Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The effect of lavender aroma on occupational stress and sleep quality of pre-hospital emergency personnel

Protocol summary

Study aim
Determining the effect of lavender aroma on occupational stress and sleep quality of pre-hospital emergency personnel

Design
This study is a clinical trial with control group, with parallel groups, single blind,Randomized by coin toss, sample size is 70, 2–3 phase

Settings and conduct
Participants in this study will be Kerman pre-hospital emergency personnel. Intervention group will receive glass pendant neck containing 25% lavender essence and control group will receive glass pendant containing sweet almond oil. Intervention will be one month.Before, immediately and one month after the intervention, sleep quality and job stress questionnaires will be completed.

Participants/Inclusion and exclusion criteria
Inclusion Criteria: Age between 20 to 45 years, no anxiolytic and other relaxing herbal remedies , no drug addiction, no working in other health care facilities, normal olfactory test, no history of nasal surgery, no liver or kidney problems, work experience more than one year. Exclusion Criteria:Respiratory and allergic problems

Intervention groups
intervention group:25% lavender essencel will be provided by Tabib Darou Co., Kashan. Intervention group will inhale lavender essence.Intervention group will be presented with 5 cc glass neck pendants containing lavender essential oil.The pendants will be installed within 30 cm of the subjects nose.The pendants will be used for one month, 3 times a week and daily for two hours at the end of each shift.The researcher will remind the subjects during the intervention by telephone and text message. Finally, the questionnaires will be completed again immediately and 30 days after the intervention. control group:It will look exactly like the intervention group.in this group, the pendants contain refined and odorless sweet almond oil

Main outcome variables
Occupational stress, sleep quality

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20190515043601N3**
Registration date: **2020-02-01, 1398/11/12**
Registration timing: **retrospective**

Last update: **2020-02-01, 1398/11/12**
Update count: **0**

Registration date
2020-02-01, 1398/11/12

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
2019-01-21, 1397/11/01

Expected recruitment end date
2019-09-23, 1398/07/01

Actual recruitment start date
2019-01-21, 1397/11/01

Actual recruitment end date
2019-09-23, 1398/07/01

Trial completion date

2019-09-23, 1398/07/01

Scientific title
The effect of lavender aroma on occupational stress and sleep quality of pre-hospital emergency personnel

Public title
The effect of lavender aroma on occupational stress and sleep quality of pre-hospital emergency personnel

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
Ages between 20 to 45 years Not use anxiolytic and other Relaxing herbal remedies non-drug addiction no Working in other health care facilities passing an olfactory test Having no history of nasal surgery not having liver or kidney problems work experience more than one year
Exclusion criteria:
Respiratory and allergic problems

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

Gender
Male

Phase
2-3

Groups that have been masked

- Data analyser

Sample size
Target sample size: **70**
Actual sample size reached: **70**

Randomization (investigator's opinion)
Randomized

Randomization description
12 pre-hospital emergency bases will be randomly divided into intervention and control groups using the coin toss (only bases will be randomized when personnel will not be randomized).

Blinding (investigator's opinion)
Single blinded

Blinding description
The data analyst will be unaware of the type of intervention for each group

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 Sciences
Street address
Ayatollah Ghafari Blv
City
Birjand
Province
South Khorasan
Postal code
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Approval date
2019-02-05, 1397/11/16

Ethics committee reference number
IR.BUMS.REC.1397.352

Health conditions studied

1

Description of health condition studied
Sleep quality,Occupational stress

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
sleep quality

Timepoint
Before, immediately, one month after the end of the intervention

Method of measurement
Pittsburgh Sleep Quality Questionnaire

2

Description
Occupational stress

Timepoint
Before, immediately, one month after the end of the intervention

Method of measurement
Nursing stress scale

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: There will be 35 participants in the lavender group.Participants will receive a 5cc glass necklace containing 25% lavender essence. pendants will be used at the end of each shift for 2 hours, three times a week for one month.Questionnaires will be completed before, immediately and one month after the intervention.

Category

Treatment - Drugs

2

Description
Control group: There will be 35 participants in this group.Participants will receive a 5cc glass necklace containing refined Sweet almond oil without odor .pendants will be used at the end of each shift for 2 hours, three times a week for one month.Questionnaires will be completed before, immediately and one month after the intervention.

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
Kerman University of Medical Sciences,Pre-hospital emergency bases

Full name of responsible person
Seyyed Mohamad Saberi

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Emergency Management Center, Campus of Medical Sciences University, Haft Bagh Alavi Blv

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Ems@kmu.ac.ir

Web page address

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Birjand University of Medical Sciences

Full name of responsible person
Tooba Kazemi

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drtooba.kazemi@ gmail.com

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
Instructor

Latest degree
Master

Other areas of specialty/work
CAM

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

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

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available

Title and more details about the data/document

All potential data can be shared after unidentifiable participants

When the data will become available and for how long

Start of access period 12 months after printing results

To whom data/document is available

It will only be available to researchers working in academic and scientific institutions

Under which criteria data/document could be used

In order to access the data, researchers can request access to the information 12 months after the results are published. Within two weeks, the information will be sent to them.It should be noted that applicants must be faculty members of the Ministry of Health.

From where data/document is obtainable

Applicants can apply to the Birjand University of Medical Sciences School of Nursing and Midwifery for information.

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

After verifying the identity of the applicant, the data will be submitted to the researcher within 2 weeks.

Comments