

Clinical Trial Protocol

Iranian Registry of Clinical Trials

01 Aug 2026

Comparison of home-based and hospital-based pulmonary rehabilitation on lung function in patients with Chronic Obstructive Pulmonary Disease

Protocol summary

Summary

To compare the effects of a simple home pulmonary rehabilitation program and hospital-based program on lung function in patients with Chronic Obstructive Pulmonary Disease. Patients in this prospective, randomized clinical trial were randomized to 2 groups to receive hospital or home pulmonary rehabilitation. Patients with chronic obstructive pulmonary disease will be referred to lung clinic in Tehran scholar Christ's, Thirty patients were randomized to the hospital rehabilitation group and Thirty to the home group. Sampling will be done based on inclusion criteria. Rehabilitation program for 2 months and 3 times a day is done. Patients in the hospital group then carried out a structured exercise program while home group patients performed low intensity exercises at home that is collected in the form of CD and pamphlet, without supervision. Before and after the end of the second month, lung function in patients is measured whit spirometry, 6-minute walk test and criterion of dyspnea whit questionnaire of MMRC. The expected impact in this study, pulmonary rehabilitation program at home as in a hospital rehabilitation program are effective on pulmonary function in patients, the 6-minute walk test and reducing dyspnea

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015010720600N1**
Registration date: **2016-06-26, 1395/04/06**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2016-06-26, 1395/04/06

Registrant information

Name

Fateme Tavanaiee Yosefian

Name of organization / entity

Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 51 3859 1511

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Recruitment status

Recruitment complete

Funding source

Financial Assistance Mashhad University of Medical Sciences

Expected recruitment start date

2015-08-11, 1394/05/20

Expected recruitment end date

2015-12-11, 1394/09/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of home-based and hospital-based pulmonary rehabilitation on lung function in patients with Chronic Obstructive Pulmonary Disease

Public title

pulmonary rehabilitation in Chronic Obstructive Pulmonary Disease

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: have the desire to participate in the study; live in Mashhad; they have over 35 years of age;

spoke Persian; confirmed diagnosis of COPD is confirmed by a physician and clinical results; signs of infection or exacerbations (Acute Exacerbation) based on the baseline examination by specialists not have lungs; history is not in favor of exacerbations in the past month; ability to participate in the rehabilitation program based on initial medical examination have rehabilitation medicine specialist; chronic diseases such as heart failure, coronary artery disease, other diseases known respiratory, kidney disease, arthritis, severe knee arthritis, cancer and depression is not active; history of participation in the rehabilitation program, is not; the ability to have a relationship with the researcher. Exclusion criteria: refuse to participate in a research study and work with it; The absence of training sessions (4 sessions 3 sessions intermittent or continuous) have; exacerbation of symptoms during the rehabilitation program; Symptoms of angina, shortness of breath and severe hypoxia (Sat O2 <85%) occur during the rehabilitation program; Patients in the hospital for any reason (- Surgical) hospital.

Age

From **59 years** old to **15 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

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Sample selection was done based on random assignment and table of random numbers

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Mashhad University of Medical Sciences

Street address

Four ways PhD, School of Nursing and Midwifery, Mashhad Jarjani

City

Mashhad

Postal code

Approval date

2015-08-01, 1394/05/10

Ethics committee reference number

IR.MUMS.REC.1394.103

Health conditions studied

1

Description of health condition studied

chronic obstructive pulmonary disease

ICD-10 code

J44

ICD-10 code description

other chronic obstructive pulmonary disease

Primary outcomes

1

Description

Improvement lung function

Timepoint

Before and after the intervention.

Method of measurement

Spirometric parameters, 6 minute walk test and the severity of dyspnea

Secondary outcomes

1

Description

health-related quality of life

Timepoint

Before and after the intervention

Method of measurement

St. George's questionnaire

Intervention groups

1

Description

Home rehabilitation group includes protocol designed and applicable in the patient's home the 4 components endurance training, resistance training, flexibility exercises and breathing exercises have been formed. And training programs for CD and pamphlet will be given for the patients. Patient rehabilitation program 3 times a week, with each session scheduled for 8 weeks doing

Category

Rehabilitation

2

Description

Group rehabilitation of the hospital designed the hospital protocol of 4 components endurance training, resistance training, flexibility exercises and breathing exercises

have been formed. And patients attending specialist training in sports medicine are doing. Patient rehabilitation program 3 times a week, with each session scheduled for 8 weeks doing

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Lung Clinic of Dr. Masih Daneshvari Hospital

Full name of responsible person

Fateme Tavanaiee Yosefian

Street address

Dar Abad, Aghdasiyeh, Tehran

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Mashhad University of Medical Sciences

Full name of responsible person

Dr. tafaghodi

Street address

Daneshgah street; Mashhad

City

Mashhad

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, Mashhad 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

Mashhad University of Medical Sciences

Full name of responsible person

Fateme Tavanaiee Yosefian

Position

MSc in Nursing, Critical Care

Other areas of specialty/work

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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