# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

21 Sep 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)

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**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
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## Sponsors / Funding sources

### 1

**Sponsor**
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**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**
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**Position**
Surgical Technologist (Operating Room)

**Latest degree**
Master

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Operating Room

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## Person responsible for scientific inquiries

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## Person responsible for updating data

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## 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