Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

Comparative study of the effect of Domask Rose essence and citrus aurantium on the severity of the symptoms of premenstrual syndrome in the students of Jahrom University of Medical Sciences

Protocol summary

Study aim

Determining the effect of Domask Rose and Citrus Aurantium essence on the severity of premenstrual syndrome symptoms in students of Jahrom University of Medical Sciences

Design

Clinical trial with two test groups and one control group, with parallel, double-blind, randomized groups, on 80 female students (all female students of operating room, anesthsia, and nursing).

Settings and conduct

This quasi-experimental study will be conducted on female students at Jahrom University of Medical Sciences. The Goldberg General Health Questionnaire (GHQ) will be completed to assess the mental health of the samples and the Premenstrual Symptoms Screening Questionnaire to determine the presence of PMS and its severity (for three consecutive menstrual cycles). Participants will be randomly divided into three groups.For the intervention, essential oil of rose and orange blossom in 15 cc bottles will be given to the first intervention group: domask rose essence, to the second intervention group: citrus aurantium essence, and to the third group, placebo sweet almond oil. In this way, during two menstrual cycles from 7 days before menstruation to the third day of menstruation, 5 drops of the contents of the desired bottle will be measured by the bottle's own dropperand complete the premenstrual symptoms screening questionnaire at the end of each menstrual cycle.

Participants/Inclusion and exclusion criteria

Willingness to participate in the study and completing the consent form, having premenstrual syndrome, not taking hormonal medications two months before the study.

Intervention groups

Intervention groups with Domask Rose and Citrus Aurantium essence (one group 5 drops of Domask Rose essence and the other group 5 drops of Citrus Aurantium essence) and control group with placebo (5 drops of sweet Almond essence oil)

Main outcome variables

Symptoms of premenstrual syndrome

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210502051161N3**
Registration date: **2025-05-22, 1404/03/01**
Registration timing: **prospective**

Last update: **2025-05-22, 1404/03/01**
Update count: **0**

Registration date

2025-05-22, 1404/03/01

Registrant information

Name

Hamidreza Nejati

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 71 5372 3872

Email address

hamidrezaa891425@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2025-10-02, 1404/07/10

Expected recruitment end date

2026-07-01, 1405/04/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative study of the effect of Domask Rose essence and citrus aurantium on the severity of the symptoms of premenstrual syndrome in the students of Jahrom University of Medical Sciences

Public title

Studying the effect of Domask Rose essence and citrus aurantium on premenstrual syndrome

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

Willingness to participate in the study Completing the informed consent form Having premenstrual syndrome based on self-report and questionnaire Not taking hormonal medications for at least two months before the study No use of any medication to reduce symptoms during menstruation or use of a specific medication such as painkillers by all participants Not taking vitamin supplements one month before the start of the intervention Absence of underlying physical and mental disorders based on the Goldberg General Health Scale Having regular menstruation Student dormitory resident

Exclusion criteria:

Unwillingness to continue participating in the study The occurrence of stressful events during the study and the use of any other medication during the study Changes in menstrual cycle intervals and duration based on criteria Sensitivity to essences used in the study Incomplete completion of questionnaires

Age

No age limit

Gender

Female

Phase

3

Groups that have been masked

- Participant
- Care provider
- Investigator
- Outcome assessor

Sample size

Target sample size: **80**

Randomization (investigator's opinion)

Randomized

Randomization description

The sampling method in this study was simple random allocation, in which, based on the list of female students in the operating room, anesthsia, and nursing, using a random number table, the first and second selected numbers from the students class list were placed in the test group, and the third number was placed in the control group in the same way. Allocation of samples in three groups continued until the number of samples was complete.

Blinding (investigator's opinion)

Double blinded

Blinding description

The students in the experimental and control groups will be placed in two separate locations. In the first experimental group, a bottle containing 15 cc of 40% Domask Rose essence, from Barij Essential Oil Company, Kashan, will be provided to the experimental group. In the second experimental group, a bottle containing 15 cc of Citrus Aurantium essence, from Barij Essential Oil Company, Kashan, will be provided to the experimental group. For the students in the control group, a bottle containing 15 cc of edible Sweet Almond oil will be provided to them.The bottles containing essence oDomask Rose, Citrus Aurantium, and edible sweet almond are the same shape and none will have a specification label and will be marked with labels A (Domask Rose essence), B (Citrus Aurantium essence), and C (Sweet Almond oil) to differentiate them. Then, all three groups will be given bottle A, bottle B, and the control group will be given bottle C, respectively. Sufficient information will be given to the groups on how to consume the contents of the bottles.In this way, during two menstrual cycles, from 7 days before menstruation to the third day of menstruation, they will measure and drink 5 drops of the contents of the desired bottle by the bottle's own mouthpiece. At the end of each menstrual cycle during the intervention period, they will be asked to complete a premenstrual symptoms screening questionnaire.

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Jahrom University of Medical Sciences

Street address

Ostad Motahari Boulevard

City

Jahrom

Province

Fars

Postal code

7414846199

Approval date

2025-05-03, 1404/02/13

Ethics committee reference number

IR.JUMS.REC.1404.015

Health conditions studied

1

Description of health condition studied
Premenstrual syndrome
ICD-10 code
N94.3
ICD-10 code description
Premenstrual tension syndrome

Primary outcomes

1

Description
Screening for premenstrual symptoms
Timepoint
Before and after menstruation
Method of measurement
PSST questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Aromatherapy is performed by individuals 1 week before menstruation until the third day of menstruation, twice a day for 5 minutes each time for 2 consecutive cycles, in a quiet place and in a stable and comfortable position, and they take 5 drops of the contents of the bottle with a dropper. For the first group, the dose of Domask rose essence used is 4% and for the second group, citrus aurantium essence is 0.5%.
Category
Treatment - Drugs

2

Description
Control group: Aromatherapy is performed by individuals 1 week before menstruation until the third day of menstruation, twice a day for 5 minutes each time for 2 consecutive cycles, in a quiet place and in a stable and comfortable position, and they take 5 drops of the contents of the bottle with a dropper. Sweet almond oil is used for this group.
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Jahrom University of Medical Sciences Dormitories
Full name of responsible person
Hamid Reza Nejati
Street address
Ostad Motahari Street, Jahrom University of Medical Sciences
City
Jahrom
Province
Fars
Postal code
7414846199
Phone
+98 71 5434 0405
Email
Hamidrezaa891425@Gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Jahrom University of Medical Sciences
Full name of responsible person
Amir Abdoli
Street address
Ostad Motahari Street, Jahrom University of Medical Sciences
City
Jahrom
Province
Fars
Postal code
7414846199
Phone
+98 71 5434 0405
Email
info@gmail.com
Web page address
http://www.jums.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Jahrom University of Medical Sciences
Proportion provided by this source
100
Public or private sector
Public
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
Jahrom University of Medical Sciences

Full name of responsible person
Hamid Reza Nejati

Position
Surgical Technologist (Operating Room)

Latest degree
Master

Other areas of specialty/work
Operating Room

Street address
Ostad Motahari Street, Jahrom University of Medical Sciences, Campus Site

City
Jahrom

Province
Fars

Postal code
7414846199

Phone
+98 74 1484 6199

Email
Hamidrezaa891425@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity
Jahrom University of Medical Sciences

Full name of responsible person
Bahareh Mahdood

Position
Faculty instructor

Latest degree
Master

Other areas of specialty/work
Operating Room

Street address
Ostad Motahari Street, Jahrom University of Medical Sciences

City
Jahrom

Province
Fars

Postal code
7414846199

Phone
+98 71 5434 0405

Email
baharehmahdood68@gmail.com

Person responsible for updating data

Contact

Name of organization / entity
Jahrom University of Medical Sciences

Full name of responsible person
Hamid Reza Nejati

Position
Surgical technologist

Latest degree
Master

Other areas of specialty/work
Operating Room

Street address
Ostad Motahari Street, Jahrom University of Medical Sciences

City
Jahrom

Province
Fars

Postal code
7414846199

Phone
+98 71 5434 0405

Email
Hamidrezaa891425@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