

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

26 Jun 2026

### Effects of stretching and strengthening exercises with and without manual therapy on scapular range of motion, function and pain in individuals with shoulder impingement.

#### Protocol summary

##### Study aim

The purpose of this research is to evaluate the effects of stretching and strengthening exercises with and without manual therapy on scapular range of motion, function and pain on individuals with shoulder impingement syndrome.

##### Design

Randomized, superiority, parallel group trial with blinded outcome assessment. Randomization was centralized and computerized with concealed randomization sequence carried out at an external site.

##### Settings and conduct

participants, healthcare providers (Physicians, nurses, etc.) who care for participants during the trial, data collectors, outcome assessors, and with lessor importance Data Safety and Monitoring Board and manuscript writers

##### Participants/Inclusion and exclusion criteria

**INCLUSION CRITERIA** □ Patients of 25-50 years □ Both male and female participants will be included. □ Participants with history of non-traumatic onset of shoulder pain □ Positive painful arc during active elevation of arm □ 1 or more positive SIS tests (Hawkins-Kennedy, jobe, Neer) or □ Participants having pain during passive or isometric resisted external rotation of the arm at 90 degree of abduction. □ Pain with palpation of rotator cuff tendons. □ On visual Examination 150 degree of arm elevation as determined  
**Exclusion Criteria:** □ History of clavicle, humerus or scapular fracture and rotator cuff surgery □ Numbness or tingling of the upper limb that is reproduced by cervical compression test; □ A positive sulcus or apprehension test □ A positive drop arm test □ A systematic illness □ A corticosteroid injection within 3 months prior to intervention □ Physical therapy within 6 months prior to intervention

##### Intervention groups

Group A : Exercise with manual therapy group Group B:

Exercise group alone

##### Main outcome variables

Quick Dash Questionnaire Numeric Pain rating scale  
Goniometer

#### General information

##### Reason for update

##### Acronym

stretching and strengthening exercises with and without manual therapy comparison shoulder impingement

##### IRCT registration information

IRCT registration number: **IRCT20210205050249N1**  
Registration date: **2021-02-07, 1399/11/19**  
Registration timing: **registered\_while\_recruiting**

Last update: **2021-02-07, 1399/11/19**

Update count: **0**

##### Registration date

2021-02-07, 1399/11/19

##### Registrant information

##### Name

Sana Tauqeer

##### Name of organization / entity

Kanaan Physiotherapy and Spine Clinic

##### Country

Pakistan

##### Phone

+92 42 35470418

##### Email address

360physioclinic1@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2021-01-03, 1399/10/14

**Expected recruitment end date**

2021-06-03, 1400/03/13

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Effects of stretching and strengthening exercises with and without manual therapy on scapular range of motion, function and pain in individuals with shoulder impingement.

**Public title**

Effects of stretching and strengthening exercises with and without manual therapy on scapular range of motion, function and pain in individuals with shoulder impingement.

**Purpose**

Treatment

**Inclusion/Exclusion criteria****Inclusion criteria:**

Participants with history of non-traumatic onset of shoulder pain Participants havig.Positive painful arc during active elevation of arm,1 or more positive SIS tests (Hawkins-Kennedy, jobe, Neer) or Participants having pain during passive or isometric resisted external rotation of the arm at 90 degree of abduction or Pain with palpation of rotator cuff tendons. On visual Examination 150 degree of arm elevation as determined

**Exclusion criteria:**

•History of clavicle, humerus or scapular fracture and rotator cuff surgery• Numbness or tingling of the upper limb that is reproduced by cervical compression test;• A positive sulcus or apprehension test• A positive drop arm test• A systematic illness

**Age**

From **25 years** old to **50 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

- Outcome assessor

**Sample size**

Target sample size: **32**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Patients will be randomly allocated in two groups by lottery method. Individuals will randomly assigned to 1of 2 groups. Those treated exclusively with exercises and those treated exclusively with the same exercises supplemented with manual therapy.

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

Participant Blind: Data safety will be ensured by giving specific safety numbers

**Placebo**

Not used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

secretary ethical review committee, Riphah College of Rehabilitation and Allied Health Sciences

**Street address**

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

**City**

Lahore

**Postal code**

54000

**Approval date**

2020-03-27, 1399/01/08

**Ethics committee reference number**

REC/RCRS/20/1059

**Health conditions studied****1****Description of health condition studied**

Shoulder Impingement Syndrome

**ICD-10 code**

M75.4

**ICD-10 code description**

Impingement Syndrome of shoulder

**Primary outcomes****1****Description**

Pain

**Timepoint**

Before intervention and weeks after intervention

**Method of measurement**

Numeric Pain Rating Scale

**2****Description**

Function

**Timepoint**

Before intervention and 4 weeks after intervention

**Method of measurement**

quick Dash

### 3

#### **Description**

Scapular Range of Motion

#### **Timepoint**

Before Intervention and 4 weeks after intervention

#### **Method of measurement**

Goniometer

### **Secondary outcomes**

empty

### **Intervention groups**

#### 1

#### **Description**

Intervention group: Stretching and strengthening exercises with manual therapy

#### **Category**

Treatment - Other

#### 2

#### **Description**

Intervention group: Stretching and Strengthening Exercises without manual therapy

#### **Category**

Treatment - Other

### **Recruitment centers**

#### 1

#### **Recruitment center**

##### **Name of recruitment center**

Kanaan Physiotherapy and spine Clinic

##### **Full name of responsible person**

Dr. Naveed Anwar

##### **Street address**

Kanaan Physiotherapy & Spine Clinic Shahrah-e-Aiwan-e-tijarat, Lahore

##### **City**

Lahore

##### **Postal code**

54000

##### **Phone**

##### **Email**

kanaanclinic@yahoo.com

### **Sponsors / Funding sources**

#### 1

#### **Sponsor**

##### **Name of organization / entity**

Riphah International University Lahore, Pakistan.

##### **Full name of responsible person**

Dr. Naveed Anwar

##### **Street address**

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

Lahore

##### **City**

Lahore

##### **Postal code**

54000

##### **Phone**

+92 42 35126110

##### **Email**

naveed.anwer@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 Lahore, Pakistan.

#### **Proportion provided by this source**

20

#### **Public or private sector**

Private

#### **Domestic or foreign origin**

Foreign

#### **Category of foreign source of funding**

Sponsor: country of origin

#### **Country of origin**

PK

#### **Type of organization providing the funding**

Academic

### **Person responsible for general inquiries**

#### **Contact**

##### **Name of organization / entity**

Riphah International University Lahore, Pakistan.

##### **Full name of responsible person**

Dr. Naveed Anwar

##### **Position**

Assistant Professor

##### **Latest degree**

Ph.D.

##### **Other areas of specialty/work**

Physiotherapy

##### **Street address**

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

##### **City**

Lahore

##### **Province**

Punjab

##### **Postal code**

54000

##### **Phone**

+92 42 35126110

##### **Email**

naveed.anwer@riphah.edu.pk

### **Person responsible for scientific inquiries**

#### **Contact**

##### **Name of organization / entity**

Riphah International University Lahore, Pakistan.

**Full name of responsible person**

Dr. Naveed Anwar

**Position**

Associate Professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Physiotherapy

**Street address**

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

**City**

Lahore

**Province**

Punjab

**Postal code**

54000

**Phone**

+92 42 35126110

**Email**

naveed.anwer@riphah.edu.pk

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

**City**

Lahore

**Province**

Punjab

**Postal code**

54000

**Phone**

+92 42 35126110

**Email**

360physioclinic1@gmail.com

**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

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

Riphah International University Lahore, Pakistan.

**Full name of responsible person**

Sana Tauqeer

**Position**

Student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

**Street address**