

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

26 Jun 2026

### Effectiveness of routine physical therapy with and without equal weight bearing sit-to-stand exercise program on balance and functional independence in stroke patients

#### Protocol summary

##### Study aim

To determine the effectiveness of routine physical therapy with and without equal weight bearing exercise program on balance and functional outcome in stroke patients.

##### Design

randomized clinical trial, parallel groups, no blinding

##### Settings and conduct

The participants were allocated from Omer medical centre, Yaseen medical centre, UOL teaching hospital Lahore. The participant was asked to pick a sealed envelop and then according to the number in envelop the group was allocated. There was no blinding done.

##### Participants/Inclusion and exclusion criteria

Clinically diagnosed sub-acute stroke patients aged between 40-60 years by neurologist and able to understand command were included. where as the patients with any Musculoskeletal Disorder, Disability or other comorbid disease, any Previous history of neurological disease, or enrolled in another experimental study were excluded.

##### Intervention groups

Control group: received the 3 sessions per week for 2 months of routine physical therapy treatment that includes electrical stimulation, Muscles Stretching, Strengthening and range of Motion Exercises for 45-60 minutes. In a session, electrical stimulation and Hot pack was given for 15 minutes. Static stretching of affected muscles was performed according to the participant requirement. The muscle strengthening included loading of affected leg with unaffected leg placed on a wooden block, stepping up exercise with the affected leg, stepping down with the affected leg, heels lift. Fifteen repetitions of each exercise was given with a resting period of 1minute between exercises. Intervention group: received 3 sessions per week for 2 months of routine physical therapy with equal weight bearing sit-to-stand

exercise for 45-60 minutes. In one session, routine physiotherapy was given with equal weight bearing sit-to-stand exercise (20 repetitions).

##### Main outcome variables

Balance, Functional independence

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20200225046616N2**

Registration date: **2020-10-15, 1399/07/24**

Registration timing: **retrospective**

Last update: **2020-10-15, 1399/07/24**

Update count: **0**

##### Registration date

2020-10-15, 1399/07/24

##### Registrant information

##### Name

Fariha Khalid

##### Name of organization / entity

University of Lahore

##### Country

Pakistan

##### Phone

+92 42 35220878

##### Email address

fariha.khalid@dhpt.uol.edu.pk

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2019-11-01, 1398/08/10

##### Expected recruitment end date

2020-05-01, 1399/02/12  
**Actual recruitment start date**  
2019-11-23, 1398/09/02  
**Actual recruitment end date**  
2020-06-03, 1399/03/14  
**Trial completion date**  
2020-07-29, 1399/05/08

**Scientific title**  
Effectiveness of routine physical therapy with and without equal weight bearing sit-to-stand exercise program on balance and functional independence in stroke patients

**Public title**  
Equal weight bearing sit-to-stand exercise in stroke patients

**Purpose**  
Treatment

**Inclusion/Exclusion criteria**

**Inclusion criteria:**

Clinically diagnosed stroke patients by neurologist Sub-acute stage (between 2 weeks to 6 months after onset) Both males and females aged 40-60 years Both hemorrhagic or ischemic types Able to understand command and have the capacity to provide informed consent

**Exclusion criteria:**

Musculoskeletal Disorder i.e. Substantial loss of joint range due to arthritis etc Unstable Angina Participation in other interventional or pharmacological studies which can affect the results of this study Disability or other comorbid disease such as cancer or amputation that will limit or prevent assessment of the patients Previous history of neurological disease other than stroke

**Age**  
From **40 years** old to **60 years** old

**Gender**  
Both

**Phase**  
N/A

**Groups that have been masked**  
*No information*

**Sample size**  
Target sample size: **28**  
Actual sample size reached: **24**

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

**Randomization description**  
28 participant were allocated in control or experimental group by simple randomization method at individual level. A random sequence for patients allocation was generated on computer using commentpicker.com. Each number was kept in a sealed envelope. For each patient a sealed envelope was opened and according to mentioned number, group was allocated. No allocation concealment was carried out.

**Blinding (investigator's opinion)**  
Not blinded

**Blinding description**

**Placebo**  
Not used

**Assignment**  
Parallel  
**Other design features**  
No

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

**Name of ethics committee**

Ethic's committee of University of Lahore

**Street address**

1-Km, Defence Road, Bhupatian Chowk, Off Raiwind Road

**City**

Lahore

**Postal code**

54590

**Approval date**

2019-10-30, 1398/08/08

**Ethics committee reference number**

472

## Health conditions studied

### 1

#### Description of health condition studied

stroke

**ICD-10 code**

I63.50

**ICD-10 code description**

Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery

## Primary outcomes

### 1

#### Description

Balance

**Timepoint**

Before intervention, 4th week of intervention, 8th week of intervention

**Method of measurement**

Berg balance scale

### 2

#### Description

functional independence

**Timepoint**

Before intervention, 4th week of intervention, 8th week of intervention

**Method of measurement**

Functional independence measure scale

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Control group: 3 sessions per week for 2 months of routine physical therapy treatment that includes electrical stimulation, Muscles Stretching, Strengthening and range of Motion Exercises for 45-60 minutes. In one session, electrical stimulation and Hot pack was given for 15 minutes. Static stretching of affected muscles was performed according to the participant requirement. The muscle strengthening exercises included loading of affected leg with unaffected leg placed on a wooden block, stepping up exercise with the affected leg (stepping up a wooden block with the affected leg), stepping down with the affected leg, heels lift. Fifteen repetitions of each exercise was given with a resting period of 1 minute between exercises.

#### Category

Rehabilitation

### 2

#### Description

Intervention group: 3 sessions per week for 2 months of routine physical therapy with equal weight bearing sit-to-stand exercise for 45-60 minutes. In one session, routine physiotherapy mentioned above was given with equal weight bearing Sit-to-stand exercise (20 rep). In Sit-to-stand exercise affected foot positioned alongside the unaffected foot rising with chair arm-rest assistance.

#### Category

Rehabilitation

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

UOL Teaching Hospital

##### Full name of responsible person

Dr Muhammad hussain Iqbal

##### Street address

1 - KM Defence Road, Lahore.

##### City

Lahore

##### Postal code

54590

##### Phone

+92 42 99200600

##### Email

hussainiqbal94@gmail.com

### 2

#### Recruitment center

##### Name of recruitment center

Omer medical centre

##### Full name of responsible person

Dr Fariha Khalid

##### Street address

JOHAR TOWN 42 A/III , Colledge Road, near AL JANNAT MARRIAGE HALL, Lahore, Pakistan

##### City

Lahore

##### Postal code

54600

##### Phone

+92 42 35174737

##### Email

farihakhalid93@gmail.com

### 3

#### Recruitment center

##### Name of recruitment center

Yaseen Medical Centre

##### Full name of responsible person

Dr Fariha Khalid

##### Street address

246 Allama Iqbal road dharampura

##### City

Lahore

##### Postal code

39571

##### Phone

+92 42 35880878

##### Email

farihakhalid93@gmail.com

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

The university of Lahore

##### Full name of responsible person

Dr Ashfaq Ahmad

##### Street address

1-Km, Defence Road, Bhupatian Chowk, Off Raiwind Road, Lahore, Pakistan

##### City

Lahore

##### Postal code

54590

##### Phone

+92 42 99200600

##### Email

Farihakhalid93@gmail.com

#### Grant name

#### Grant code / Reference number

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

Yes

#### Title of funding source

The university of Lahore

#### Proportion provided by this source

100

**Public or private sector**

Public

**Domestic or foreign origin**

Domestic

**Category of foreign source of funding**

empty

**Country of origin****Type of organization providing the funding**

Academic

farihakhalid93@gmail.com

**Person responsible for updating data****Contact****Name of organization / entity**

University of Lahore

**Full name of responsible person**

Dr Fariha khalid

**Position**

Lecturer

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

**Street address**

University of Lahore, Main Campus, Lahore

**City**

Lahore

**Province**

Punjab

**Postal code**

54590

**Phone**

+92 42 99200600

**Email**

farihakhalid93@gmail.com

**Person responsible for general inquiries****Contact****Name of organization / entity**

University of Lahore

**Full name of responsible person**

Dr Fariha khalid

**Position**

Lecturer

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

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**Postal code**

54590

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+92 42 99200600

**Email**

farihakhalid93@gmail.com

**Person responsible for scientific inquiries****Contact****Name of organization / entity**

University of Lahore

**Full name of responsible person**

Dr Fariha khalid

**Position**

Lecturer

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

**Street address**

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**City**

Lahore

**Province**

Punjab

**Postal code**

54590

**Phone**

+92 42 99200600

**Email****Sharing plan****Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**Study Protocol**

No - There is not 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**

No - There is not a plan to make this available

**Clinical Study Report**

No - There is not a plan to make this available

**Analytic Code**

Not applicable

**Data Dictionary**

Not applicable

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

All collected deidentified IPD

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

Data will be available to other people after the completion of study and remained available till 3 months

**To whom data/document is available**

Data will be available to people working in academic institutions

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

"Fariha Khalid" Institutional email address:

fariha.khalid@dhpt.uol.edu.pk

**From where data/document is obtainable**

"Fariha Khalid" Institutional email address:

fariha.khalid@dhpt.uol.edu.pk

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

Data can be accessed by communicating with principle investigator "Fariha Khalid" through institutional email

address: fariha.khalid@dhpt.uol.edu.pk  
**Comments**