

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effects of multi-segmental individual -based exercise approach on postural dysfunction among geriatric population.

#### Protocol summary

##### Study aim

to determine the effects of multi segmental exercise intervention on postural dysfunction among geriatric population. to determine the effects of multi segmental exercise intervention on balance among geriatric population.

##### Design

. The exercise program will be divided into six sections: • Postural awareness • Stretching exercises • Mobility exercises • Strength exercises • Balance & coordination exercises • Endurance training The above-mentioned exercise program consists of: • 10-minute warm up period. • 35-minut exercise period. • 10- minute relaxation (cool down) period.

##### Settings and conduct

University institute of physical therapy university of Lahore, Lahore.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Both male & female. • Age 65-75 years. • Participants who can able to move independently. • Participants who can able to climb one flight of stairs independently. • Participants who have thoracic kyphosis of 50 degree or greater. Exclusion criteria: • Patient who could not maintain balance when standing unassisted • Patient with diagnosed neurological or vestibular disorders. • Patient with serious medical conditions that will limit participation in exercise program i.e. (chest pain, myocardial infarction, cardiac surgery within 6 months) • Patient with uncontrolled hypertension. • Patient with previous 12 months history of hip fracture or total hip replacement.

##### Intervention groups

Group-A (Control group): This group will receive no exercise program but postural education will be given to this group via video. Group B (Experimental group): The patients in this group will receive exercise program of 1 hour. The exercise program will consist of warm up period, an exercise session, & cool down period twice weekly for 24 weeks.

##### Main outcome variables

• Posture control • Balance (static & dynamic balance)

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20221005056094N1**

Registration date: **2022-10-25, 1401/08/03**

Registration timing: **retrospective**

Last update: **2022-10-25, 1401/08/03**

Update count: **0**

##### Registration date

2022-10-25, 1401/08/03

##### Registrant information

##### Name

Filza Shoukat

##### Name of organization / entity

University of lahore

##### Country

Pakistan

##### Phone

+92 42 111 865 865

##### Email address

filza.shaukat@uipt.uol.edu.pk

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2021-04-21, 1400/02/01

##### Expected recruitment end date

2022-08-21, 1401/05/30

##### Actual recruitment start date

2021-04-21, 1400/02/01

##### Actual recruitment end date

2022-08-21, 1401/05/30  
**Trial completion date**  
2022-10-22, 1401/07/30

**Scientific title**  
Effects of multi-segmental individual -based exercise approach on postural dysfunction among geriatric population.

**Public title**  
Effects of multi-segmental individual -based exercise approach on postural dysfunction among geriatric population.

**Purpose**  
Treatment

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Participants who are able to move independently  
participants who are able to climb one flight of stairs independently  
Participants having thoracic kyphosis of 50 degree or greater  
Gender both male & female  
Age 65-75 years  
**Exclusion criteria:**  
participants who could not maintain balance when standing unassisted  
patients with diagnosed neurological and vestibular disorder  
patient with uncontrolled hypertension  
patients with previous 12 months history of hip fracture or total hip replacement  
patients with serious medical conditions that will limit participation in exercise program i.e (chest pain, myocardial infarction, cardiac surgery within 6 months)

**Age**  
From **65 years** old to **75 years** old

**Gender**  
Both

**Phase**  
N/A

**Groups that have been masked**

- Participant
- Investigator
- Outcome assessor

**Sample size**  
Target sample size: **95**  
Actual sample size reached: **113**

**Randomization (investigator's opinion)**  
Randomized

**Randomization description**  
The subjects will be randomly assigned to one of two groups by using a table of random numbers generated the randomization sequence, using a restricted randomization scheme to assure equal numbers in each group. Random allocation to all groups will be ensured, from all study personnel and participants by entry of data into computer randomization program immediately.

**Blinding (investigator's opinion)**  
Triple blinded

**Blinding description**  
Patient, investigator and assessor all will be blind in this study. Patient did not know which group he belongs to, investigator and assessor did not know which treatment is given to which group

**Placebo**  
Not used

**Assignment**  
Parallel

**Other design features**

**Secondary Ids**  
empty

**Ethics committees**

**1**

**Ethics committee**  
**Name of ethics committee**  
research ethical committee (REC)  
**Street address**  
28-M, Quaid-e Azam, Industrial Estate Kot Lakhpat, Lahore  
**City**  
Lahore  
**Postal code**  
0423  
**Approval date**  
2021-03-19, 1399/12/29  
**Ethics committee reference number**  
RCRS-RE-PHD-RS/Fall19/127

## Health conditions studied

**1**

**Description of health condition studied**  
Healthy geriatric population

**ICD-10 code**  
**ICD-10 code description**

## Primary outcomes

**1**

**Description**  
posture, balance(static, dynamic)

**Timepoint**  
interventional

**Method of measurement**  
Global postural system

## Secondary outcomes

**1**

**Description**  
• TUG test • Tragus to wall test. • Mini BESTest.

**Timepoint**  
interventional

**Method of measurement**  
descriptive

## Intervention groups

1

### Description

Intervention group: The patients in this group will receive exercise program of 1 hour. The exercise program will consist of warm up period, an exercise session, and stretching exercises & cool down period twice weekly for 24 weeks.

### Category

Rehabilitation

## Recruitment centers

1

### Recruitment center

#### Name of recruitment center

university institute of physical therapy, university of Lahore, Lahore

#### Full name of responsible person

Filza shoukat

#### Street address

house no 244 93 Ali Street Shakir Road icchra lhr

#### City

lahore

#### Postal code

0423

#### Phone

+92 332 4543865

#### Email

filza.shaukat@uipt.uol.edu.pk

## Sponsors / Funding sources

1

### Sponsor

#### Name of organization / entity

Riphah International University

#### Full name of responsible person

Riphah International University

#### Street address

28-M, Quaid-e Azam, Industrial Estate Kot Lakhpat, Lahore

#### City

lahore

#### Postal code

54000

#### Phone

+92 42 111 747 424

#### Email

admissions@riphah.edu.pk

#### Web page address

<https://www.riphah.edu.pk/lahore/>

#### Grant name

#### 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

filza shoukat

#### Position

assistant professor

#### Latest degree

Master

#### Other areas of specialty/work

Physiotherapy

#### Street address

house no 244 93 Ali Street Shakir Road icchra lhr

#### City

lahore

#### Province

Punjab

#### Postal code

0423

#### Phone

+92 332 4543865

#### Email

filza.shaukat@uipt.uol.edu.pk

## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

Riphah International University

#### Full name of responsible person

filza shoukat

#### Position

Assistant Professor

#### Latest degree

Master

#### Other areas of specialty/work

Physiotherapy

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#### Province

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**Email**

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**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Riphah International University

**Full name of responsible person**

filza shoukat

**Position**

Assistant Professor

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

**Street address**

house no 244 93 Ali Street Shakir Road icchra lhr

**City**

lahore

**Province**

Punjab

**Postal code**

0423

**Phone**

+92 332 4543865

**Email**

filzashoukat21@gmail.com

**Sharing plan**

**Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Yes - There is a plan to make this available

**Informed Consent Form**

No - There is not 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**

No - There is not a plan to make this available

**Data Dictionary**

No - There is not a plan to make this available

**Title and more details about the data/document**

Effects of multi-segmental individual-based exercise approach on postural dysfunction among geriatric population."

**When the data will become available and for how long**

after the publication

**To whom data/document is available**

for other researchers

**Under which criteria data/document could be used**

for research only

**From where data/document is obtainable**

Riphah international university

**What processes are involved for a request to access data/document**

request to sponsor party

**Comments**