

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effectiveness of Shacklock's Neural Mobilization for Acute & Sub-acute Lumbar Disc Prolapsed.

#### Protocol summary

##### Study aim

To identify the effectiveness of Shacklock's Neural Mobilization for acute and sub-acute lumbar disc prolapsed.

##### Design

Randomised, superiority, parrallel group randomised control trial with double blinded

##### Settings and conduct

The study will conduct at Musculoskeletal Outdoor Department of Center for the Rehabilitation of the Paralysed (CRP)-Mirpur and CRP-Savar.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: 1. Patients with acute and sub-acute LBP, diagnosed as lumbar disc prolapsed by MRI. 2. Patients with low back pain whose symptoms increase in closing movements like lumber extension or, reduce symptoms by opening movements like flexion of lumbar spine. 3. Age between 25 to 60 years. 4. Male and female both will be included. Exclusion criteria: 1. Patients with clinical disorders where physiotherapy is contraindicated. 2. Diagnosed from secondary complications such as fever, weight loss, tumors, Tuberculosis (TB) spine, fracture, dislocation, severe osteoporosis, Paget's disease, rheumatoid arthritis, ankylosing spondylitis, cauda-equina lesions, cord signs and syndrome, transverse myelitis and all sorts of infection. 3. Pregnant women. 4. Medically unstable, mental retardation, and unwillingness to participate in the study.

##### Intervention groups

Intervention: Intervention group will receive usual physiotherapy intervention and Shacklock's neural mobilization. There are several progression of Shacklock's neural Mobilisation: Progression 1: Static Opener Progression 2: Dynamic Opener Progression 3: Treatment of interface dysfunction(Closing Mobilisation) Progression 4: Treatment of Neural dysfunction (Sliding & tension) Progression 5: Treatment of Multistructural dysfunction (Closing with tensioner)

#### Main outcome variables

1. Pain 2. Disability status

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20230105057050N1**

Registration date: **2023-01-17, 1401/10/27**

Registration timing: **prospective**

Last update: **2023-01-17, 1401/10/27**

Update count: **0**

##### Registration date

2023-01-17, 1401/10/27

##### Registrant information

##### Name

Zahid Bin Sultan Nahid

##### Name of organization / entity

Center for Physiotherapy & Mobility (CPM)

##### Country

Bangladesh

##### Phone

+880 1671-067313

##### Email address

ranacrpphysio@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2023-02-01, 1401/11/12

##### Expected recruitment end date

2023-03-02, 1401/12/11

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

**Trial completion date**  
empty

**Scientific title**  
Effectiveness of Shacklock's Neural Mobilization for Acute & Sub-acute Lumbar Disc Prolapsed.

**Public title**  
Efficacy of shacklock's neural mobilization intervention for reducing pain and disability for patients with lower back pain.

**Purpose**  
Education/Guidance

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Patients with acute and sub-acute LBP, diagnosed as lumbar disc prolapsed by MRI. Patients with low back pain whose symptoms increase in closing movements like lumbar extension or, reduce symptoms by opening movements like lumbar flexion of Lumbar spine. Age between 25 to 60 years and both male and female will be included  
**Exclusion criteria:**  
Patients with clinical disorders where physiotherapy is contraindicated. Diagnosed from secondary complications such as fever, weight loss, tumors, Tuberculosis (TB) spine, fracture, dislocation, severe osteoporosis, paget's disease, rheumatoid arthritis, ankylosing spondylitis, cauda-equina lesions, cord signs and syndrome, transverse myelitis and all sorts of infection. Pregnant women. Medically unstable, mental retardation and unwillingness to participate in the study.

**Age**  
From **25 years** old to **60 years** old

**Gender**  
Both

**Phase**  
1-2

**Groups that have been masked**

- Participant
- Outcome assessor

**Sample size**  
Target sample size: **40**

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

**Randomization description**  
This study will be a double-blinded, randomized controlled design. After initial screening, a computer-generated random number will use to allocate participants arbitrarily to the intervention group and control groups. Four Physiotherapists blinded to the allotment procedure administered the pretest and posttest assessments. Four physiotherapists will provide usual care and another four physiotherapists will provide Shacklock's neural mobilization with usual care. All the therapists who will administer treatment will not be blind but all have training in the study treatment protocol.

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

**Blinding description**

The assessor and participants are blinded in this study. Investigator employed four assessor for assessment whereas, pre-test and post-test data will be assessed by different assessor and assessors do not know the group allocation.

**Placebo**  
Not used

**Assignment**  
Parallel

**Other design features**  
40

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Institutional Review Board (IRB), Bangladesh Health Professions Institute (BHPI).

##### Street address

CRP, Savar, Dhaka, Bangladesh.

##### City

Savar

##### Postal code

1343

#### Approval date

2022-10-25, 1401/08/03

#### Ethics committee reference number

CRP/BHPI/IRB/10/2022/668

## Health conditions studied

### 1

#### Description of health condition studied

Lumbar Disc Prolapsed

#### ICD-10 code

M99.73

#### ICD-10 code description

Connective tissue and disc stenosis of intervertebral foramina of lumbar region

## Primary outcomes

### 1

#### Description

Pain

#### Timepoint

Before intervention and 2 weeks after intervention.

#### Method of measurement

Dallas Pain Questionnaire using Visual Analogue Scale.

## Secondary outcomes

## 1

### Description

Disability score.

### Timepoint

Before intervention and 2 weeks after intervention.

### Method of measurement

Disability status by Oswestry Disability Index.

## Intervention groups

## 1

### Description

Intervention group

### Category

Treatment - Other

## Recruitment centers

## 1

### Recruitment center

#### Name of recruitment center

Center for the Rehabilitation of the Paralysed (CRP), Savar

#### Full name of responsible person

Rumana Sharmin

#### Street address

CRP Road, PO: CRP-Chapain, Savar Union, Dhaka, Bangladesh

#### City

Savar

#### Postal code

1343

#### Phone

+880 1614-118881

#### Email

rumanaphysio@gmail.com

#### Web page address

<https://www.crp-bangladesh.org/crp-center/crp-savar-head-office>

## 2

### Recruitment center

#### Name of recruitment center

Center for the Rehabilitation of the Paralysed (CRP), Mirpur.

#### Full name of responsible person

Nusrat Jahan

#### Street address

Plot A/5, Block A, Mirpur, Dhaka, Bangladesh

#### City

Dhaka

#### Postal code

1206

#### Phone

+880 1671-046445

#### Email

nusratphysio@yahoo.com

#### Web page address

<https://www.crp-bangladesh.org/crp-center/crp-mirpur-dhaka>

## Sponsors / Funding sources

## 1

### Sponsor

#### Name of organization / entity

Bangladesh Health Professions Institute (BHPI)

#### Full name of responsible person

Md. Shofiqul Islam

#### Street address

P.O CRP-Chapain, Savar, Dhaka, Bangladesh

#### City

Savar

#### Postal code

1343

#### Phone

+880 1730-059647

#### Email

shofiqul.islam@crp-bangladesh.org

#### Web page address

<https://www.bhpi.edu.bd/>

#### Grant name

#### Grant code / Reference number

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

Yes

#### Title of funding source

Bangladesh Health Professions Institute (BHPI)

#### 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

Bangladesh Health Professions Institute (BHPI)

#### Full name of responsible person

Md. Anwar Hossain

#### Position

Associate Professor of Physiotherapy

#### Latest degree

Ph.D.

#### Other areas of specialty/work

Physiotherapy

#### Street address

P.O CRP-Chapain, Savar, Dhaka, Bangladesh.

#### City

Savar

#### Province

Dhaka

**Postal code**  
1343  
**Phone**  
+8802224445464  
**Email**  
anwar.hossain@crp-bangladesh.org  
**Web page address**  
<http://www.bhpi.edu.bd>

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**  
Center for Physiotherapy & Mobility (CPM)  
**Full name of responsible person**  
Zahid Bin Sultan Nahid  
**Position**  
Consultant of Physiotherapy  
**Latest degree**  
Master  
**Other areas of specialty/work**  
Physiotherapy  
**Street address**  
CPM, 95 DIT Road, Malibagh, Dhaka, Bangladesh  
**City**  
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**Province**  
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**Postal code**  
1217  
**Phone**  
+880 1671-067313  
**Fax**  
**Email**  
ranacrpphysio@gmail.com

## Person responsible for updating data

### Contact

**Name of organization / entity**  
Center for Physiotherapy & Mobility (CPM)  
**Full name of responsible person**  
Zahid Bin Sultan Nahid  
**Position**  
Consultant of Physiotherapy  
**Latest degree**  
Master  
**Other areas of specialty/work**  
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**Email**  
ranacrpphysio@gmail.com  
**Web page address**  
<https://www.cpmbd.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

Not applicable

### Data Dictionary

Yes - There is a plan to make this available

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

Name of file will be "Neural Mobilisation". Data will be shared on request to the principal investigator through email.

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

Data will be available after the end of the study and after publication. Starting in January 2024 and data will be available for next five years.

### To whom data/document is available

People working in academic institutions.

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

The principal investigator will review the request and provide the information on the request for further research.

### From where data/document is obtainable

Data will be obtainable through email to the principal investigator. Contact person: Zahid Bin Sultan Nahid, email: ranacrpphysio@gmail.com; zahidbinsultannahid@gmail.com, Mobile: +8801717704776; +8801671067313, website: cpmbd.com

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

Data will be provided on request through email to the main investigator. email: ranacrpphysio@gmail.com; zahidbinsultannahid@gmail.com

### Comments

This study will emphasize the new treatment protocol on lumbar disc prolapsed in acute and subacute stage.