

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effects of facial Neuromuscular Retraining with and without neural Mobilization on facial Symmetry and disability in patients with Bell's palsy

#### Protocol summary

##### Study aim

To determine the effects of facial neuromuscular retraining, with and without neural mobilization on facial symmetry and disability in patients with Bell's Palsy.

##### Design

Randomized Controlled Trial, Single-blinded study design, the sample size will be 44 participants

##### Settings and conduct

Trail will be conducted at General Hospital, Lahore Upon randomization, participants will be briefed on their respective therapy programs. The researcher responsible for outcome assessments will remain unaware of the group allocation throughout the study.

##### Participants/Inclusion and exclusion criteria

Inclusion Criteria: Unilateral loss of facial weakness. House Brackman grades 3 and 4 Acute onset 1-3 weeks. No history of earlier Bell's palsy or diabetes(6) Exclusion Criteria: Stroke associated with Bell's palsy Pregnancy Any fracture, or tumor Facial surgery Skin allergy on the face Facial nerve palsy

##### Intervention groups

Group A: will receive Facial Neuromuscular Retraining with Neural Mobilization and conventional treatment (Experimental group) Group B: will receive Facial Neuromuscular Retraining with conventional treatment (Controlled group)

##### Main outcome variables

Facial symmetry Disability

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20240509061716N1**

Registration date: **2024-05-23, 1403/03/03**

Registration timing: **registered\_while\_recruiting**

Last update: **2024-05-23, 1403/03/03**

Update count: **0**

##### Registration date

2024-05-23, 1403/03/03

##### Registrant information

###### Name

Samima Saeed

###### Name of organization / entity

Riphah international university

###### Country

Pakistan

###### Phone

+92 42 111 747 424

###### Email address

samimasaeedakhter@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2024-05-14, 1403/02/25

##### Expected recruitment end date

2024-06-20, 1403/03/31

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Effects of facial Neuromuscular Retraining with and without neural Mobilization on facial Symmetry and disability in patients with Bell's palsy

##### Public title

Effects of facial Neuromuscular Retraining with and without neural Mobilization on facial Symmetry and

disability in patients with Bell's palsy

### **Purpose**

Supportive

### **Inclusion/Exclusion criteria**

#### **Inclusion criteria:**

Age between 18 to 65 years Both genders Unilateral loss of facial weakness House Brackman grades 3 and 4 Acute onset 1-3 weeks No history of earlier bell's palsy or diabetes

#### **Exclusion criteria:**

Stroke associated with Bell's palsy Pregnancy Any fracture or tumor Facial surgery Skin allergy on face Facial nerve palsy

### **Age**

From **18 years** old to **65 years** old

### **Gender**

Both

### **Phase**

N/A

### **Groups that have been masked**

- Participant
- Care provider
- Outcome assessor

### **Sample size**

Target sample size: **44**

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

Randomized

### **Randomization description**

A lottery method of randomization using a fishbowl technique will be used by one of the research team members who is not involved in patient recruitment assessment or data analysis. After baseline assessment, eligible subjects will be arbitrarily allocated into group A (facial neuromuscular retraining with Neural mobilization) and group B (facial neuromuscular retraining). Upon randomization, participants will be briefed on their respective therapy programs. The researcher responsible for outcome assessments will remain unaware of the group allocation throughout the study.

### **Blinding (investigator's opinion)**

Single blinded

### **Blinding description**

Outcome assessors and participants will be kept unaware of the group assignments to maintain blinding.

### **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  
Lahore, Pakistan

### **Street address**

Address: 25 Raza Saeed Rd, Bhabra Block M Gulberg  
III, Lahore, Punjab 25-M Block, Lahore, 54660,  
Pakistan

### **City**

Lahore

### **Postal code**

53700

### **Approval date**

2024-04-29, 1403/02/10

### **Ethics committee reference number**

F22C14G37033

## **Health conditions studied**

### 1

#### **Description of health condition studied**

Bell's palsy

#### **ICD-10 code**

G51.0

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

Bell's palsy

## **Primary outcomes**

### 1

#### **Description**

Facial symmetry, Disability

#### **Timepoint**

Before the intervention and three weeks after the  
intervention

#### **Method of measurement**

Sunnybrook Facial Grading System (SBS), Modified House  
Brackmann grading system (HBGS), and Facial Disability  
Index (FDI)

## **Secondary outcomes**

empty

## **Intervention groups**

### 1

#### **Description**

Experimental group: e Facial Neuromuscular Retraining  
with Neural Mobilization and conventional treatment  
group

#### **Category**

Rehabilitation

### 2

#### **Description**

Control group: Facial Neuromuscular Retraining with  
conventional treatment

#### **Category**

Rehabilitation

## Recruitment centers

### 1

#### Recruitment center

**Name of recruitment center**

General Hospital Lahore

**Full name of responsible person**

Mrs.Umoal Bunin Mushtaq

**Street address**

Ferozpur Road Near Ismail Nagar , Lahore.

**City**

Lahore

**Postal code**

54000

**Phone**

+92 42 99268801

**Email**

lahoregeneralhospital@yahoo.com

**Web page address**

<https://lgh.punjab.gov.pk/>

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**

Riphah International University

**Full name of responsible person**

Faculty of Rehabilitation and Allied Health Sciences(FRAHS)

**Street address**

25 Raza Saeed Rd, Bhabra Block M Gulberg III, Lahore, Punjab 25-M Block, Lahore, 54660, Pakistan

**City**

Lahore

**Postal code**

05309

**Phone**

+92 309 3330153

**Email**

admissions.lahore@riphah.edu.pk

**Web page address**

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

**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**

Dr. SANA RIAZ

**Position**

Senior lecturer

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

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Punjab

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**Phone**

+92 300 0720826

**Email**

Sana.rcrs@riphah.edu.pk

**Web page address**

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

## Person responsible for scientific inquiries

#### Contact

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**Position**

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**Other areas of specialty/work**

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## Person responsible for updating data

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### Contact

**Name of organization / entity**

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Dr. SANA RIAZ

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**Postal code**

05309

**Phone**

+92 309 3330153

**Email**

## Sharing plan

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

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

**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