

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jun 2026

Comparison of the effects of teaching via visual thinking strategies and routine training on lifestyle and hypertension control in hypertensive patients

Protocol summary

Study aim

To compare the effects of teaching via visual thinking strategies and routine training on lifestyle and hypertension control in hypertensive patients

Design

In this study, 76 eligible patients referring to health centers of Birjand were selected through convenience sampling method. The participants were randomly divided into intervention and control groups (using the table of random numbers) and each participant was assigned a code.

Settings and conduct

The research was conducted in the education hall of the health center (number 4) in Birjand. At first, the participants' blood pressure was measured, and the lifestyle questionnaire was completed. In addition to the routine training, the intervention group members received training via visual thinking strategies in five sessions, while the controls received the routine training. After the 5 sessions finished and two months later, the members of both groups completed the lifestyle questionnaire, and their blood pressure was measured. The study was not blinded.

Participants/Inclusion and exclusion criteria

Major inclusion criteria: Age between 18 and 60 years; diagnosis of high blood pressure in the person at least two months earlier; and signing the written informed consent form. Major exclusion criterion: Lack of appropriate auditory, visual, cognitive, and communicative health

Intervention groups

Intervention group (visual thinking): In addition to the routine training, they received training via visual thinking strategies in 5 sessions. Control group (routine training): They only received the routine training.

Main outcome variables

lifestyle; systolic and diastolic blood pressure

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20170316033099N2**

Registration date: **2018-11-21, 1397/08/30**

Registration timing: **retrospective**

Last update: **2018-11-21, 1397/08/30**

Update count: **0**

Registration date

2018-11-21, 1397/08/30

Registrant information

Name

Mohammad Bagher Roozgar

Name of organization / entity

Birjand University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 56 3239 5680

Email address

roozgar@bums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-01-23, 1396/11/03

Expected recruitment end date

2018-05-24, 1397/03/03

Actual recruitment start date

2018-01-23, 1396/11/03

Actual recruitment end date

2018-05-24, 1397/03/03

Trial completion date

2018-10-02, 1397/07/10

Scientific title

Comparison of the effects of teaching via visual thinking strategies and routine training on lifestyle and hypertension control in hypertensive patients

Public title

Effects of teaching through visual thinking strategies on lifestyle and hypertension control

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age between 18 and 60 years
Diagnosis of high blood pressure in the person at least two months earlier
Signing the written informed consent form
Residence in Birjand

Exclusion criteria:

Suffering from acute and advanced disease, such as cancer, which is effective on the blood pressure control program
Lack of appropriate auditory, visual, cognitive, and communicative health

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: **76**

Actual sample size reached: **76**

Randomization (investigator's opinion)

Randomized

Randomization description

A total of 76 participants who met the inclusion criteria were incorporated (using convenience sampling method). Each eligible participant was assigned a code. Using the table of random numbers, the participants were allocated to the intervention or control groups.

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Birjand University of Medical

Sciences

Street address

Ghaffari Ave.

City

Birjand

Province

South Khorasan

Postal code

9717853577

Approval date

2017-12-03, 1396/09/12

Ethics committee reference number

lr.bums.REC.1396.239

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

lifestyle

Timepoint

Before intervention, after 5 sessions of training, 2 months after the last training session

Method of measurement

Lifestyle Questionnaire

2

Description

hypertension

Timepoint

Before intervention, after 5 sessions of training, 2 months after the last training session

Method of measurement

Mercury sphygmomanometer

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group (visual thinking): At first, the lifestyle questionnaire was completed by the members, and their blood pressure was measured. In addition to the routine training, the intervention group members received training on visual thinking strategies in five sessions. After the 5 sessions finished and two months later, the

members completed the lifestyle questionnaire, and their blood pressure was measured.

Category

Behavior

2

Description

Control group (routine training): At first, the lifestyle questionnaire was completed by the members, and their blood pressure was measured. They received the routine training of the center. At the same time with the completion of the fifth session in the intervention group and two months later, the members completed the lifestyle questionnaire, and their blood pressure was measured.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Health center number 4

Full name of responsible person

Somaye Binaeian

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Behdari St.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Birjand University of Medical Sciences

Full name of responsible person

Dr Tooba Kazemi

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Birjand 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

Birjand University of Medical Sciences

Full name of responsible person

Somaye Binaeian

Position

MSc Student of Nursing

Latest degree

Bachelor

Other areas of specialty/work

Nursery

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Birjand University of Medical Sciences

Full name of responsible person

Somaye Binaeian

Position

MSc Student of Nursing

Latest degree

Bachelor

Other areas of specialty/work

Nursery

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Person responsible for updating data

Contact

Name of organization / entity
Birjand University of Medical Sciences
Full name of responsible person
Mohammad Bagher Roozgar
Position
Translator
Latest degree
Master
Other areas of specialty/work
Others
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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

Not applicable

Title and more details about the data/document

Deidentified Individual Participant Data Set

When the data will become available and for how long

After the paper extracted from the research project is published and for 6 months

To whom data/document is available

to readers of the paper

Under which criteria data/document could be used

for research purposes

From where data/document is obtainable

personal correspondence with the corresponding author

What processes are involved for a request to access data/document

email

Comments