

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

combined effects of diaphragmatic breathing and thoracic kinesio taping on pulmonary functions, dyspnea, thoracoabdominal mobility and quality of life in Chronic obstructive Pulmonary Disease

Protocol summary

Study aim

To determine Combined Effects of diaphragmatic breathing and Thoracic Kinesio Taping on Pulmonary functions, dyspnea, Thoracoabdominal mobility and quality of life in mild to moderate COPD Chronic Obstructive Pulmonary Disease patients .

Design

Two parallel group ,single blinded ,Randomized Controlled Trial with pre and post assessment

Settings and conduct

Pulmonology ward : Ittefaq hospital Lahore

Participants/Inclusion and exclusion criteria

Inclusion Criteria: ●Mild to moderate level COPD patients
●Both male and female gender ●Age between 40-60 years ●Vitally stable patient ●Individuals with no prior experience with thoracic Kinesio taping
Exclusion Criteria: ● Participants with unstable medical conditions (e.g., cardiovascular instability) ● Individuals with cognitive impairments ●Pregnant women ● Participants with known allergies to tape ● Participants with known respiratory conditions other than COPD ● Diabetic patients

Intervention groups

Thoracic Kinesio Taping along with diaphragmatic breathing

Main outcome variables

- Dyspnea 12 Questionnaire will be used to assess change in Dyspnea
- Digital Spirometer will be used to assess Pulmonary functions changes
- St. George's Respiratory Questionnaire for COPD patients (SGRQ-C) will be used to assess quality of life

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20191117045462N19**

Registration date: **2024-07-23, 1403/05/02**

Registration timing: **prospective**

Last update: **2024-07-23, 1403/05/02**

Update count: **0**

Registration date

2024-07-23, 1403/05/02

Registrant information

Name

Wajeetha Zia

Name of organization / entity

Riphah International University

Country

Pakistan

Phone

+92 42 35126110

Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-08-15, 1403/05/25

Expected recruitment end date

2024-12-15, 1403/09/25

Actual recruitment start date

2024-08-15, 1403/05/25

Actual recruitment end date

2024-12-15, 1403/09/25

Trial completion date

2024-12-25, 1403/10/05

Scientific title

combined effects of diaphragmatic breathing and thoracic kinesio taping on pulmonary functions, dyspnea,

thoracoabdominal mobility and quality of life in Chronic obstructive Pulmonary Disease	
Public title	combined effects of diaphragmatic breathing and Thoracic Kinesio Taping on Pulmonary functions, dyspnea, thoracoabdominal mobility and quality of life in Chronic Obstructive Pulmonary Disease
Purpose	Treatment
Inclusion/Exclusion criteria	Inclusion criteria: Mild to moderate level COPD patients Both male and female gender Age between 40-60 years Vitally stable patient Individuals with no prior experience with thoracic Kinesio taping Exclusion criteria: Participants with unstable medical conditions (e.g., cardiovascular instability) Individuals with cognitive impairments Pregnant women Participants with known allergies to tape Participants with known respiratory conditions other than COPD Diabetic patients
Age	From 40 years old to 60 years old
Gender	Both
Phase	N/A
Groups that have been masked	Investigator
Sample size	Target sample size: 74 Actual sample size reached: 74
Randomization (investigator's opinion)	Randomized
Randomization description	Taking into account the aforementioned inclusion and exclusion criteria patients will be divided into two groups by convenient sampling and allocated to 2 groups by simple randomization process by sealed opaque envelope method and labeled as 0 for group A and 1 for group B.
Blinding (investigator's opinion)	Single blinded
Blinding description	Investigator will be blind. Assessment will be done by 2nd therapist who will not be involved in treatment and data analysis.
Placebo	Not used
Assignment	Parallel
Other design features	
Secondary Ids	empty
Ethics committees	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 City Lahore Postal code 54000 Approval date 2024-01-15, 1402/10/25 Ethics committee reference number RCR&AHS/REC/MS-CPPT
Health conditions studied	Description of health condition studied Mild to moderate COPD patients ICD-10 code J44.9 ICD-10 code description Chronic obstructive pulmonary disease, unspecified
Primary outcomes	Description Dyspnea Timepoint Pre post treatment Method of measurement Dyspnea 12 Questionnaire
Secondary outcomes	Description Pulmonary functions Timepoint Pre post treatment Method of measurement Digital Spirometer
Intervention groups	Description Experimental group will receive thoracic kinesio taping and diaphragmatic breathing exercises. Diaphragmatic breathing exercises will be performed by assuming flat position. Be sure to flex your knees and support your head. • Put one hand over your breastbone in the center of your chest, and the other just below your rib. Take a

calm, deep breath in through your nose. • Squeeze out with your lips pursed and tense the muscles directly beneath your ribs. • Advice: Tighten your muscles while using the hand you placed below your ribs to gently push in and up. • Participant will be scheduled to attend 20 treatment sessions (5 sessions every week for 4 weeks, 35 minutes each session) Assessment will be done on 0 weeks, 2nd week, and 4th week • Thoracic Kinesio Taping will be performed by this process :The material to be used for thoracic KT application will be 100% cotton, latex-free, 5-cm wide, elastic tape. Patients will be instructed to sit upright on an armless chair with no back support, with knees flexed to 90 degrees, feet on the floor and arms relaxed. Kinesio tape will be applied anteriorly and posteriorly to facilitate respiratory muscles (primarily diaphragm) along the subcostal area. Anteriorly, the base point of an “I” shaped kinesio tape will be applied on xiphoid process with 50-75% tension only on the linea alba and the tails of the tape will be applied towards subcostal curvature with no tension. Posteriorly, a second “I” shaped kinesio tape will be applied from the back. The base point of the tape will be applied on the projection of 12th Thoracic vertebra with 50-75% tension and the tails will be applied toward the ribs without any tension. Additionally, two more kinesio tapes will be applied to upper trapezius area which lies between neck and acromion at both sides (left and right). • Patient will be taped for about 48 hours • Participant will be scheduled to attend 12 treatment sessions (3 sessions every week for 4 weeks, 35 mins each session) • Assessment will be done on 0-week, 2nd week, and 4th week. Treatment evaluation will be done by measuring severity of dyspnea by dyspnea-12 scale, quality of life will be measured by st. george questionnaire and pulmonary function by spirometry.

Category

Rehabilitation

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Description

Control group: will receive diaphragmatic breathing exercises. Diaphragmatic breathing exercises will be performed by assuming flat position. Be sure to flex your knees and support your head. • Put one hand over your breastbone in the center of your chest, and the other just below your rib. Take a calm, deep breath in through your nose. • Squeeze out with your lips pursed and tense the muscles directly beneath your ribs. • Advice: Tighten your muscles while using the hand you placed below your ribs to gently push in and up. • Participant will be scheduled to attend 20 treatment sessions (5 sessions every week for 4 weeks, 35 minutes each session) Assessment will be done on 0 weeks, 2nd week, and 4th week • Treatment evaluation will be done by measuring severity of dyspnea by dyspnea-12 scale, quality of life will be measured by st. george questionnaire and pulmonary function by spirometry.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Riphah College of Rehab & Allied health sciences

Full name of responsible person

Riphah College of Rehab & Allied health sciences

Street address

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

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Recruitment center

Name of recruitment center

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

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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

Arfa Amin

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

Undecided - It is not yet known if there will be a plan to make this available