Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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Lahore

Postal code
54000

Phone
+92 346 6646556

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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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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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village Aima qazian, tehsil & district Narowal

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Person responsible for scientific inquiries

Contact

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Position
senior lecturer

Latest degree
Ph.D.

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Physiotherapy

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Person responsible for updating data

Contact

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Full name of responsible person
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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