisky scale

Secondary outcomes

1

Description

Adherence to drug treatment

Timepoint

Before intervention, end of intervention, three and six weeks after the end intervention

Method of measurement

Murisky eight-questions questionnaire related to adherence to drug treatment

2

Description
Adherence to diet treatment
Timepoint
Before intervention, end of intervention, three and six weeks after the end intervention
Method of measurement
Researchers' made ten-questions questionnaire related to adherence to diet treatment

Intervention groups

1

Description
Intervention group: first, an elderly person with hypertension who has controlled his or her blood pressure in the last six months, means that there is no systolic pressure greater than 16 years old and has a specific problem associated with hypertension or hospitalization due to HTN. Selected as a peer. Then, 3 sessions of 45 minutes, with the contents of the standard educational package, are communicated by the Ministry of Health regarding the control of blood pressure and its importance in reducing costs. In the intervention group, 45-minute training sessions with standard educational package content are provided by peer group for other elderly once a week for 6 weeks.
Category
Behavior

Recruitment centers

1

Recruitment center
Name of recruitment center
Health Center No. 3
Full name of responsible person
Mahmoud Bakhshi
Street address
Khayyam Blvd - Ershad Blvd. 8 - Payyam Street - opposite of Payyam street 6
City
Mashhad
Province
Razavi Khorasan
Postal code
9185837715
Phone
+98 51 3763 4007
Email
bakhshim@mums.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Mahmood Bakhshi
Street address
Ebne Sina Ave.,Doktora Intersection,
City
Mashhad
Province
Razavi Khorasan
Postal code
9137913199
Phone
+98 51 3859 1511
Email
bakhshim@mums.ac.ir
Web page address
http://nurse.mums.ac.ir/
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Mashhad 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
Mashhad University of Medical Sciences
Full name of responsible person
Kobra Sadeghi vazin
Position
Senior of Griatric Nursing Student
Latest degree
Bachelor
Other areas of specialty/work
Nursery
Street address
Faculty of Nursing and Midwifery,Ebne Sina Ave.,Doktora Intersection, Mashhad, Iran
City
Mashhad
Province
Razavi Khorasan
Postal code
9166987
Phone
+98 51 3841 2810
Email
sadeghivk951@mums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity
Mashhad University of Medical Sciences

Full name of responsible person
Kobra Sadeghi Vazin

Position
Senior of Griatric Nursing Student

Latest degree
Bachelor

Other areas of specialty/work
Nursery

Street address
Faculty of Nursing and Midwifery, Ebne Sina Ave., Doktora Intersection, Mashhad, Iran

City
Mashhaf

Province
Razavi Khorasan

Postal code
9166987

Phone
+98 51 3841 2810

Email
sadeghivk951@mums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity
Mashhad University of Medical Sciences

Full name of responsible person
Kobra Sadeghi Vazin

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City
Mashhad

Province
Razavi Khorasan

Postal code
9166987

Phone
009851384`2810

Email
sadeghivk951@mums.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
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
Evaluating the Effectiveness of Peer Education on Adherence to Treatment of Elderly With Hypertension, Compared to Routine Training

When the data will become available and for how long
Start the access period 6 months after printing the results

To whom data/document is available
Researchers and patients with hypertension

Under which criteria data/document could be used
After collecting data and encoding and logging into the computer, using spss 11 software, data analysis is done using descriptive and inferential statistics. To describe the characteristics of the research units in the two groups, descriptive statistics including frequency distribution and percentages, and central inclination and dispersion, mean, and standard deviations are used. In the analytical statistics, a quantitative data test was performed using Kolmogorov-Smynov and Shapiro Wilk tests. To determine the homogeneity of data in two groups, Chi-square or Fisher test for qualitative variables and independent t-test for quantitative variables and if the abnormality is used, the Mann-Whitney test will be used. Also, intra-group comparisons based on whether data are normal or not, paired t-test or Kruskal-Wallis tests will be used. To determine the relationship between the underlying and interventional variables, two groups of variance analysis or covariance analysis will be used in three groups. To compare the cost-effectiveness of the two methods of peer-to-peer training, with the help of a statistic expert, Tree Age's decision tree model and software will be used. For all tests, the confidence coefficient will be 95%

From where data/document is obtainable
Faculty of Nursing and Midwifery, Ibn Sina Avenue,Doktora st.Mashhad, Iran Phone:0098 5138591511 Fax: 0098 5138597313 Zip Code: 9137913199 E-mail: NMS.IT@mums.ac.ir

What processes are involved for a request to access data/document
Referring to the library of Mashhad Nursing and Midwifery Faculty and presenting the identification card to this unit and receiving the existing documentation

Comments