Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

The effect of geranium (pelargonium graveolens) and orange (citrus sinesis) aroma on anxiety and vital signs in first stage of labor in primiparous women

Protocol summary

Summary

Objectives: This study compared the effects of aromatherapy geranium and orange essential oil in first stage of labor in nulliparous on the anxiety and vital sign.Design: parallel. Setting and conduct: This study is a three-group of randomized clinical trial. The sample consisted of 150 nulliparous admitted to the Bojnoord Bint al-Huda hospital. After take consent of the participants were randomly divided into 3 groups. One group would receive geranium essential oil (50) and orange oil group (50) and a distilled water (50).Before and 20 minutes after intervention are examined to STAI anxiety questionnaire, physiological parameters would record. Participants including: Inclusion criteria for this study included nulliparous women to full-term pregnancy, with a single fetus, cervix dilatation of 3-5cm,haven't chronic disease, no colds and haven't nasal congestio, anosmia, lack of sensitivity to smell specific experience of breath smells particular (which bad recalls memories or stress), the use of sedatives or anti-anxiety in 3 hours before the experiment, no known mental illness, no history of epilepsy and asthma, lack of fetal distress, failure to induce labor there was a high risk pregnancy. Exclusion criteria for the study, the firm's unwillingness to continue the study of fetal distress or impairment in labor progress during the intervention, use of pain medication during labor induction or intervention. Intervention: One group, orange essential oil 2% and other group geranium oil 2% and in control group distilled water 2drops would receive on non-absorbent fabric, the clothing will connect. Main outcome measures Intervention. Anxiety, physiological parameters, including systolic blood pressure, diastolic blood pressure, respiration and pulse.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2012111811515N1**
Registration date: **2013-09-15, 1392/06/24**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2013-09-15, 1392/06/24

Registrant information

Name

Fahimeh Rashidi Fakari

Name of organization / entity

North Khorasan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 58 4224 6095

Email address

rashidif85@nkums.ac.ir

Recruitment status

Recruitment complete

Funding source

Medical Sciences of Vice chancellor for research, North Khorasan University

Expected recruitment start date

2012-08-22, 1391/06/01

Expected recruitment end date

2013-10-23, 1392/08/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date
empty

Scientific title
The effect of geranium (pelargonium graveolens) and orange (citrus sinesis) aroma on anxiety and vital signs in first stage of labor in primiparous women

Public title
The effect of aromatherapy on anxiety and vital signs
Purpose
Prevention
Inclusion/Exclusion criteria
included nulliparous women; full-term pregnancy (37-42); ages 18-35; with a single fetus; dilatation of3-5 cm ; haven't chronic disease; no colds and haven't nasal congestion; anosmia; lack of sensitivity to smell specific experience of breath smells particular (which bad recalls memories or stress); the use of sedatives or anti-anxiety in 3 hours before the experiment; no known mental illness; no history of epilepsy and asthma; lack of fetal distress; failure to induce labor there was a high risk pregnancy. Exclusion criteria for the study; the firm's unwillingness to continue the study of fetal distress or impairment in labor progress during the intervention; use of pain medication during labor induction or intervention
Age
From **18 years** old to **35 years** old
Gender
Female

Phase
3
Groups that have been masked
No information
Sample size
Target sample size: **150**
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
Ethics Committee of North Khorasan University of Medical Sciences
Street address
20 Number, Berenji street, Bojnord, North Khorasan
City
Bojnord
Postal code
Approval date
2012-05-23, 1391/03/03
Ethics committee reference number
91/p/349

Health conditions studied

1

Description of health condition studied
Anxiety Level
ICD-10 code
F41.9
ICD-10 code description
Anxiety disorder, unspecified

Primary outcomes

1

Description
anxiety level of first phase of labor
Timepoint
Befor and 20 min after intervention
Method of measurement
Spielberger state-trait

Secondary outcomes

1

Description
pulse rate
Timepoint
Before and 20 minutes after intervention
Method of measurement
examination

2

Description
Systolic BP
Timepoint
Before and 20 minutes after intervention
Method of measurement
examination

3

Description
Diastolic BP
Timepoint
Before and 20 minutes after intervention
Method of measurement
examination

4

Description

pain intensity

Timepoint

Before and 20 minutes after intervention

Method of measurement

VAS pain scale

Intervention groups

1

Description

In test one (oil of orange peels) and experimental group II (Essence Geranium), on fabric, non-absorbent, the clothing connected. Before and 20 minutes after intervention anxiety inventory STAI, physiological parameters by examining pain Pain was measured using visual analog scales.

Category

Prevention

2

Description

In the control group, distilled water onto non-absorbent fabric, the clothing connected. Before and 20 minutes after intervention STAI anxiety questionnaire, physiological parameters were recorded by the examiner and VAS pain scale.

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Bentul Hoda Hospital Bojnourd, Bojnourd, North Khorasan

Full name of responsible person

Alieh Mortazavi

Street address

Bentul Hoda Hospital Bojnourd, Zaieshgah Street , Bojnourd, North Khorasan

City

Bojnourd

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Medical Sciences of Vice chancellor for research, North Khorasan University

Full name of responsible person

Arash Aabri

Street address

20 Number, Berenji street, Bojnord

City

Bojnord

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Medical Sciences of Vice chancellor for research, North Khorasan University

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

North Khorasan University of Medical Sciences

Full name of responsible person

Maboobeh Tabatabaee Chehr

Position

Mentor, Msc of midwifery

Other areas of specialty/work

Street address

Bojnourd,Shahriar street ,Faculty Nursing & Midwifery Of Bojnourd

City

Bojnourd

Postal code

Phone

+98 85 4229 7095

Fax

Email

chehr19@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

North Khorasan University of Medical Sciences

Full name of responsible person

Fahimeh Rashidi Fakari

Position

Msc of Midwifery

Other areas of specialty/work

Street address

3 Number, ferdwsi 3 street, Bojnourd, North Khorasan

City

Bojnord

Postal code

Phone

+98 58 4232 1812

Fax

Email

fahimehrashidi85@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity

North Khorasan University of Medical Sciences

Full name of responsible person

Fahimeh Rashidi Fakari

Position

Msc of midwifery

Other areas of specialty/work

Street address

3 Number, 3 ferdwsi street, Bojnourd, North Khorasan

City

Bojnourd

Postal code

Phone

+98 58 4232 1812

Fax

Email

fahimehrashidi85@yahoo.com

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