Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Survey the effect of auricular shenmen acupressure on occupational stress and cognitive resilience of nurses in intensive care units: A parallel randomized clinical trial

Protocol summary

Study aim

Determining the effect of acupressure on the Shenman point of the ear on occupation stress and cognitive resilience of nurses in special wards

Design

A controlled clinical trial with parallel groups, single-blind, randomized, block design, size 4, is created from the site sealedenvelope.com. The sequence of blocks, list, and codes for each intervention are generated. The sample size is 157 people.

Settings and conduct

First, out of 13 intensive care units, 8 clusters will be randomly selected and at least 157 nurses will be selected using cluster sampling. The units selected randomly will be placed into two intervention groups and control group. In order to blind the study participants, adhesives containing seeds will be used for the experimental group and without seeds for the control group.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Special departments, bachelor's degree or higher, at least 6 months of clinical experience, good health in the ear area, and willingness to participate in the study. Exclusion criteria: Dialysis and recovery department, participation in similar acupressure sessions in the past three months, use of antidepressants and anxiety, no recent department transfer, and no experience of stress in the past 6 months.

Intervention groups

The researcher will teach each group of nurses, the test group, how to press the ear's Shenman point using a sticky plant seed (Vaccaria Ear Seed), for 1 minute on the ear's Shenman point, for both groups, and they will be asked to perform the intervention once with the researcher. And each participant in both groups will be asked to do this for 4 weeks. In the control group, seedless plant adhesives that are completely similar in appearance to the seeded adhesives of the test group and have no difference in appearance and only do not have seeds.

Main outcome variables

occupation stress, cognitive resilience

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20100114003064N17**
Registration date: **2025-09-19, 1404/06/28**
Registration timing: **prospective**

Last update: **2025-09-19, 1404/06/28**
Update count: **0**

Registration date

2025-09-19, 1404/06/28

Registrant information

Name
Hossein Bagheri
Name of organization / entity
Shahroud University of Medical Sciences
Country
Iran (Islamic Republic of)
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+98 23 3239 5054
Email address
bagheri@shmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2025-10-23, 1404/08/01

Expected recruitment end date

2026-05-22, 1405/03/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Survey the effect of auricular shenmen acupressure on occupational stress and cognitive resilience of nurses in intensive care units: A parallel randomized clinical trial

Public title
Survey the effect of auricular shenmen acupressure on occupational stress and cognitive resilience of nurses in intensive care units

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Have a bachelor's degree or higher. Have at least 6 months of clinical experience. Have full consent to participate in the study. Health in the ear area, free from wounds and any deformity. Elective departments are one of the special departments of Imam Hussein (AS) and Bahar Shahrood Hospital, including: ICU, CCU, emergency room, open heart ICU, neonatal intensive care, and pediatric intensive care.

Exclusion criteria:
Previous history of participating in acupressure sessions and simultaneously participating in similar supportive psychotherapy sessions. Skin sensitivity to alcohol and adhesives Use of acupressure or acupuncture in the past three months. Use of antidepressant and anti-anxiety medication No recent segment displacement. No stress experience in the past six months. Dialysis and recovery wards

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked

- Participant

Sample size
Target sample size: **157**

Randomization (investigator's opinion)
Randomized

Randomization description
First, 8 intensive care units will be randomly selected from 13 intensive care units. Then, to ensure that the sample size is the same in the two groups, a block method of size 4 will be used. For this purpose, 2 blocks of four will be created and identified with letters. The random assignment will be as follows: First, the sequence of blocks, list, and codes of each intervention will be created using the site https://www.sealedenvelope.com, then the intervention assignment will be made based on the created list.

Blinding (investigator's opinion)
Single blinded

Blinding description
The present study is a single-blind study and blinding will be done for the participating groups. In order to blind the study participants and not to inform them whether they belong to the experimental or control group, adhesives containing seeds will be used for the experimental group and without seeds for the control group, which are completely similar in appearance and method of use and will be effective in hiding information.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics Committee of Shahroud University of Medical Sciences

Street address
Faculty of Nursing and Midwifery, Shahroud University of Medical Sciences, Haft Tir Square, Shahroud

City
Shahroud

Province
Semnan

Postal code

Approval date
2025-08-17, 1404/05/26

Ethics committee reference number
IR.SHMU.REC.1404.064

Health conditions studied

1

Description of health condition studied
occupational stress

ICD-10 code

ICD-10 code description

2

Description of health condition studied
cognitive resilience

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
occupation stress score in the Nursing Stress Scale (NSS) questionnaire
Timepoint
Measurement of job stress before the intervention and 4 weeks after the intervention
Method of measurement
Nursing Stress Scale (NSS) questionnaire

2

Description
Cognitive resilience score in the CRS Cognitive Resilience Scale questionnaire
Timepoint
Measurement of cognitive resilience before the intervention and 4 weeks after the intervention
Method of measurement
CRS Cognitive Resilience Scale questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: After assigning groups, first, in a face-to-face session, at the workplace (ICU of Imam Hussein Hospital and Bahar Shahroud), the researcher will teach each group of nurses in the test group how to press the Shenman point of the ear using a sticky herbal seed (Vaccaria Ear Seed) (Zhongyang brand, made in China for transmission and concentration), for 1 minute on the Shenman point of the ear (a point in the triangular area of the ear, just below the upper curved part that connects the ear in a shape), for both groups. After the training, they will be asked to perform the intervention once with the researcher so that the accuracy and correctness of the intervention method performed by the nurse can be confirmed for the researcher. Each participant in both groups will be asked to do this for 1 minute, 5 days a week, 3 times a day (every 8 hours) for 4 weeks. The herbal adhesives used in the two groups, the training and control, are waterproof and They are hypoallergenic and are replaced every 5 days, but if they become detached, they are replaced again in coordination with the researcher. It is worth noting that in order to comply with ethical issues, the initial acupressure training will be applied by a female researcher for female participants and by a male researcher for male participants. Before and 4 weeks after the intervention, the level of job stress and cognitive resilience will be completed by participants in both groups using the relevant questionnaires.
Category
Treatment - Other

2

Description
Control group: In the control group, seedless herbal adhesives, which are completely similar in appearance to the seeded adhesives of the test group and do not differ in appearance except that they do not have seeds, will be used on a point lower and more external to the Shenman point, on the lower base of the ear antihelix, in the triangular area of the ear (which is called a passive and non-specific point in clinical studies), and the participants in the control group will be asked to press this point for 1 minute, 5 days a week, 3 times a day (every 8 hours) for 4 weeks.
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Imam Hossein Hospital
Full name of responsible person
Dr. Hoseein Bagheri
Street address
28-meter Touhidi, Imam Khomeini Street
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http://eh.shmu.ac.ir/home.html

2

Recruitment center
Name of recruitment center
Bahar Hspital
Full name of responsible person
Dr. Hossein Bagheri
Street address
22 Bahman Avenue, opposite the park of the child
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Sponsors / Funding sources

1

Sponsor

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

Full name of responsible person
Dr. Hossein Ebrahimi

Street address
Hafte-Tir Square, Shahroud University of Medical Sciences

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vcr@shmu.a.ir

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 Shahroud 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
Shahroud University of Medical Sciences

Full name of responsible person
Ehsan Shojaei

Position
nurse

Latest degree
Bachelor

Other areas of specialty/work
Nursery

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Contact

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Position
Associate professor

Latest degree
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Other areas of specialty/work
Nursery

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Person responsible for updating data

Contact

Name of organization / entity
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Full name of responsible person
Ehsan Shojaei

Position
nurse

Latest degree
Bachelor

Other areas of specialty/work
Nursery

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

Study Protocol
Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan
Undecided - It is not yet known if there will be 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
Undecided - It is not yet known if there will be a plan to make this available

Analytic Code
Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available