# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

07 Nov 2026

## The effect of lavender essential oil on severity and Symptoms of primary dysmenorrhea in students of Lorestan University of Medical Sciences dormitories

## Protocol summary

**Summary**

The purposes of this study were to determine the effect of lavender essential oil on severity and Symptoms of primary dysmenorrhea in female students that were resident in the dormitories of Lorestan University of Medical Sciences. The study was a randomized trial. The subjects had pain score greater than 4 on a 10 point visual analogue scale, had regular menstrual periods, without pelvic inflammatory diseases and who did not use contraceptive drugs. Subjects were randomized into two groups: (1) an experimental group did a massage with essential oil of lavender (2 drops) in 2.5 cc of almond oil and the placebo group receive 2.5cc almond oil only that was used topically for 15 minutes on upper symphysis pubis, 48 hours before and after menstruation, twice a day for two menstrual cycles. Participants were asked to record their own severity of dysmenorrhea before intervention and at the end the first and secondary days of menstruation by using visual analogue scale and Symptoms of primary dysmenorrheal were recorded in likert scale.

## General information

**Acronym**

**IRCT registration information**

IRCT registration number: **IRCT201310297697N2**
Registration date: **2013-11-20, 1392/08/29**
Registration timing: **retrospective**

Last update:
Update count: **0**

**Registration date**

2013-11-20, 1392/08/29

**Registrant information**

**Name**

Shourangiz Beiranvand

**Name of organization / entity**

Lorestan University of Medical Sciences

**Country**

Iran (Islamic Republic of)

**Phone**

+98 66 1330 5313

**Email address**

shorangiz.beiranvand@lums.ac.ir

**Recruitment status**

**Recruitment complete**

**Funding source**

Vice Chancellor for Research of Lorestan University of Medical Sciences

**Expected recruitment start date**

2012-11-10, 1391/08/20

**Expected recruitment end date**

2013-09-11, 1392/06/20

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

The effect of lavender essential oil on severity and Symptoms of primary dysmenorrhea in students of Lorestan University of Medical Sciences dormitories

**Public title**

The effect of aromatherapy on primary dysmenorrhea

**Purpose**

Treatment

**Inclusion/Exclusion criteria**

Inclusion criteria: resident in the dormitory of Lorestan University of Medical Sciences and being single, aged 18 to 26 years, having regular menstrual periods at

intervals of 21-35 days, severity of pain is greater than 4 on a 10 point visual analogue scale, none had pelvic inflammatory diseases, and non received hormonal drugs and oral contraceptive pills. Exclusion criteria: subjects willing to withdraw from the study, Irregular use of medication or placebo, Occurrence of any significant stress listed in the questionnaire (first degree family members died ...) during the study, married during the study, changed the location and do not complete the questionnaire, Allergies to essential oils

**Age**
From **18 years** old to **26 years** old

**Gender**
Female

**Phase**
2

**Groups that have been masked**
*No information*

**Sample size**
Target sample size: **100**

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

**Randomization description**

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

**Blinding description**

**Placebo**
Used

**Assignment**
Parallel

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**

**Name of ethics committee**
Ethics Committee of Lorestan University of Medical Sciences

**Street address**
Department of Research and Technology, Lorestan University of Medical Sciences, Kamalvand

**City**
Khorramabad

**Postal code**
381351698

**Approval date**
2011-03-01, 1389/12/10

**Ethics committee reference number**
43943/200

## Health conditions studied

### 1

**Description of health condition studied**
Primary dysmenorrhoea

**ICD-10 code**
N94.4

**ICD-10 code description**
Primary dysmenorrhoea

## Primary outcomes

### 1

**Description**
Severity of dysmenorrhea

**Timepoint**
Before the intervention and two months after the intervention in ending the first and secondary days of menstruation

**Method of measurement**
Visual analogue scale

## Secondary outcomes

### 1

**Description**
Symptoms with dysmenorrhea

**Timepoint**
Before the intervention and two months after the intervention ending the first and secondary days of menstruation

**Method of measurement**
Questionnaire

## Intervention groups

### 1

**Description**
Intervention Group: Massage on the symphysis pubis with essential oil of lavender (2 drops) in 2.5 cc of almond oil that was used topically for15 minutes, 48 hours before and after of menstruation, twice in days for two consecutive menstrual cycles

**Category**
Treatment - Drugs

### 2

**Description**
Control Group: Massage on the symphysis pubis with 2.5 cc just almond oil that was used topically for15 minutes, 48 hours befoer and after of menstruation, twice in day for two consecutive menstrual cycles

**Category**
Placebo

## Recruitment centers

### 1

**Recruitment center**

**Name of recruitment center**

Lorestan University of Medical Sciences dormitories

**Full name of responsible person**
Shourangiz Beiranvand

**Street address**
Nursing Department, Nursing and Midwifery Faculty, Lorestan University of Medical Sciences, Kamalvand

**City**
Khorramabad

## Sponsors / Funding sources

**1**

**Sponsor**

**Name of organization / entity**
Vice Chancellor for Research of Lorestan University of Medical Sciences

**Full name of responsible person**
Bahram Rasoulian

**Street address**
End of the shafa street

**City**
Khorramabad

**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 Lorestan 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**
Lorestan University of Medical Sciences

**Full name of responsible person**
Shourangiz Beiranvand

**Position**
Master of nursing, Faculty member of Lorestan University of Medical Sciences

**Other areas of specialty/work**

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Nursing Department, Nursing and Midwifery Faculty, Lorestan University of Medical Sciences, Kamalvand

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## Person responsible for scientific inquiries

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## Person responsible for updating data

**Contact**

## 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*