

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The effect of Respiratory muscles resistance training and Specific respiratory muscle training on physical and pulmonary function in patient with asthma.

Protocol summary

Summary

Objectives: We aimed to assess the effect of exercise training program on respiratory muscle strength and exercise on pulmonary function and respiratory muscles, especially the health of asthmatic patients. Study design: Quasi-experimental pretest - posttest study with experimental and control groups. Study population: the population of the study, all women will be diagnosed with asthma during the years 2006-2013 who have admission due to coronary artery diseases. Inclusion criteria: age between 30- 55 years old; history of asthma over two years and exclusion criteria: musculoskeletal problems; disability; pregnancy; cardiovascular disease or serious diseases that interfere with their exercise. Sample size: 23 women with asthma. Methods: samples by randomly were placed in one of three groups; 1- Respiratory muscles resistance exercise training(doen weight training movement including lift, fly, bench press, lat pull down, crunch, rowing), 2- Specific respiratory muscle training(inhale against the resistance by using a especial device) and 3- control group. The trainings were performed for 8 weeks.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015011420666N1**

Registration date: **2015-03-15, 1393/12/24**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-03-15, 1393/12/24

Registrant information

Name

Nafiseh Ghodrati

Name of organization / entity

Hakim Sabzevari Univresity

Country

Iran (Islamic Republic of)

Phone

+98 51 4466 9508

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sa.hosseini@hsu.ac.ir

Recruitment status

Recruitment complete

Funding source

Hakim Sabzevari University

Expected recruitment start date

2014-04-18, 1393/01/29

Expected recruitment end date

2014-04-20, 1393/01/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of Respiratory muscles resistance training and Specific respiratory muscle training on physical and pulmonary function in patient with asthma.

Public title

The effect of resistance and specific training in patient with asthma

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria were: age between 55-30 years old, History of asthma over two years. Exclusion criteria:

musculoskeletal problems; disability; pregnancy; cardiovascular disease or acute diseases that interfere with the exercise.

Age

From **30 years** old to **55 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **23**

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

Sabzevar University of Medical Sciences

Street address

Sabzevar University of Medical Sciences, Asad Abadi street

City

Sabzevar

Postal code

Approval date

2014-01-27, 1392/11/07

Ethics committee reference number

madsab.rec.93.102

Health conditions studied

1

Description of health condition studied

asthma

ICD-10 code

J45

ICD-10 code description

Asthma

Primary outcomes

1

Description

respiratory function

Timepoint

8 weeks before and after the intervention.

Method of measurement

spirometry

2

Description

physical function

Timepoint

8 weeks before and after the intervention.

Method of measurement

strength and endurance muscle

Secondary outcomes

empty

Intervention groups

1

Description

The control group did not cause any interference

Category

Rehabilitation

2

Description

Specific respiratory muscle training (inhale against the resistance by using a special device) . This training can be done up to 50% of maximum strength of respiratory muscles

Category

Rehabilitation

3

Description

Respiratory muscles resistance training (doing weight training movement including lift, fly, bench press, lat pull down, crunch, rowing) that performed in The three sets of 8-12 repetitions

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Sabzevar Vasei hospital

Full name of responsible person

Mohammad Mohammadzadeh

Street address

In front of The Health Park, Shohadaye Hasteie blvd.

City

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Sabzevar University of Medical Sciences

Full name of responsible person

Ali Asghar Molavi

Street address

Sabzevar University of Medical Sciences, Tohid Shahr

City

Sabzevar

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Sabzevar 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

Hakim Sabzevari University

Full name of responsible person

seyad alireza hosseini kakhk

Position

Associate Professor, Faculty of Physical Education and Sports Science

Other areas of specialty/work

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Person responsible for scientific

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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