Clinical Trial Protocol
Iranian Registry of Clinical Trials

20 Jun 2026

The effect of pulmonary rehabilitation program on self-efficacy and severity of symptoms among patients with chronic obstructive pulmonary disease

Protocol summary

Summary

The aim of this study is to investigate the effect of pulmonary rehabilitation on self efficacy and severity of symptoms in chronic obstructive pulmonary disease patients. This is a semi-experimental clinical trial on 66 mild to moderate COPD patients recruited from Masih Daneshvari outpatient clinic. The patients were randomly assigned into experimental or control groups. The control group received only routine visits and experimental group participated in a pulmonary rehabilitation program. Then, the patients were encouraged to accomplish pulmonary rehabilitation program three times a week for 7 weeks and were followed up by telephone weekly. The self efficacy, fatigue, dyspnea and cough severity were measured and compared between groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138905064443N2**
Registration date: **2011-05-14, 1390/02/24**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2011-05-14, 1390/02/24

Registrant information

Name

Masoumeh Zakerimoghadam

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 2286 2160

Email address

zakerimo@sina.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2010-09-23, 1389/07/01

Expected recruitment end date

2011-03-16, 1389/12/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of pulmonary rehabilitation program on self-efficacy and severity of symptoms among patients with chronic obstructive pulmonary disease

Public title

The effect of pulmonary rehabilitation program on self-efficacy and severity of symptoms among patients with chronic obstructive pulmonary disease

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: age less than 65 years, verification of diagnosis of moderate to severe COPD according to GOLD criteria (2008), absence of formal exercise training or pulmonary rehabilitation for at least one year prior to the study, no active symptomatic diseases (cardiac disease, musculoskeletal disease, mental disease) that would interfere with the exercise, literate and able to

speak Persian, possibility of contact by phone/mobile phone Exclusion criteria: recent exacerbation or change of medication, recent mobility limitation that interferes with exercise, not participating in educational sessions, lack of employing nutritional recommendation or exercise respiratory practice for at least a week

Age
From **18 years** old to **65 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **66**

Randomization (investigator's opinion)
Not 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
Tehran University of Medical Sciences

Street address
Ghods street, Keshavarz Boulevard

City
Tehran

Postal code

Approval date
2010-05-08, 1389/02/18

Ethics committee reference number
89/130/189

Health conditions studied

1

Description of health condition studied
Chronic Obstructive Pulmonary Disease (COPD)

ICD-10 code
J44

ICD-10 code description
Other chronic obstructive pulmonary disease

Primary outcomes

1

Description
Self efficacy

Timepoint
before and after intervention

Method of measurement
Chronic Obstructive Pulmonary Disease Self Efficacy Scale (CSES)

2

Description
severity of dyspnea

Timepoint
before and after intervention

Method of measurement
Dyspnea Severity Scale

3

Description
severity of fatigue

Timepoint
before and after intervention

Method of measurement
Fatigue Severity Scale (FSS)

4

Description
severity of cough

Timepoint
before and after intervention

Method of measurement
Cough Severity Scale

Secondary outcomes

empty

Intervention groups

1

Description
Experimental group participate to pulmonary rehabilitation program that design base on Bandura self efficacy theory. Pulmonary rehabilitation program included self care and self management education, nutrition recommendations, stress reduction methods, effective cough, breathing exercises, control of breathing in crucial situations, and muscle stretching exercises. Researcher instructed the pulmonary rehabilitation components in 3 parts of 30 minutes.Then patients were encouraged to perform pulmonary rehabilitation program at home 3 times a week for 7 weeks. Telephone follow-up program that consisted encourage patients to continue the performance, reinforcement of education, analyze success and failure and answers to the patient questions performed weekly.

Category
Rehabilitation

2

Description
The control group received only routine visits and telephone follow up weekly.
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Masih Daveshvari hospital
Full name of responsible person
Street address
City
Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Tehran University of Medical Sciences, Iran.
Full name of responsible person
Mr. Madadi
Street address
Ghods street, Keshavarz Boulevard
City
Tehran
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Tehran University of Medical Sciences, Iran.
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
Tehran University of Medical Sciences
Full name of responsible person
Masoumeh Zakerimoghadam
Position
MS/Faculty of Nursing and Midwifery
Other areas of specialty/work
Street address
Nursing and Midwifery, Tehran University of Medical Sciences, Nosrat St, Tohid Square, Tehran
City
Tehran
Postal code
Phone
+98 21 6692 7171
Fax
Email
zakerimo@sina.tums.ac.ir
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Tehran University of Medical Sciences
Full name of responsible person
Masoumeh Zakerimoghadam
Position
MS./Faculty of Nursing and Midwifery
Other areas of specialty/work
Street address
Nursing and Midwifery, Tehran University of Medical Sciences, Nosrat St, Tohid Square, Tehran
City
Tehran
Postal code
Phone
+98 21 6692 7171
Fax
Email
zakerimo@sina.tums.ac.ir
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Tehran University of Medical Sciences
Full name of responsible person
Masoumeh Zakerimoghadam
Position
MS./ Faculty of Nursing and Midwifery
Other areas of specialty/work
Street address
Nursing and Midwifery, Tehran University of Medical Sciences, Nosrat St, Tohid Square, Tehran
City
Tehran
Postal code
Phone
+98 21 6692 7171
Fax
Email
zakerimo@sina.tums.ac.ir
Web page address

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