# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

22 Nov 2026

# COMPARATIVE EFFECTS OF MOTOR RELEARNING PROGRAM AND ACTION OBSERVATION THERAPY ON BALANCE AND GAIT IN CHRONIC STROKE PATIENTS.

## Protocol summary

**Study aim**
The aim of the study is to compare the effects of Motor Relearning program and Action Observation therapy on balance and gait in chronic stroke patients.

**Design**
study design is Randomized control trial

**Settings and conduct**
DHQ hospital sahiwal

**Participants/Inclusion and exclusion criteria**
• Those who were diagnosed with cerebral hemorrhage and cerebral infarction based on computed tomography or magnetic resonance imaging. • Both male and female • Patients age 50-70 years • Chronic stroke patients (after 6 months of first stroke) • Medically stable patients having a single stroke • No visual field defects • No abnormality in the vestibular organs • A score greater than 24-30 in mini-mental test • Patients that will be able to fulfill and comprehend the command. • 2–4 muscle power in the affected side (Medical Research Council-MRC Muscle scale 2–4) exclusion criteria: • Patients with orthopedic diseases (such as contracture) in the trunk and both lower extremity. • History of fall in last 6 months • A history of other neurological diseases or disorders (Multiple Sclerosis, Parkinson's) • Manual muscle testing below grade II • Those who are receiving other related therapy through the study, which may affect the efficacy of this study; • Those with any contraindications to start rehabilitation (i.e. severe uncontrolled hypertension, uncontrolled diabetes or unstable angina)

**Intervention groups**
Group A will receive intervention Motor Relearning Program with conventional treatment and Group B will receive Action Observation Therapy with conventional treatment. All participants will receive interventions for 35-40 minutes per session, three times a week, for eight weeks.

**Main outcome variables**
Balance and Gait

## General information

**Reason for update**

**Acronym**

**IRCT registration information**
IRCT registration number: **IRCT20231015059732N1**
Registration date: **2023-10-28, 1402/08/06**
Registration timing: **registered_while_recruiting**

Last update: **2023-10-28, 1402/08/06**
Update count: **0**

**Registration date**
2023-10-28, 1402/08/06

**Registrant information**

**Name**
Ayesha Nazir

**Name of organization / entity**
Riphah International University

**Country**
Pakistan

**Phone**
+92 46 95995061

**Email address**
ayeshanazir670@gmail.com

**Recruitment status**
**Recruitment complete**

**Funding source**

**Expected recruitment start date**
2023-08-01, 1402/05/10

**Expected recruitment end date**
2023-12-01, 1402/09/10

**Actual recruitment start date**
empty

**Actual recruitment end date**
empty
**Trial completion date**
empty

**Scientific title**
COMPARATIVE EFFECTS OF MOTOR RELEARNING PROGRAM AND ACTION OBSERVATION THERAPY ON BALANCE AND GAIT IN CHRONIC STROKE PATIENTS.

**Public title**
MOTOR RELEARNING PROGRAM AND ACTION OBSERVATION THERAPY FOR STROKE PATIENTS
**Purpose**
Treatment
**Inclusion/Exclusion criteria**
**Inclusion criteria:**
Those who were diagnosed with cerebral hemorrhage and cerebral infarction based on computed tomography or magnetic resonance imaging. Both male and female Patients age 50-70 years Chronic stroke patients (after 6 months of first stroke) Medically stable patients having a single stroke No visual field defects No abnormality in the vestibular organs A score greater than 24-30 in mini-mental test Patients that will be able to fulfill and comprehend the command. 2–4 muscle power in the affected side (Medical Research Council-MRC Muscle scale 2–4
**Exclusion criteria:**
Patients with orthopedic diseases (such as contracture) in the trunk and both lower extremity History of fall in last 6 months A history of other neurological diseases or disorders (Multiple Sclerosis, Parkinson's)• Manual muscle testing below grade II Those who are receiving other related therapy through the study, which may affect the efficacy of this study Those with any contraindications to start rehabilitation (i.e. severe uncontrolled hypertension, uncontrolled diabetes or unstable angina)
**Age**
From **50 years** old to **70 years** old
**Gender**
Both

**Phase**
N/A
**Groups that have been masked**

- Participant
- Data analyser

**Sample size**
Target sample size: **34**
**Randomization (investigator's opinion)**
Randomized
**Randomization description**
Simple randomization method by using a table of random numbers
**Blinding (investigator's opinion)**
Double blinded
**Blinding description**
participants and data analyzer will be blind in this study
**Placebo**
Used
**Assignment**
Parallel
**Other design features**

## Secondary Ids

empty

## Ethics committees

**1**

**Ethics committee**
**Name of ethics committee**
Ethics committee of Riphah International University
**Street address**
Riphah international university Gulberg 3 campus Lahore
**City**
Lahore
**Postal code**
54660
**Approval date**
2023-08-03, 1402/05/12
**Ethics committee reference number**
REC/RCR & AHS/23/0249

## Health conditions studied

**1**

**Description of health condition studied**
Stroke
**ICD-10 code**
G46.4
**ICD-10 code description**
Cerebellar stroke syndrome

## Primary outcomes

**1**

**Description**
Balance & Gait
**Timepoint**
pre intervention and post intervention
**Method of measurement**
by using Berg balance scale, 10-m walk test and timed up and go test

## Secondary outcomes

empty

## Intervention groups

**1**

**Description**
Intervention group: Group A
**Category**
Treatment - Other

**2**

**Description**
Intervention group: Group B
**Category**
Treatment - Other

## Recruitment centers

**1**

**Recruitment center**
**Name of recruitment center**
District head quarter hospital Sahiwal
**Full name of responsible person**
DR sherazi
**Street address**
DHQ hospital Road sahiwal
**City**
sahiwal
**Postal code**
57000
**Phone**
+92 57 95995061
**Email**
ayeshanazir670@gmail.com

## Sponsors / Funding sources

**1**

**Sponsor**
**Name of organization / entity**
Riphah international university
**Full name of responsible person**
Ethics committee of Riphah International University
**Street address**
Riphah international university Gulberg 3 campus Lahore
**City**
Lahore
**Postal code**
54660
**Phone**
+92 57 67881831
**Email**
ayeshanazir670@gmail.com
**Grant name**
**Grant code / Reference number**
**Is the source of funding the same sponsor organization/entity?**
No
**Title of funding source**
research fund
**Proportion provided by this source**
2
**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**
Ayesha Nazir
**Position**
Student
**Latest degree**
Master
**Other areas of specialty/work**
Physiotherapy
**Street address**
Riphah international university Gulberg 3 campus Lahore
**City**
Lahore
**Province**
PUNJAB
**Postal code**
54660
**Phone**
+92 57 95995061
**Email**
ayeshanazir670@gmail.com

## Person responsible for scientific inquiries

**Contact**
**Name of organization / entity**
RIPHAH INTERNATIONAL UNIVERESITY
**Full name of responsible person**
AYESHA NAZIR
**Position**
STUDENT
**Latest degree**
Master
**Other areas of specialty/work**
Physiotherapy
**Street address**
Riphah international university Gulberg 3 campus Lahore
**City**
Lahore
**Province**
PUNJAB
**Postal code**
54660
**Phone**
+92 57 95995061
**Email**
ayeshanazir670@gmail.com

## Person responsible for updating data

**Contact**

**Name of organization / entity**
RIPHAH INTERNATIONAL UNIVERSITY
**Full name of responsible person**
AYESHA NAZIR
**Position**
STUDENT
**Latest degree**
Master
**Other areas of specialty/work**
Physiotherapy
**Street address**
Riphah international university Gulberg 3 campus Lahore
**City**
Lahore
**Province**
PUNJAB
**Postal code**
54660
**Phone**
+92 57 95995061
**Email**
ayeshanazir670@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**
Yes - There is a plan to make this available
**Clinical Study Report**
Yes - There is a plan to make this available
**Analytic Code**
Yes - There is a plan to make this available
**Data Dictionary**
Yes - There is a plan to make this available
**Title and more details about the data/document**
COMPARATIVE EFFECTS OF MOTOR RELEARNING PROGRAM AND ACTION OBSERVATION THERAPY ON BALANCE AND GAIT IN CHRONIC STROKE PATIENTS.
**When the data will become available and for how long**
starting 6 months after pubication
**To whom data/document is available**
dr sana riaz
**Under which criteria data/document could be used**
dr sana riaz
**From where data/document is obtainable**
Dr SANA RIAZ
**What processes are involved for a request to access data/document**
CONTACT DR SANA RIAZ
**Comments**
N/A