

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

The effect of inhalation aroma with rosemary oils on stress, anxiety and job fatigue in emergency medical technicians

Protocol summary

Study aim

Investigating the effect of Rosemary oil inhalation on stress, anxiety and occupational fatigue of EMS personnel

Design

Clinical trials with control group, with parallel groups, randomized. The sample size will be totally 30 person at each group. 8 bases will be selected. Then the numbers of the bases will be put into the container. By coin tossing, a number goes out of the container at the same time. Eventually and the bases will be in the groups.

Settings and conduct

At first, the cream chest badges made of linen, with the size of 3x5cm, will stuck to the uniform of the subjects. Then, the rosemary oil were made in the form of 20cc sprays, provide for group. Then, the groups will ask to spray 2 puffs of the essential oils on their badges exactly at 8 O'clock every morning. The essential oils will apply from 8 to 10 O'clock (2 hour) at 3 shifts per week for one month. The researcher will remind the subjects of the intervention. Finally, immediately and 30 days after the intervention, questionnaire will re-complete.

Participants/Inclusion and exclusion criteria

Inclusion Criteria: Do not use of anti-anxiety and anti-depressant drugs, Do not use perfumes and fragrances during the intervention, Lack of allergy and migraine and liver and kidney disease, No addiction, health of the sense of smell. Exclusion criteria: history of allergies

Intervention groups

1-Intervention: The Badges will be installed within thirty centimeters of the nose. At 8:00 am, spray content will spray on the Badges. The badges will apply from 8 to 10 O'clock, 3 shifts per week for one month. Control: It will be exactly the same as the intervention group. Only in the sprays, the refined sweet almond oil will be placed.

Main outcome variables

stress: anxiety: occupational Fatigue

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190515043601N1**

Registration date: **2019-07-10, 1398/04/19**

Registration timing: **registered_while_recruiting**

Last update: **2019-07-10, 1398/04/19**

Update count: **0**

Registration date

2019-07-10, 1398/04/19

Registrant information

Name

Hossein Rahimi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 56 3238 1427

Email address

hosseinrahimi92@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-02-04, 1397/11/15

Expected recruitment end date

2019-07-11, 1398/04/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of inhalation aroma with rosemary oils on stress, anxiety and job fatigue in emergency medical technicians

Public title
The effect of inhalation aroma with rosemary oils on stress, anxiety and job fatigue in emergency medical technicians

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
EMS personnel of the Birjand city Non-use of anti-anxiety and anti-depressant drugs-. Do not use perfume during the intervention No drug addiction No history of liver and kidney diseases healthy olfactory
Exclusion criteria:
history of any allergies

Age
From **20 years** old to **45 years** old

Gender
Male

Phase
2-3

Groups that have been masked
No information

Sample size
Target sample size: **60**

Randomization (investigator's opinion)
Randomized

Randomization description
in order to sampling, firstly, from eight pre-hospital emergency Base of Birjand were selected by available sampling method and according to the entrance criteria, 60 individuals (on average from 7 to 8 personnel from each base) were selected. Bases randomly placed in intervention and control groups by using coin toss.

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 Birjand university of Medical science

Street address

ghafari

City

Birjand

Province

South Khorasan

Postal code

9717853577

Approval date

2019-02-13, 1397/11/24

Ethics committee reference number

IR.BUMS.REC.1397.352

Health conditions studied

1

Description of health condition studied

stress

ICD-10 code

F43.0

ICD-10 code description

Acute stress reaction

2

Description of health condition studied

occupational Fatigue

ICD-10 code

ICD-10 code description

3

Description of health condition studied

anxiety

ICD-10 code

F41.9

ICD-10 code description

Anxiety disorder, unspecified

Primary outcomes

1

Description

Stress, anxiety, depression,Occupational fatigue

Timepoint

Before, immediately and one month after the intervention

Method of measurement

DASS42 questionnaire,Fatigue Scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group:Initially, 25% Rosemary Essence was purchased from tabib daroo Company in Kashan. The intervention group inhaled Rosemary.The intervention group received 5 × 3 cm cotton badges and spray containing 20 ml Rosemary essential oils,the sprays were

united and solidified. The badges were placed at a distance of 30 centimeters from the nose, on the uniform of technicians. In the intervention group, 2 puff (one cc) of spray contents were sprayed for one month, three shifts per week and two hours per shift. The researcher reminded using spray during the intervention by telephone and Auto Sms Reminder application. Eventually, immediately and 30 days after the intervention, the questionnaires were completed again.

Category

Treatment - Drugs

2

Description

Control group: Initially, Refined Sweet Almond Oil will be purchased from Tabib Daroo Company in Kashan. The control group inhaled Refined Sweet Almond Oil. The control group received 5 × 3 cm cotton badges and spray containing 20 ml Refined Sweet Almond Oil, the sprays were united and solidified. The badges were placed at a distance of 30 centimeters from the nose, on the uniform of technicians. In the control group, 2 puff (one cc) of spray contents were sprayed for one month, three shifts per week and two hours per shift. The researcher reminded using spray during the intervention by telephone and Auto Sms Reminder application. Eventually, immediately and 30 days after the intervention, the questionnaires will be completed again.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Pre-hospital emergency in Birjand city

Full name of responsible person

mohamad reza hosseini

Street address

ghafari

City

Birjand

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South Khorasan

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Phone

+98 56 3238 1427

Email

mohamadrezahoseiniems@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Birjand University of Medical Sciences

Full name of responsible person

Mohammad Hossein Dehghani Firoozabadi

Street address

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City

Birjand

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Postal code

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Phone

+98 56 3238 1400

Email

drdehghani@bums.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Birjand 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

Birjand University of Medical Sciences

Full name of responsible person

hossein Rahimi

Position

faculty member of Birjand university of medical science

Latest degree

Master

Other areas of specialty/work

Nursing

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

Hossein Rahimi

Position

Faculty member of Birjand university of medical science

Latest degree

Master

Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

Only available upon request by the BUMS and ethics committee

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

The whole potential data will publish, after being unidentifiable

When the data will become available and for how long

Start the access period 6 months after printing the results

To whom data/document is available

Only for researchers working in academic and scientific institutions

Under which criteria data/document could be used

Data from this research can be used in meta-analyses and other studies. There is no limit to the use of data.

From where data/document is obtainable

hosseinrahimi92@yahoo.com requesting data is only possible through email queries.

What processes are involved for a request to access data/document

information will be provided in consultation with the Ethics Committee and the Research Deputy of Research at Birjand University of Medical Sciences after receiving the requested information. It may take up to 2 weeks.

Comments

Person responsible for updating data

Contact

Name of organization / entity

Birjand University of Medical Sciences

Full name of responsible person

Hossein Rahimi

Position

faculty member of BUMS

Latest degree

Master

Other areas of specialty/work

Nursery

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