Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

The effect of aromaterapy on severity of primary dysmenorrhea

Protocol summary

Summary
The aim of this study was to investigate the effect of lavender and peppermint essential oil on severity of pain in primary dysmenorrhea. It is a randomized clinical trial which was done on the female students suffering from menstrual pain with 2 and 3 severity on the basis of multi-dimensional scale, no history of systemic diseases - and consent to participate in the study. A total of 108 participants in the study were randomly assigned in three groups to receive massage with almond oil, only massage, and massage with essential oil of lavender (2 drops) and peppermint (2 drops) in 4 cc of almond oil, daily, topically for 15 minutes on upper symphysis pubis for a week before menstruation, for two menstrual cycles. Participants were asked to record their most severe pain before intervention and on the first, second and third day, by using visual analogue scale.

General information

Acronym

IRCT registration information
IRCT registration number: **IRCT138902153869N1**
Registration date: **2011-02-15, 1389/11/26**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date
2011-02-15, 1389/11/26

Registrant information
Name
Leila Amirifarahani
Name of organization / entity
Arak University of Medical Sciences
Country
Iran (Islamic Republic of)
Phone
+98 86 1417 3524
Email address
l.amirifarahani@arakmu.ac.ir

Recruitment status
Recruitment complete

Funding source
Arak University Of Medical Sciences

Expected recruitment start date
2009-02-28, 1387/12/10
Expected recruitment end date
2009-08-31, 1388/06/09
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
The effect of aromaterapy on severity of primary dysmenorrhea

Public title
The effect of aromaterapy on severity of primary dysmenorrhea
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria: being single, residence in the dormitory of Hazrat Masumeh (SA) University of Medical Sciences, having regular menstrual periods at intervals of 35-21 days, having dysmenorrhea in the most menstrual periods, pain with menstruation and menstrual bleeding painful grade 2 and 3 Tyq multidimensional measure of speech Exclusion criteria: history of abnormal uterus or ovary, previous medical or psychiatric diseases, a history of uterine development problems such as abnormal bleeding, ovarian cysts, history of previous genital system surgery, receiving hormonal drugs or oral contraceptive pills, being on special diet (water therapy, vegetarian diet), weight loss regimens, presence of psychological stresses such as: marriage, divorce, death

of parents

Age
From **18 years** old to **35 years** old

Gender
Female

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **90**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Arak University of Medical Sciences

Street address
Nursing-Midwifery Faculty, Arak University of Medical Sciences, Sardasht, Arak

City
Arak

Postal code

Approval date
2009-05-18, 1388/02/28

Ethics committee reference number
1-52-88

Health conditions studied

1

Description of health condition studied
primary dysmenorrhea

ICD-10 code
N94.4

ICD-10 code description
Noninflammatory disorders of female genital tract

Primary outcomes

1

Description
severity of dysmenorrhea

Timepoint
During menstrual cycles

Method of measurement
The basis of visual analogue scale

Secondary outcomes

1

Description
quality of life

Timepoint
Before and 3 months after the intervention

Method of measurement
quality of life 36 Items

Intervention groups

1

Description
Massage on the symphysis pubis with almond oil, 15 minutes, daily, started before menstrual bleeding and continued on the first and second day of bleeding, for 2 consecutive menstrual cycles

Category
Treatment - Drugs

2

Description
Massage on the symphysis pubis, 15 minutes, daily, started before menstrual bleeding and continued on the first and second day of bleeding, for 2 consecutive menstrual cycles

Category
Placebo

3

Description
Massage on the symphysis pubis with lavender and peppermint essential oil, 15 minutes, daily, started before menstrual bleeding and continued on the first and second day of bleeding, for 2 consecutive menstrual cycles

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
hazrat Masoomeh's dormitory of Arak University Of Medical Sciences

Full name of responsible person

Street address

City
Arak

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Arak University Of Medical Sciences
Full name of responsible person
Leila Amiri Farahani
Street address
Arak University Of Medical Sciences, Sardasht, Arak
City
Arak
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Arak 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
Arak University Of Medical Sciences
Full name of responsible person
Leila Amiri
Position
edition board
Other areas of specialty/work
Street address
Arak University Of Medical Sciences, Sardasht, Arak
City
Arak
Postal code
Phone
+98 86 1417 3645
Fax
Email
l.amirifarahani@arakmu.ac.ir
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Arak University Of Medical Sciences
Full name of responsible person
Leila Amiri Farahani
Position
MSc midwifery
Other areas of specialty/work
Street address
Arak University Of Medical Sciences, Sardasht, Arak
City
Arak
Postal code
Phone
+98 86141735015
Fax
Email
l.amirifarahani@arakmu.ac.ir
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Arak University Of Medical Sciences
Full name of responsible person
Leila Amiri Farahani
Position
Msc midwifery
Other areas of specialty/work
Street address
Arak University Of Medical Sciences, Sardasht, Arak
City
Postal code
Phone
Fax
Email
Web page address

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