

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

EFFECTS OF PILATES VS CORE STABILIZATION EXERCISES ON PULMONARY FUNCTIONS AND CHEST WALL EXPANSION IN COPD PATIENTS

Protocol summary

Study aim

EFFECTS OF PILATES VS CORE STABILIZATION EXERCISES ON PULMONARY FUNCTIONS AND CHEST WALL EXPANSION IN COPD PATIENTS

Design

Two parallel group , single blinded, randomized control trial with pre and post assessment

Settings and conduct

Pulmonology Ward District Headquarter Hospital Narowal

Participants/Inclusion and exclusion criteria

Inclusion criteria Patients with stable COPD Male & female age >18 years Able to walk independently Ability to perform voluntary given exercise program Did not participate in any training program during the last six months Exclusion criteria Unstable COPD >4 months hospital admissions due to COPD during last 1 year cognitive impairments □ progressive neuromuscular disease Spinal cord Injuries or severe orthopedic problems cardiovascular

Intervention groups

Group A: will be treated by Pilates exercises with deep breathing Group B: will be treated by core stabilization exercises with deep breathing

Main outcome variables

Assessment of pulmonary functions by using spirometer. tape measurement for chest wall expansion.

General information

Reason for update

due to some incomplete information

Acronym

IRCT registration information

IRCT registration number: **IRCT20191117045462N12**

Registration date: **2024-02-21, 1402/12/02**

Registration timing: **registered_while_recruiting**

Last update: **2024-07-21, 1403/04/31**

Update count: **1**

Registration date

2024-02-21, 1402/12/02

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

2023-12-10, 1402/09/19

Expected recruitment end date

2024-04-10, 1403/01/22

Actual recruitment start date

2023-12-10, 1402/09/19

Actual recruitment end date

2024-04-10, 1403/01/22

Trial completion date

2024-07-10, 1403/04/20

Scientific title

EFFECTS OF PILATES VS CORE STABILIZATION EXERCISES ON PULMONARY FUNCTIONS AND CHEST WALL EXPANSION IN COPD PATIENTS

Public title

EFFECTS OF PILATES VS CORE STABILIZATION EXERCISES ON PULMONARY FUNCTIONS AND CHEST WALL EXPANSION IN COPD PATIENTS

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Patients with stable COPD Male & female age >18 years
Able to walk independently Ability to perform voluntary
given exercise program Did not participate in any
training program during the last six months

Exclusion criteria:

Unstable COPD >4 months hospital admissions due to
COPD during last 1 year cognitive impairments Spinal
cord Injuries or severe orthopedic problems
cardiovascular conditions progressive neuromuscular
disease

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **54**

Actual sample size reached: **54**

Randomization (investigator's opinion)

Randomized

Randomization description

Taking into account the above mentioned inclusion and
exclusion criteria, patients will be recruited by
convenient sampling technique and allocated to groups
by simple randomization process by sealed opaque
enveloped labeled as 0 for Group A and for 1 group B

Blinding (investigator's opinion)

Single blinded

Blinding description

It's a single blinded study as patients were blinded.

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 Rd, Bhabra Block M Gulberg III,
Lahore, Punjab 25-M Block, Lahore

City

Lahore

Postal code

54660

Approval date

2023-11-26, 1402/09/05

Ethics committee reference number

RCR&AHS/REC/MS-CPPT

Health conditions studied

1

Description of health condition studied

chronic obstructive pulmonary disease

ICD-10 code

J44.1

ICD-10 code description

Chronic obstructive pulmonary disease with (acute)
exacerbation

Primary outcomes

1

Description

pulmonary functions

Timepoint

pre- Post treatment

Method of measurement

spirometer

2

Description

chest wall expansion

Timepoint

pre- Post treatment

Method of measurement

tape measurement

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: pilates exercises along with deep
breathing

Category

Rehabilitation

2

Description

Intervention group: core stabilization exercises along
with deep breathing

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Riphah college of rehabilitation & Allied Health Sciences

Full name of responsible person

Riphah college of rehabilitation & Allied Health Sciences

Street address

13-14-C-civic center, township near Hamdard Chowk, Lahore

City

Lahore

Postal code

54000

Phone

+92 346 6646556

Email

saimaarshad893@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

riphah international university

Full name of responsible person

wajeeha

Street address

25 Raza Saeed Rd, Bhabra Block M Gulberg III, Lahore, Punjab 25-M Block, Lahore

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+92 42 35126110

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wajeeha_z@yahoo.com

Grant name

Educational

Grant code / Reference number**Is the source of funding the same sponsor organization/entity?**

No

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

Saima Arshad

Position

student

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Province

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51601

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saimaarshad893@gmail.com

Person responsible for scientific inquiries

Contact**Name of organization / entity**

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Full name of responsible person

Wajeeha

Position

senior lecturer

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

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Person responsible for updating data

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Riphah international University

Full name of responsible person

saima Arshad

Position

student

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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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

Not applicable