Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effects of TEACH Back Training Intervention on Pulmonary Functions in COPD Patients

Protocol summary

Study aim
To determine significant effectiveness of teach back training intervention with breathing exercises including diaphragmatic breathing , pursed lip breathing and effective cough to improve the pulmonary functions in COPD patients.

Design
Randomized Control Trial with parallel groups , Single blinded with pre and post treatment readings

Settings and conduct
Fatima Memorial Hospital, Jinnah Hospital And Services Hospital

Participants/Inclusion and exclusion criteria
Inclusion Criteria: Age from 18 to 75 years old ,Male and Female, Diagnosed COPD with FEV1/FVC ratio <70% ,Lack of cognitive impairment ,Ability to attend training session, Clinical diagnosis of COPD confirmed by smoking history Exclusion Criteria: Long Term Bed Rest, Inability To Perform 6-minute Walk Test, Malignancy, Cardiovascular disease (Angina, MI),Stroke, Immunocompromised conditions, Cardiac and pulmonary surgical History

Intervention groups
Interventional Group(A):Teach Back training with breathing exercises along with Conventional treatment and educational session protocols among COPD patients. Control Group(B):Breathing Exercises with Conventional Training among COPD patients

Main outcome variables
Pulmonary Function Assessment using Digital Spirometry and Borg Dyspnea Scale

General information

Reason for update

Acronym
Randomized Control Trial

IRCT registration information
IRCT registration number: **IRCT20191117045462N25**
Registration date: **2025-04-23, 1404/02/03**
Registration timing: **retrospective**

Last update: **2025-04-23, 1404/02/03**
Update count: **0**

Registration date
2025-04-23, 1404/02/03

Registrant information

Name
Wajeeha Zia

Name of organization / entity
Riphah International University

Country
Pakistan

Phone
+92 42 35126110

Email address
wajeeha_z@yahoo.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2024-03-08, 1402/12/18

Expected recruitment end date
2024-07-10, 1403/04/20

Actual recruitment start date
2024-03-08, 1402/12/18

Actual recruitment end date
2024-07-10, 1403/04/20

Trial completion date
2024-07-10, 1403/04/20

Scientific title
Effects of TEACH Back Training Intervention on Pulmonary Functions in COPD Patients

Public title
Effects of TEACH Back Training Intervention on

Pulmonary Functions in COPD Patients

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

Clinically diagnosed COPD patient with long chain smoking history Diagnosed COPD with FEV1/FVC ratio <70% Ability to attend training session Lack of cognitive impairment Both Male and female 18-75 years old Individuals

Exclusion criteria:

Long Term Bed Rest Inability To Perform 6-minute Walk Test Cardiovascular Disease(Angina, Myocardial Infarction) Stroke Immunocompromised Conditions Cardiac, Pulmonary Surgery History

Age

From **18 years** old to **75 years** old

Gender

Both

Phase

2

Groups that have been masked

- Investigator

Sample size

Target sample size: **45**
More than 1 sample in each individual
Number of samples in each individual: **45**
English
Actual sample size reached: **40**
More than 1 sample in each individual
Actual sample size in each individual: **40**
English

Randomization (investigator's opinion)

Randomized

Randomization description

Patient will be recruited in the study through non-probability convenience sampling technique and then will be randomly assigned to each group through random sampling sealed opaque enveloped. Group 1 allocated as A and group 2 allocated as B. Half enveloped will be labeled with A and a half with labeled with B. If a patient gets the envelop with label 1 then will be in group A and if a patient gets the envelop with label 2 that will be treated as Group B

Blinding (investigator's opinion)

Single blinded

Blinding description

Investigator will be blinded .Assessment will be done by another therapist who will not be involved in treatment and data analysis

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Riphah College of Rehabilitation & Allied Health Sciences

Street address

25 Raza Saeed Road,Babra Block M Gulberg 3,Lahore,Punjab 25-Block Lahore

City

Lahore

Postal code

54000

Approval date

2023-11-20, 1402/08/29

Ethics committee reference number

RCR&AHS/REC/MS-CPPT

Health conditions studied

1

Description of health condition studied

Chronic Obstructive Pulmonary Condition

ICD-10 code

J44.9

ICD-10 code description

Chronic obstructive pulmonary disease, unspecified

Primary outcomes

1

Description

Pulmonary Function Testing

Timepoint

Pre & Post Treatment

Method of measurement

Digital Spirometer

Secondary outcomes

1

Description

Dyspnea

Timepoint

Pre-Post Treatment

Method of measurement

Borg Dyspnea Scale

Intervention groups

1

Description

Intervention Group: Teach Back training with pursed lip and diaphragmatic breathing along with Conventional treatment and educational session protocols among

COPD patients.3 Times/week with 10 repetitions/3 set/session/day

Category
Rehabilitation

2

Description
Control group: Recieved Conventional Treatment along with breathing exercises(Pursed lip breathing & diapgragmatic breathing).

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Riphah College of Rehabilitation & Allied Health Sciences

Full name of responsible person
Hira Nadeem Bhatti

Street address
25 Raza Saeed Road,Bhabra Block M Gulberg 3,Lahore ,Punjab 25 -Block Lahore

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Riphah International University

Full name of responsible person
Wajeeha

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Grant name
Educational

Grant code / Reference number

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

Title of funding source
Riphah International University

Proportion provided by this source
100

Public or private sector
Private

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
Riphah International University

Full name of responsible person
Wajeeha

Position
Senior Lecturer

Latest degree
Ph.D.

Other areas of specialty/work
Physiotherapy

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Position
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Other areas of specialty/work
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD
There is no further Information

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