Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Effect of aromatherapy with lavender oil on sleep quality in elderly retired Kashan

Protocol summary

Summary

This study aims to examine the effects of aromatherapy using lavender essential oil on the quality of sleep among the elderly. Inclusion criteria involved subjects over 60 years of age having poor quality of sleep, sound cognitive status, no background of asthma and allergy to flowers, no background of mental disorders, no use of herbal medicine in the week before the experiment, and willingness to participate in the study. This research is a clinical trial conducted on 100 elderly retired employees in Kashan. Participants were randomly categorized into two groups of intervention and control (n=50). Pittsburgh Sleep Quality Index (PSQI) was used for data gathering and was administered to both groups before and after aromatherapy. Lavender essential oil and distilled water were used as placebos in intervention and control groups, respectively. The participants were asked to apply some lavender essential oil or distilled water on a piece of cotton wool and place it beneath the exterior of their pillows for 7 nights a week. PSQI was completed by each subject of both groups after the intervention in the seventh night.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013062013722N1**
Registration date: **2013-07-07, 1392/04/16**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2013-07-07, 1392/04/16

Registrant information

Name

Darush Ahmadi

Name of organization / entity

Kashan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 36 1555 6633

Email address

darushahmadi@kaums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Kashan University of Medical Sciences

Expected recruitment start date

2013-02-19, 1391/12/01

Expected recruitment end date

2013-07-11, 1392/04/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of aromatherapy with lavender oil on sleep quality in elderly retired Kashan

Public title

Effect of aromatherapy with lavender oil on sleep quality in elderly

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:Minimum age: 60 years, the ability to communicate verbally, having good cognitive status, willingness to participate in the study, having poor sleep quality Exclusion criteria: history of asthma and allergies to flowers and plants, smell disorders, history of

psychiatric disorders, addiction to drugs, herbal remedies and alternative medicine use in a week, changing sleeping places during the study,

Age
From **60 years** old to **90 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **100**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Single blinded

Blinding description

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ehics commitee of Kashan University of medical sciences

Street address
Kashan University of Medical Science, Gotbe ravandi road, Kashan, Iran

City
Kashan

Postal code

Approval date
2013-02-17, 1391/11/29

Ethics committee reference number
29/5/1/4262ب

Health conditions studied

1

Description of health condition studied
sleep Quality

ICD-10 code
G47.9

ICD-10 code description
Sleep disorder, unspecified

Primary outcomes

1

Description
sleep quality

Timepoint
Before the intervention-a week after intervention

Method of measurement
Pittsburgh Sleep Quality Index

Secondary outcomes

empty

Intervention groups

1

Description
intervention group: 2 drop of lavender essential oil on the participant’s pillow at night, repeated for 1 week

Category
Treatment - Other

2

Description
control group: 2 drop of Distilled water on the participant’s pillow at night, repeated for 1 week

Category
Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Retirees Association

Full name of responsible person
Darush Ahmadi

Street address

City
Kashan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice chancellor for research, Kashan University of Medical Sciences

Full name of responsible person
Dr. GolamAli Hamidi

Street address
Vice chancellor for research, Kashan University of Medical Sciences, Ghotbe ravandi Bolvard

City
Kashan

Grant name

Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research, Kashan University of Medical Sciences
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
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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