

Clinical Trial Protocol

Iranian Registry of Clinical Trials

22 Jul 2026

The effect of buteyko breathing technique on quality of life in asthmatic patient referred to the shahid Behshti hospital in hamedan 2020

Protocol summary

Study aim

The aim of this study was to investigate the effect of buteyko breathing technique on the quality of life of patients with asthma.

Design

A randomized clinical trial with a control group, with two parallel groups

Settings and conduct

The present study will be performed as a two-group clinical trial with the participation of 60 patients with asthma admitted to Shahid Beheshti hospital in Hamadan in 1399. Patients will be divided into two groups: control and intervention by simple random allocation. In the intervention group, a 90-minute session will teach how to perform the buteyko breathing technique. Then, for a month, they will breathe 15 times a day, twice a day, 15 minutes each time. To ensure that breathing exercises are performed by samples, follow-up via SMS will be followed. In the control group, no special action will be taken other than routine training.

Participants/Inclusion and exclusion criteria

Inclusion criteria: ability to communicate verbally; be at least 18 years old and at most 40 years old; the diagnosis of asthma by a physician; the patient's willingness to participate in the study. Exclusion criteria: lack of breathing exercises at home; lack of patient willingness to continue cooperation.

Intervention groups

In the intervention group, in a 90-minute session, patients will be taught how to perform buteyko breathing. They will then perform breathing techniques twice a day for a month. Control group: Only routine training will be performed at the time of hospitalization.

Main outcome variables

Quality of life

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20160110025929N29**

Registration date: **2020-06-28, 1399/04/08**

Registration timing: **prospective**

Last update: **2020-06-28, 1399/04/08**

Update count: **0**

Registration date

2020-06-28, 1399/04/08

Registrant information

Name

Mehdi Molavi Vardanjani

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 81 3422 5056

Email address

m.molavi@umsha.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-07-05, 1399/04/15

Expected recruitment end date

2021-03-19, 1399/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of buteyko breathing technique on quality of life in asthmatic patient referred to the shahid Behshti hospital in hamedan 2020

Public title

The effect of buteyko breathing technique on quality of life in asthmatic patient

Purpose

Supportive

Inclusion/Exclusion criteria**Inclusion criteria:**

The patient's willingness to participate in the study
The diagnosis of asthma by a physician
Be at least 18 years old and at most 40 years old
Ability to communicate verbally

Exclusion criteria:

Lack of patient willingness to continue cooperation
Lack of breathing exercises at home

Age

From **18 years** old to **40 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple random allocation will be done using a random number table. Patients will be randomly divided into two groups intervention(A) and control (B).

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 Hamadan University of Medical Sciences

Street address

Shahid Fahmideh St., Hamadan University of Medical Sciences, Hamadan

City

Hamedan

Province

Hamadan

Postal code

38698-65178

Approval date

2020-04-11, 1399/01/23

Ethics committee reference number

IR.UMSHA.REC.1399.052

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

Asthma

ICD-10 code

J45

ICD-10 code description

Asthma

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

Quality of Life

Timepoint

Before and one month after the intervention

Method of measurement

Quality of Life Questionnaire for Patients with Asthma

Secondary outcomes

empty

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

In the intervention group, in a 90-minute session, patients will be taught how to perform buteyko breathing. They will then perform breathing techniques twice a day for a month

Category

N/A

2**Description**

Control group: only routine training will be performed at the time of hospitalization.

Category

N/A

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

Shahid Beheshti hospital

Full name of responsible person

Mehdi Molavi

Street address

Shahid Fahmideh St., Hamadan University of Medical Sciences, Hamadan

City

Hamadan
Province
Hamadan
Postal code
38698-65178
Phone
+98 81 3838 0535
Email
m.molavi@umsha.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Hamedan University of Medical Sciences
Full name of responsible person
Saeed Bashirian
Street address
Shahid Fahmideh St., Hamadan University of Medical Sciences, Hamadan
City
Hamadan
Province
Hamadan
Postal code
38698-65178
Phone
+98 81 3838 0535
Email
s_bashirian@umsha.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
Deputy of research and technology
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
Hamedan University of Medical Sciences
Full name of responsible person
Mehdi Molavi
Position
Instructor
Latest degree
Master

Other areas of specialty/work

Nursery

Street address

Shahid Fahmideh St., Hamadan University of Medical Sciences, Hamadan

City

Hamadan

Province

Hamadan

Postal code

38698-65178

Phone

+98 81 3838 0535

Email

m.molavi@umsha.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity
Hamedan University of Medical Sciences
Full name of responsible person
Mehdi Molavi
Position
Instructor
Latest degree
Master
Other areas of specialty/work
Nursery
Street address
Shahid Fahmideh St., Hamadan University of Medical Sciences, Hamadan
City
Hamadan
Province
Hamadan
Postal code
38698-65178
Phone
+98 81 3838 0535
Email
m.molavi@umsha.ac.ir

Person responsible for updating data

Contact

Name of organization / entity
Hamedan University of Medical Sciences
Full name of responsible person
Mehdi Molavi
Position
Instructor
Latest degree
Master
Other areas of specialty/work
Nursery
Street address
Shahid Fahmideh St., Hamadan University of Medical Sciences, Hamadan
City
Hamadan

Province
Hamadan
Postal code
38698-65178
Phone
+98 81 3838 0535
Email
m.molavi@umsha.ac.ir

Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available
Study Protocol
Undecided - It is not yet known if there will be a plan to

make this available
Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available
Analytic Code
Undecided - It is not yet known if there will be a plan to make this available
Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available