

Clinical Trial Protocol

Iranian Registry of Clinical Trials

05 Jul 2026

The effect of breathing exercises on the fatigue dimensions in patients with chronic obstructive pulmonary disease referred to RAZI educational therapeutic center

Protocol summary

Summary

Shortness of breath and fatigue are two main symptoms in COPD patients. Fatigue is an unpleasant feeling, which prevents tasks and role of the individual and social. Pulmonary rehabilitation is an effective method to reduce fatigue and promotion of quality of life in COPD patients. Breathing exercises are an important component of pulmonary rehabilitation. The nurses who look after the patients with lung obstruction can be efficient in fastening the recovery and promoting the health level by representing a list of these practices. The aim of this study is to determine the effect of breathing exercises on fatigue dimension chronic obstructive pulmonary disease patients. This research is a quasi-experimental design, clinical trial. The research units include 70 patients suffering from COPD in Razi Hospital. Inclusion criteria: confirming of Disease by a specialist and the results of diagnostic tests; Patients enter in study with stage two above; Absence of Underlying disease (including unstable angina; aortic valve disease; cardiac uncontrolled arrhythmia; uncontrolled hypertension; heart failure); Absence of Known defects in the respiratory system caused by other diseases not consumption; Fatigue-reducing drugs such as amantadine; Literate and able to speak Persian; Possibility of contact by phone/mobile phone. Exclusion criteria: patients with progressed COPD disease; death of patients; enter to acute phase disease. The patients were randomly assigned into experimental or control groups. The experimental group participated in a breathing exercises program. Then, the patients will be asked to do breathing exercises 4 times a day for 10 days. The control group received only routine visits. Both of groups received routine drugs. Fatigue dimensions (general, physical, reduced activity, reduced motivation, mental fatigue) measured and compared in both groups

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201504111174N10**
Registration date: **2015-05-16, 1394/02/26**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2015-05-16, 1394/02/26

Registrant information

Name

Atefeh Ghanbari

Name of organization / entity

Guilan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 13780509

Email address

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Recruitment status

Recruitment complete

Funding source

vice chancellor for research, Guilan University of Medical Sciences

Expected recruitment start date

2015-04-21, 1394/02/01

Expected recruitment end date

2015-09-23, 1394/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of breathing exercises on the fatigue dimensions in patients with chronic obstructive pulmonary disease referred to RAZI educational therapeutic center

Public title

The effect of breathing exercises on the fatigue dimensions in patients with chronic obstructive pulmonary disease referred to RAZI educational therapeutic center .

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: confirming of Disease by a specialist and the results of diagnostic tests: Patients enter in study with stage two above: Absence of Underlying disease (including unstable angina: aortic valve disease: cardiac uncontrolled arrhythmia: uncontrolled hypertension: heart failure): Absence of Known defects in the respiratory system caused of other diseases not consumption: Fatigue-reducing drugs such as amantadine : Literate and able to speak Persian: Possibility of contact by phone/mobile phone: Exclusion criteria: patients with progresses COPD disease :death of patients: enter to acute phase disease.

Age

No age limit

Gender

Both

Phase

2

Groups that have been masked*No information***Sample size**Target sample size: **70****Randomization (investigator's opinion)**

Randomized

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids****1****Registry name**

no

Secondary trial Id

no

Registration date

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Vice Chancellor for Research and Technology ,Guilan University of Medical Scienc

Street address

Research and Technology affairs building , infront of Bank Sepah , over of iran radiator , West Beheshti Boulevard ,Rasht

City

Rasht

Postal code**Approval date**

2015-03-10, 1393/12/19

Ethics committee reference number

293/000/361/8

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

Chronic Obstructive Pulmonary Disease.

ICD-10 code

j40 ,j41,

ICD-10 code description

other chronic obstructive pulmonary disease

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

Fatigue dimensions

Timepoint

Before and after intervention

Method of measurement

Multidimensional fatigue inventory

Secondary outcomes**1****Description**

no

Timepoint

no

Method of measurement

no

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

Experimental group participated in a breathing exercises program The breathing exercises in this study consisted of Pursed- lip breathing, diaphragmatic breathing and

effective cough. Researcher instruct the breathing exercises components in 1 parts of 30 minutes. Then, the patients will be asked to do breathing exercises 4 times a day for 10 days. Researcher administer the breathing exercises of patients during they hospitalized. The patient complete breathing exercises by using self-reporting forms After discharge. Telephone Follow-up program that consisted encourage patients to continue the performance, reinforcement of education, and answers to the patient questions education daily.

Category

Rehabilitation

2

Description

The control group received only routine visits and, no such intervention does not take place .

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

RAZI educational therapeutic center

Full name of responsible person

Atefeh Ghanbari

Street address

Nursing and midwifery school ,St Student ,Beheshti Highway, Rasht

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research and Technology ,Guilan University of Medical Sciences

Full name of responsible person

Abtin Heidar Zadeh

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Research and Technology affairs building ,infront of Bank Sepah ,over of iran radiator ,West Beheshti Boulevard ,Rasht

City

Rasht

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 and Technology ,Guilan 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

Guilan University of Medical Sciences

Full name of responsible person

Atefeh Ghanbari

Position

PHD

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