Clinical Trial Protocol
Iranian Registry of Clinical Trials

10 Jun 2026

The effect of localized magnetic field with a very low frequency of sleep induction during the rest of the nurses' Work night

Protocol summary

Study aim
Determination of the Effect of Localized Magnetic Fields with Low Frequency of Induced Sleepiness in Nurses

Design
Sixteen subjects are illuminated for four weeks at eight doses. The second group is not exposed to radiation. Only the coil before nursing hours is used during eight shifts of the night in a month. There is no intervention for two weeks after that.

Settings and conduct
In this study, 32 nurses from the critical care nurses are voluntarily selected of Ali-ibn Abi Talib (AS) Hospital, Rafsanjan University of Medical Sciences.

Participants/Inclusion and exclusion criteria
At least 4 nights Work a month. Satisfaction with the presence of research. No children under one year.

Intervention groups
Sixteen subjects were given a four-week period during eight sessions of radiation with an intensity of 200 microseconds and a frequency of less than 20 Hz before the nurses rest at night in a month's shift in a month.

Main outcome variables
sleep quality

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20171002036498N3**
Registration date: **2019-10-03, 1398/07/11**
Registration timing: **retrospective**

Last update: **2019-10-03, 1398/07/11**
Update count: **0**

Registration date
2019-10-03, 1398/07/11

Registrant information

Name
Ali Akbari

Name of organization / entity
Medical Sciences of Rafsanjan University

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Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-04-21, 1398/02/01

Expected recruitment end date
2019-08-23, 1398/06/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of localized magnetic field with a very low frequency of sleep induction during the rest of the nurses' Work night

Public title
The effect of localized magnetic field with a very low frequency of sleep induction during the rest of the nurses' Work night

Purpose
Other

Inclusion/Exclusion criteria

Inclusion criteria:
At least 4 nights Work a month Satisfaction with the presence of research

Exclusion criteria:

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked

- Participant

Sample size
Target sample size: **32**

Randomization (investigator's opinion)
Randomized

Randomization description
samples are selected based on the availability. Before intervention, the device is turned off and without any waves is on head. After intervention, the device is placed on the samples head with waves propagation.

Blinding (investigator's opinion)
Single blinded

Blinding description
The samples are unaware of whether or not they receive radiation

Placebo
Not used

Assignment
Crossover

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Qom University of Medical Sciences

Street address
Faculty of Nursing and Midwifery

City
Rafsanjan

Province
Kerman

Postal code
7717933777

Approval date
2017-02-11, 1395/11/23

Ethics committee reference number
IR.MUQ.REC.1395.43

Health conditions studied

1

Description of health condition studied
Relation between Magnetic fields and inductance on sleep at rest in night shift nurses

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
Sleeping during the day for a person to feel rejuvenated be necessary. Rest as one of the basic needs of mankind, in the Maslow needs series, is in line with physiological needs and provides the human body with an opportunity to regenerate and escape from tensions.Nurses are the largest group of health professionals in the health care system.there are regular outdoor activities, including people who are at risk of insomnia Because of the nature of his work in shifts: morning, afternoon and evening.

Timepoint
after the intervention

Method of measurement
Epworth Sleepiness

Secondary outcomes

1

Description
It can be described as one of the ways to improve sleep after nursing hours

Timepoint
after the intervention

Method of measurement
Epworth Sleepiness(ESS)

Intervention groups

1

Description
In the post intervention phase for four weeks and during eight nights, radiation with a frequency of 200 micro Tesla and less than 20 Hz is given before nurses rest after the night shift. In the pre-intervention phase for four weeks, during the eight nights, the device was placed on the head of samples without any wave propagation.

Category
N/A

Recruitment centers

1

Recruitment center

Name of recruitment center
Ali-Ebn abitaleb hospital

Full name of responsible person
Ali Akbari

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Taleghani blvd, Ali-Ebn abitaleb hospital

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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Rafsanjan University of Medical Sciences
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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
Rafsanjan 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
Rafsanjan University of Medical Sciences
Full name of responsible person
Ali Akbari
Position
Instructor
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Person responsible for updating data

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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

After data analysis will be decided

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not 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