

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Evaluation of therapeutic potential of deep tissue foot massage with or without jasmine oil in hypertensive and diabetic patients

#### Protocol summary

##### Study aim

Therapeutic deep tissue foot massage with jasmine oil in diabetes and hypertensive patients and their effects on blood pressure, heart rate, oxygen saturation, insulin level, temperature, respiration rate, lipid profile.

##### Design

Lottery method, community based, parallel group, double blinded, randomized control trial and 290 patients will be enrolled.

##### Settings and conduct

Study will be conducted at Muhammad Institute of Medical and Allied Sciences Multan after approval from Institutional ethical committee.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria : Age group of 23-70 years ,Both Genders (Male, Female), Educated and uneducated Diabetic patient, Hypertensive patients,Married and unmarried.Exclusion criteria: Any type of mental disability,Lactating females,Having any type of physical disability,Pregnant females,Any type of major surgery.

##### Intervention groups

The three treatment groups will be treated with therapeutic deep tissue massage with three ways: first group will be treated with jasmine oil manually massage, second group will be treated electric palm massage with jasmine oil massage and third group will be treated with electric palm massager with-out jasmine oil. The deep tissue foot massage will be applied by three ways on the feet of diabetics and hypertensive patients for 20 consecutive days. Each session will be 40 minutes per day. Massage will be applied for 20 minutes on each foot. After 20 days we will compare pre and post blood pressure and glucose level in hypertensive and diabetics patients. We will measure objective data heart rate, respiration rate, blood pressure, and glucose level and oxygen saturation.

##### Main outcome variables

Increasing insulin and blood circulation in diabetic patients and will help in reducing mean of arterial

pressure (MAP), heart rate, respiratory rate, and increases oxygen saturation in hypertensive patients.

#### General information

##### Reason for update

We want to update title by simply placing one word ( patients) at the last of line Plus also updating the position of the person responsible for scientific inquiries

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20230103057033N2**

Registration date: **2023-02-25, 1401/12/06**

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

Last update: **2023-03-17, 1401/12/26**

Update count: **2**

##### Registration date

2023-02-25, 1401/12/06

##### Registrant information

##### Name

Ujala Hameed

##### Name of organization / entity

Ali ul Murtaza Departement of Rehabilitation Multan

##### Country

Pakistan

##### Phone

+92 316 6484756

##### Email address

ujalahameed947@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2022-11-10, 1401/08/19

##### Expected recruitment end date

2023-04-10, 1402/01/21

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Evaluation of therapeutic potential of deep tissue foot massage with or without jasmine oil in hypertensive and diabetic patients

**Public title**

Deep tissue foot massage with or without jasmine oil in hypertensive patients and diabetic

**Purpose**

Treatment

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

Age group of 23-70 years Diabetic patients Educated and uneducated Married and unmarried Hypertensive patients Both Genders (Male, Female)

**Exclusion criteria:**

Any type of mental disability MI Pregnant females Chronic illness related to cardiorespiratory ailments Any type of major surgery Having any type of physical disability Asthma Angina History of chest pain Bronchitis Lactating females

**Age**

From **23 years** old to **70 years** old

**Gender**

Both

**Phase**

1

**Groups that have been masked**

- Investigator
- Data analyser

**Sample size**

Target sample size: **290**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Simple randomization. We will use sealed envelopes for lottery method and randomization of participants will be done. Randomization of participants in groups by lottery method and statistical analysis without biasness.

**Blinding (investigator's opinion)**

Double blinded

**Blinding description**

Double blinded study will be done by keeping blind i-e the physiotherapist as Investigator and data analyser

**Placebo**

Not used

**Assignment**

Other

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

empty

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

Muhammad Institute of Medical and Allied Sciences  
Multan

**Street address**

Hbl street

**City**

Multan

**Postal code**

66000

**Approval date**

2022-10-20, 1401/07/28

**Ethics committee reference number**

MIMAS/22/IRB/IAK.Durrani

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

Diabetes Mellitus

**ICD-10 code**

E08

**ICD-10 code description**

Diabetes mellitus due to underlying condition

**2****Description of health condition studied**

Hypertension

**ICD-10 code**

I15.9

**ICD-10 code description**

Secondary hypertension, unspecified

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

Increase in Blood circulation and insulin secretion in diabetic patients

**Timepoint**

before intervention and 3 weeks after intervention

**Method of measurement**

Blood glucose level by glucometer

**2****Description**

Mean arterial pressure

**Timepoint**

3 weeks

**Method of measurement**

Mercury manometer

### 3

**Description**

Heart rate

**Timepoint**

3 weeks

**Method of measurement**

Heart rate measuring device

### 4

**Description**

Oxygen saturation

**Timepoint**

3 weeks

**Method of measurement**

Pulse oximeter

### 5

**Description**

Respiration rate

**Timepoint**

3 weeks

**Method of measurement**

Manually

## Secondary outcomes

empty

## Intervention groups

### 1

**Description**

Control group: Will be treated with jasmine oil. Diabetics and hypertensive patients will receive therapeutic deep tissue foot massage with jasmine oil. A glucometer will be used to monitor blood glucose levels in patients (both diabetic and hypertensive) via finger-prick testing. And blood pressure will be measured by mercury manometer, blood cholesterol (lipid profile) will be measured by lipid measuring device, oxygen saturation by pulse oximeter and temperature by thermometer will be monitored and body mass index (height, weight, body fat) of both diabetics and hypertensive patients will be measured by BMI scale before massage and after massage will be measured. After 3 weeks all these parameters will be measured again.

**Category**

Treatment - Drugs

### 2

**Description**

Intervention group 1: Will be treated with electrical massager and jasmine oil. Therapeutic deep tissue foot massage with jasmine oil manually, electric palm massager with jasmine oil, and electric palm massager without jasmine oil will be applied in diabetics and hypertensive patients. A glucometer will be used to monitor blood glucose levels in patients (both diabetic

and hypertensive) via finger-prick testing. And blood pressure will be measured by mercury manometer, blood cholesterol (lipid profile) will be measured by lipid measuring device, oxygen saturation by pulse oximeter and temperature by thermometer will be monitored and body mass index (height, weight, body fat) of both diabetics and hypertensive patients will be measured by BMI scale before massage and after massage will be measured. After 3 weeks all these parameters will be measured again.

**Category**

Treatment - Drugs

### 3

**Description**

Intervention group 2: Will be treated with electrical massager without jasmine oil. Electric palm massager without jasmine oil will be applied in diabetics and hypertensive patients. A glucometer will be used to monitor blood glucose levels in patients (both diabetic and hypertensive) via finger-prick testing. And blood pressure will be measured by mercury manometer, blood cholesterol (lipid profile) will be measured by lipid measuring device, oxygen saturation by pulse oximeter and temperature by thermometer will be monitored and body mass index (height, weight, body fat) of both diabetics and hypertensive patients will be measured by BMI scale before massage and after massage will be measured. After 3 weeks all these parameters will be measured again.

**Category**

Treatment - Drugs

## Recruitment centers

### 1

**Recruitment center****Name of recruitment center**

Ali-UI-Murtaza Department of Rehabilitation Sciences, Muhammad Institute

**Full name of responsible person**

Maliha Khalid Khan

**Street address**

Hbl Street

**City**

Multan

**Postal code**

66000

**Phone**

+92 312 6827130

**Email**

malihatareen1997@gmail.com

## Sponsors / Funding sources

### 1

**Sponsor****Name of organization / entity**

Muhammad Institute of Medical and Allied Sciences

**Full name of responsible person**

Imran Ahmad Khan

**Street address**

Hbl Street

**City**

Multan

**Postal code**

66000

**Phone**

+92 333 6120602

**Email**

imranahmadkhandurrani@gmail.com

**Grant name**

Student fund

**Grant code / Reference number**

26012023

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

Yes

**Title of funding source**

Muhammad Institute of Medical and Allied Sciences

**Proportion provided by this source**

50

**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**

Muhammad Institute of Medical and Allied Sciences

**Full name of responsible person**

Maliha Khalid Khan

**Position**

Demonstrator

**Latest degree**

Medical doctor

**Other areas of specialty/work**

Physiotherapy

**Street address**

Hbl Street

**City**

Multan

**Province**

Punjab

**Postal code**

66000

**Phone**

+92 312 6827130

**Email**

malihatareen1997@gmail.com

**Person responsible for scientific****inquiries****Contact****Name of organization / entity**Muhammad Nawaz Shareef University of Agriculture,  
Multan**Full name of responsible person**

Imran Ahmad Khan

**Position**Coordinator Department of Pharmacology and  
Physiology**Latest degree**

Ph.D.

**Other areas of specialty/work**

Cardiovascular Pharmacology

**Street address**

Hbl Street

**City**

Multan

**Province**

Punjab

**Postal code**

66000

**Phone**

+92 333 6120602

**Email**

imran.ahmad@mnsuam.edu.pk

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

Muhammad Institute of Medical and Allied Sciences

**Full name of responsible person**

Ujala Hameed

**Position**

Student

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

**Street address**

Hbl Street

**City**

Multan

**Province**

Punjab

**Postal code**

66000

**Phone**

+92 316 6484756

**Email**

ujalahameed947@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**

Yes - There is 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**

Yes - There is 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

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

There is no further formation

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

There is no further formation

**To whom data/document is available**

There is no further formation

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

There is no further formation

**From where data/document is obtainable**

There is no further formation

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

There is no further formation

**Comments**

Please evaluate