Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

The effects of reflexology on chronic low back pain intensity in nurses

Protocol summary

Summary

This study was double-blind a clinical trial. The study population consisted of 50 female and male nurses suffering from chronic low back pain working in hospitals affiliated with Isfahan University of Medical Sciences. This research has been conducted to investigate the effect of reflexology on chronic low back pain intensity .Nurses were included if they had, chronic non-specific back pain diagnosed by a neurosurgery specialist for more than 3months, healthy feet without injury or damage. The subjects were excluded if they, were pregnant or lactating, or had a vascular disease , thrombo phlebitis or diseases such as urinary tract infection or kidney stones (with pain in the lower back). The participants were randomized and divided into two groups of reflexology and non-specific massage. A questionnaire three section by researcher was made and completed through interviews. The 40 minute sessions of interventions were performed three times a week for two weeks. Pain intensity was measured by Numerical Analogue Scale for pain before and immediately after the intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201108217391N1**
Registration date: **2016-06-05, 1395/03/16**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2016-06-05, 1395/03/16

Registrant information

Name

Maryam Eghbali Babadi

Name of organization / entity

Isfahan University Of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Isfahan University of Medical Sciences

Expected recruitment start date

2010-04-05, 1389/01/16

Expected recruitment end date

2010-07-20, 1389/04/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effects of reflexology on chronic low back pain intensity in nurses

Public title

The effect of Reflexology on chronic low back pain

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:Nurses were included if they had low back pain; chronic non-specific back pain diagnosed by a neurosurgery specialist for more than 3months; healthy feet without injury or damage; and willingness to participate in the study.On the other hand, subjects were excluded if they had participated in another clinical research during the past 3 months;had an experience or knowledge of reflexology; were pregnant or lactating; used other methods of complementary therapy during

the study;or had a vascular disease ; thrombophlebitis or diseases such as urinary tract infection or kidney stones (with pain in the lower back). exclusion criteria: They were also excluded if any physical damage; making the subjects unable to continue their participation; was made or if they used new medical treatments (new drugs effective on pain; physical therapy or other methods).

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **50**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo
Not used

Assignment
Other

Other design features
Total of 50 nurses with chronic back pain were selected by simple random sampling method. They were then randomly numbered. Afterwards, individuals with odd and even numbers were assigned to the reflexologyand nonspecific massage groups, respectively

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of Isfahan University of Medical Sciences

Street address
Hezar Jerib Street, Isfahan University of Medical Sciences

City
Isfahan

Postal code
009881746-73461

Approval date
2010-09-23, 1389/07/01

Ethics committee reference number
IR.MUI.REC.1389.3.008

Health conditions studied

1

Description of health condition studied
low back pain

ICD-10 code
M54.5

ICD-10 code description
Low back pain

Primary outcomes

1

Description
Low back pain

Timepoint
Before and Immediately after the intervention

Method of measurement
Numerical Analogue Scale of Pain

Secondary outcomes

1

Description
NO

Timepoint
Before intervention and Immediately after intervention

Method of measurement
McGill Mlzak questionnaire

Intervention groups

1

Description
Intervention group:In this group, reflexology performed 3 times a week for two continuous weeks and each session was 40 minutes. In this group, a simple massage from the lower legs to the ankles, soles and finally toes. Then specific reflexology was performed on all reflex points on the feet.

Category
Prevention

2

Description
Control group:In this group, simple and nonspecific massage performed 3 times a week for two continuous weeks and each session was 40 minutes. However, simple massaging was not followed by deep stimulation of reflexology points in this group.

Category
Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Al-Zahra Hospitals
Full name of responsible person
Street address
City
ISFAHAN

2

Recruitment center
Name of recruitment center
Kashani Hospitals
Full name of responsible person
Street address
City
Isfahan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for research of Isfahan University of Medical Sciences
Full name of responsible person
peyman adibi
Street address
Isfahan University of Medical Sciences
City
Isfahan
Grant name
_____
Grant code / Reference number
_____
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice Chancellor for research of Isfahan University of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty