# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

18 Sep 2026

## Comparison of effect of warm-water footbath, effleurage massage and petrissage massage on the fatigue and sleep quality of Hemodialysis Patients

## Protocol summary


**Summary**

The purpose of this study was to evaluate and compare the impact of warm water foot bath, effleurage massage and petrissage massage on fatigue and sleep quality of Patients undergoing Hemodialysis. In this quasi-experimental study, eligible patients by non-random sampling selected, but according to randomly blocked among the three intervention groups warm water foot bath, effleurage massage and petrissage massage were divided. There was not control group. In finally, 62 hemodialysis patients were enrolled from two centers in Yasuj. The main inclusion criteria: at least 6 months of hemodialysis treatment; the more fatigue score; sleep quality score 5 or more and exclusion criteria: renal transplantation; migration and death. Three intervention groups separately trained and performed in hemodialysis ward warm water foot bath and massages for two weeks, three times a week. After ensuring the correct implementation, interventions continued by patients in home for two months, every night an hour before sleep. In the footbath group, the feet was immersed 15 minutes in the water 41 to 42 ° C. In effleurage massage was performed steady and long movement on the back, shoulders and neck and in petrissage massage kneading movement on the shoulders, neck and arms for 15 minutes. One month and two months after intervention, fatigue and sleep questionnaire was completed by patients. The mean score of fatigue and sleep between the three groups and each group was compared before and after intervention.


## General information

**Acronym**

**IRCT registration information**

IRCT registration number: **IRCT2015031021425N1**

Registration date: **2016-01-28, 1394/11/08**

Registration timing: **retrospective**

Last update:

Update count: **0**

**Registration date**

2016-01-28, 1394/11/08

**Registrant information**


**Name**

Shekoofeh Hamzehiekia

**Name of organization / entity**

Yasuj University of Medical Science

**Country**

Iran (Islamic Republic of)

**Phone**

+98 74 1333 7251

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**Recruitment status**

**Recruitment complete**


**Funding source**

Vice Chancellor for Research of Yasuj University of Medical Science


**Expected recruitment start date**

2014-11-22, 1393/09/01

**Expected recruitment end date**

2015-01-15, 1393/10/25

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Comparison of effect of warm-water footbath, effleurage massage and petrissage massage on the fatigue and

sleep quality of Hemodialysis Patients

**Public title**
Effect of warm water and massage on the blood dialysis patients
**Purpose**
Supportive
**Inclusion/Exclusion criteria**
Inclusion criteria: at least 6 months of hemodialysis treatment; the more fatigue score; sleep quality score 5 or more. Exclusion criteria: renal transplantation; migration; death.
**Age**
From **18 years** old to **75 years** old
**Gender**
Both

**Phase**
N/A
**Groups that have been masked**
*No information*
**Sample size**
Target sample size: **62**
**Randomization (investigator's opinion)**
Randomized
**Randomization description**
**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**
Ethics Committee of Yasuj University of Medical Science
**Street address**
Faculty of Nursing and Midwifery, second floor, Yasuj University of Medical Science, next to Emam Sajad Hospital, Shahid Jalil boulevard, Yasuj.
**City**
Yasuj
**Postal code**
7591741417
**Approval date**
2014-09-23, 1393/07/01
**Ethics committee reference number**
93050003

## Health conditions studied

**1**

**Description of health condition studied**
hemodialysis
**ICD-10 code**
Z99. 2
**ICD-10 code description**
Dependence on renal dialysis

## Primary outcomes

**1**

**Description**
fatigue
**Timepoint**
Two weeks before intervention, one month and two months after from start intervention
**Method of measurement**
Multidimensional Fatigue Inventory

**2**

**Description**
sleep
**Timepoint**
Two weeks before intervention, one month and two months after from start intervention
**Method of measurement**
Pittsburgh Quality Sleep Index

## Secondary outcomes

empty

## Intervention groups

**1**

**Description**
Intervention group of Warm water foot bath: The patient's feet are placed in a basin containing water 41 to 42 ° C to a depth of 10 cm above the ankle for 15 minutes
**Category**
Rehabilitation

**2**

**Description**
Intervention group of effleurage massage: fingers and palms of both hands placed on the patient's lower back and was motion to spine, around spine, back, shoulders and neck and opposite from neck to lower back
**Category**
Rehabilitation

**3**

**Description**
Intervention group of petrissage massage: with fingers and thumb of both hands, shoulders, neck and arms of muscles were catch, brought up, squeezed and then left

**Category**
Rehabilitation

## Recruitment centers

**1**

**Recruitment center**
**Name of recruitment center**
Shahid Beheshti Hospital
**Full name of responsible person**
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**2**

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## Sponsors / Funding sources

**1**

**Sponsor**
**Name of organization / entity**
Vice Chancellor for Research of Yasuj University of Medical Science
**Full name of responsible person**
Mahmood Naraki
**Street address**
Vice Chancellor for Research of Yasuj University of Medical Science, ground floor, Center Building of Yasuj University of Medical Sience, Setad, Shahid Motahari Boulevard, Yasuj.
**City**
Yasuj
**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 of Yasuj University of Medical Science
**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**
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## Person responsible for updating data

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**Other areas of specialty/work**

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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*