

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Comparative study of the effect of lavender, rosemary and orange essential oil on retrospective, prospective memory and drug compliance in hemodialysis patients

Protocol summary

Study aim

Effect of Lavender, Orange and Orange Essences on Retrospective, Prospective, and Pharmaceutical Follow-up in Hemodialysis Patients

Design

Clinical trial with control group, with parallel groups, non-blind, randomized minimization, with sample size 128

Settings and conduct

All patients with hemodialysis who are eligible to study in the dialysis departments of Shafa Hospital and Javad Alaeman, affiliated to Kerman University of Medical Sciences, are the sample of the study. Patients are entered into the study with available sampling method and are divided into four groups in the form of a lottery.

Participants/Inclusion and exclusion criteria

Not having any personality disorder with your doctor's diagnosis Not having chronic respiratory disease History of at least 6 months hemodialysis; If you need to be admitted during the study In case of allergy during the study

Intervention groups

In the control group, only the usual care of the dialysis units and in fact training on adherence to the drug regimen is presented, and only the drug compliance questionnaire, retrospective memory and prospective memory are completed by these individuals. Intervention groups include lavender, rosemary and orange, which will use these essential oils for three months a week. Drug compliance questionnaires, retrospective and prospective memory are completed by these individuals.

Main outcome variables

Effect of lavender essential oil on retrospective, prospective and pharmacological follow-up of hemodialysis patients Effect of rosemary essential oil on retrospective, prospective memory and drug compliance in hemodialysis patients Effect of orange essential oil on retrospective, prospective memory and drug compliance

of hemodialysis patients

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190428043410N1**

Registration date: **2019-06-25, 1398/04/04**

Registration timing: **prospective**

Last update: **2019-06-25, 1398/04/04**

Update count: **0**

Registration date

2019-06-25, 1398/04/04

Registrant information

Name

neda dehghan Ahmadabady

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 34 3377 8760

Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-07-06, 1398/04/15

Expected recruitment end date

2019-11-06, 1398/08/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative study of the effect of lavender, rosemary and orange essential oil on retrospective, prospective memory and drug compliance in hemodialysis patients

Public title

The effect of essential oil on memory in patients undergoing hemodialysis

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Not having any personality disorder with your doctor's diagnosis Not having chronic respiratory disease Lack of alcohol or other narcotics Not having history of head trauma or seizure, stroke and brain tumor There is no problem in the sense of smell Not sensitized to plants Not having a disturbance in consciousness History of hemodialysis for at least 6 months Not having a history of dementia, and Alzheimer, Parkinson, Huntington Having physical and mental ability to answer questions

Exclusion criteria:

If you need to be admitted during the study In case of allergy during the study If more than three sessions during a month do not tend to get a healing scent

Age

From **18 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **128**

Randomization (investigator's opinion)

Randomized

Randomization description

Random Minimization

Blinding (investigator's opinion)

Not blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

National Ethics Committee for Biomedical Research

Street address

Faculty of Nursing and Midwifery, Razi University of Medical Sciences, Beginning of Seven Alavi Gardens

City

Kerman

Province

Kerman

Postal code

76169-13555

Approval date

2019-06-03, 1398/03/13

Ethics committee reference number

IR.KMU.REC.1398.118

Health conditions studied**1****Description of health condition studied**

Hemodialysis

ICD-10 code

N18

ICD-10 code description

Chronic kidney disease (CKD)

Primary outcomes**1****Description**

The effect of lavender essential oil on memory and drug compliance in patients undergoing hemodialysis

Timepoint

Three times a week for a month

Method of measurement

Demographic and field information questionnaire, Drug Abuse Measurement Questionnaire, and Retrospective and Prospective Memory Measurement Questionnaire

2**Description**

Effect of rosemary essential oil on memory and drug compliance in patients undergoing hemodialysis

Timepoint

Three times a week for a month

Method of measurement

Demographic and field information questionnaire, Drug Abuse Measurement Questionnaire, and Retrospective and Prospective Memory Measurement Questionnaire

3**Description**

The effect of orange essential oil on memory and drug compliance in patients undergoing hemodialysis

Timepoint

Three times a week for a month

Method of measurement

Demographic and field information questionnaire, Drug Abuse Measurement Questionnaire, and Retrospective and Prospective Memory Measurement Questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

Control group: In the control group, only the usual care of the dialysis units and in fact training on adherence to the drug regimen is presented, and only the drug compliance questionnaire, retrospective memory and prospective memory are completed by these individuals.

Category

Treatment - Other

2

Description

Intervention group: Lavender group: In this group, the samples will use lavender essential oil (2%) three times a week for the usual care (they will be manufactured by Kashan Barij Essen). One hour after starting hemodialysis (to stabilize the patient's condition), 5 drops of lavender essential oil are poured into a gassus and placed within a distance of ten centimeters from the patient's nose. The lavender gas is put into a small 10cm container and the patient is asked to inhale it for 30 minutes. It should be noted that immediately after intervention (in other words at the end of four weeks) and one month after intervention, a retrospective-prospective memory questionnaire and drug compliance questionnaire are completed by referring to hemodialysis department. To control the essence of the essential oil, put the essential oils on a gas and put it in a small 10-centimeter container for the patients.

Category

Treatment - Other

3

Description

Intervention group: Routine group: In this group, the samples will use 100% essential oil (for the production of Barij Essen, Kashan) three times a week, for a period of one month. One hour after starting hemodialysis (to stabilize the patient's condition), 5 drops of daily essential oil are placed on a gas and placed at a distance of ten centimeters from the patient's nose. The daily gas is dipped in a small 10cm container and the patient is instructed to inhale it for 30 minutes. It should be noted that immediately after intervention (in other words at the end of four weeks) and one month after intervention, a retrospective-prospective memory questionnaire and drug compliance questionnaire are completed by referring to hemodialysis department. To control the essence of the essential oil, put the essential oils on a gas and put it in a small 10-centimeter container for the patients.

Category

Treatment - Other

4

Description

Intervention group: Orange group: In this group, the samples will be used, in addition to receiving regular care, three times a week for orange essential oil (100%) (the construction of the Bariji Essential Oil Factory of Kashan). One hour after starting hemodialysis (to stabilize the patient's condition), 5 drops of orange essential oil are placed on a gas and placed within a distance of ten centimeters from the patient's nose. The orange gas is put into a small 10cm container and the patient is instructed to inhale it for 30 minutes. It should be noted that immediately after intervention (in other words at the end of four weeks) and one month after intervention, a retrospective-prospective memory questionnaire and drug compliance questionnaire are completed by referring to hemodialysis department. To control the essence of the essential oil, put the essential oils on a gas and put it in a small 10-centimeter container for the patients.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Shafa Hospital - Javad Alaeman Clinic

Full name of responsible person

Neda Dehghan Ahmadabad

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Kerman 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

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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
Undecided - It is not yet known if there will be 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 data on the main implications is shared

When the data will become available and for how long
Start the access period after printing the results

To whom data/document is available
Data is available to researchers at academic, scientific and industrial institutions

Under which criteria data/document could be used
Data for use in supplementary research, use in treatment

and supplementary research

From where data/document is obtainable
Neda Dehghan Ahmadabady Kerman University of Medical Sciences Ndeh197@gmail.com

What processes are involved for a request to access data/document
Send your written request to Ndeh197@gmail.com. Then, the request will be reviewed and the information will be available.

Comments