Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Effect of acupressure at Yin-Tang point on the anxiety and sleep quality of pre-hospital emergency workers

Protocol summary

Study aim
Determining the effect of acupressure at Yin-Tang point on anxiety and sleep quality of pre-hospital emergency workers

Design
This study is a randomized field trial with a pre-test and post-test design with a control group of 46 employees working in pre-hospital emergency centers in Gonabad and Kashmar cities.

Settings and conduct
In the intervention group, the researcher pressed the Yin-Tang point (between the two eyebrows in line with the nasal septum) for two minutes and only once a day (from 8 am to 11 am) and three times a week for four weeks. will be done (5). The researcher pressed his thumb to a depth of 1.5 to 1.5 cm for 5 seconds and then rested for 2 seconds and continued this action for 2 minutes, but in the sham group, 2 cm above the hairline with Using the thumb will press to a depth of 1 to 1.5 cm, similar to the intervention group

Participants/Inclusion and exclusion criteria
Inclusion criteria: Informed consent to participate in the research Not having a history of anxiety and insomnia (self-reported) Not having a history of using anxiety medications related to sleep quality reduction Exit criteria: 1. Incompatibility of work shifts with other employees, for example, not having night shifts 2. Headquarters forces and Managers

Intervention groups
In the intervention group, the researcher pressed the Yin-Tang point (between the two eyebrows in line with the nasal septum) for two minutes and only once a day (from 8 am to 11 am) and three times a week for four weeks. will be done (5). The researcher pressed his thumb to a depth of 1.5 to 1.5 cm for 5 seconds and then rested for 2 seconds and continued this action for 2 minutes, but in the sham group, 2 cm above the hairline with Using the thumb will press to a depth of 1 to 1.5 cm, similar to the intervention group

Main outcome variables
Reducing anxiety and improving sleep quality

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20240425061565N1**
Registration date: **2024-06-03, 1403/03/14**
Registration timing: **registered_while_recruiting**

Last update: **2024-06-03, 1403/03/14**
Update count: **0**

Registration date
2024-06-03, 1403/03/14

Registrant information
Name
Reza Moazzen
Name of organization / entity
Country
Iran (Islamic Republic of)
Phone
+98 51 5525 2730
Email address
rezamoazzen34@gmail.com

Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2024-05-21, 1403/03/01
Expected recruitment end date
2024-06-21, 1403/04/01
Actual recruitment start date
empty
Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Effect of acupressure at Yin-Tang point on the anxiety and sleep quality of pre-hospital emergency workers

Public title
Investigating the effect of acupressure on anxiety and sleep quality

Purpose
Supportive

Inclusion/Exclusion criteria

Inclusion criteria:
Informed consent to participate in the research Having an associate's, bachelor's or master's degree in nursing and emergency medicine Having at least 2 years of experience working in pre-hospital emergency centers Not facing crises such as the death of loved ones and divorce in the last six months Not having a history of anxiety and insomnia (self-reported) Not having a history of using anxiety medications related to sleep quality reduction Attending the work environment during the research Failure to pass the stress management course Absence of severe skin diseases

Exclusion criteria:
Incompatibility of work shifts with other colleagues who have night shifts Headquarters force and managers

Age
From **20 years** old to **65 years** old

Gender
Male

Phase
N/A

Groups that have been masked

- Participant

Sample size
Target sample size: **46**

Randomization (investigator's opinion)
Randomized

Randomization description
Sampling will be done in an accessible manner and based on the entry criteria, and then they will be randomly assigned to sham and intervention groups by using four permutation blocks (AABB, ABAB, ABBA, BABA, BAAB, BBAA) by throwing a dice. . In this way, we give codes 1 to 6 to each of the quaternary permutation blocks to match the numbers in the dice. Code 1 to the AABB permutation block, code 2 to the ABAB block, code 3 to the ABBA block, and BABA block Code 4, BBAA block code 5 and BAAB block code 6. Then, due to the fact that the required sample size for this research is 46 people, we have to roll the dice 12 times (4*12=48) so that at least 46 samples are included in the research, and after matching the number of the dice with the code belonging to the permutation blocks in the order of the sample In this method, the letters A mean the samples that are placed in the intervention group, and the letters B mean the samples that are placed in the sham group.

Blinding (investigator's opinion)
Single blinded

Blinding description
They will be placed in sham and intervention groups randomly by using four permutation blocks (AABB, ABAB, ABBA, BABA, BAAB, BBAA) by throwing a dice. In each group, demographic information questionnaire, Spielberger anxiety index and Petersburg sleep quality index will be completed by the research units. Then, in the intervention group, pressing the Yin Tang point (between the two eyebrows in line with the nasal septum) for two minutes and only once a day (from 8 am to 11 am) and three times a week for four weeks by The researcher will do (5). The researcher pressed his thumb to a depth of 1.5 to 1.5 cm for 5 seconds and then rested for 2 seconds and continued this action for 2 minutes, but in the sham group, 2 cm above the hairline with Using the thumb will press to a depth of 1 to 1.5 cm, similar to the intervention group

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

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

Street address
Gonabad, Ghadir Square, Imam Khomeini St., Gonabad Medical Sciences Headquarters

City
Gonabad

Province
Razavi Khorasan

Postal code
9691793718

Approval date
2024-05-14, 1403/02/25

Ethics committee reference number
IR.GMU.REC.1403.014

Health conditions studied

1

Description of health condition studied
Anxiety and poor sleep quality

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
Anxiety
Timepoint
It will be done three times a week (three days a week) for up to a month, only once per time (day) and in the time period (8 am to 11 am).
Method of measurement
1. Questionnaire of demographic characteristics 2. Spielberger anxiety level questionnaire

2

Description
Sleep quality
Timepoint
It will be done three times a week (three days a week) for up to a month, only once per time (day) and in the time period (8 am to 11 am).
Method of measurement
1. Questionnaire of demographic characteristics 2. Petersburg Sleep Quality Questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Squeezing the Yin-Tang point (between the two eyebrows in most part of the nasal septum) will be done by the researcher for two minutes and only once a day (from 8:00 am to 11:00 am) three times a week for four weeks. The researcher should press his thumb to a depth of 1.5 to 1.5 cm for 5 seconds and then rest for 2 degrees and continue this action for 2 minutes.
Category
N/A

2

Description
control group (sham): 2 cm above the hair growth line using the thumb to a depth of 1 to 1.5 cm, similar to the intervention group. For two minutes and only once a day (from 8 am to 11 am) and as It will be done three times a week for four weeks by the researcher.
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Pre-hospital emergency
Full name of responsible person
Mohammad Hossein Ismailzadeh
Street address
Khorasan Razavi - Gonabad - Saadi St. - Naster Boulevard - Gonabad Medical Emergency and Accident Management Center
City
Gonabad
Province
Razavi Khorasan
Postal code
9691793718
Phone
+98 51 5722 9391
Email
esmaeilzadeh.ems@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Gonabad University of Medical Sciences
Full name of responsible person
Tahere Baloochi
Street address
Gonabad, near Asian Road, Gonabad University of Medical Sciences
City
Gonabad
Province
Razavi Khorasan
Postal code
9691793718
Phone
+98 915 533 9768
Email
tbaloochi@gmail.com
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
Gonabad 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
Gonabad University of Medical Sciences

Full name of responsible person
Reza Moazzen
Position
Student
Latest degree
Bachelor
Other areas of specialty/work
Health in Emergency and Disaster
Street address
Kashmar. No. 28, 7 Shahid Beheshti St
City
kashmar
Province
Razavi Khorasan
Postal code
9671953133
Phone
+98 51 5525 2730
Email
rezamoazzen34@gmail.com

Person responsible for scientific inquiries

Contact
Name of organization / entity
Gonabad University of Medical Sciences
Full name of responsible person
Taherh Baloochi
Position
Member of the academic staff of Gonabad University of Medical Sciences
Latest degree
Ph.D.
Other areas of specialty/work
Nursery
Street address
Gonabad, near Asian Road, Gonabad University of Medical Sciences
City
Gonabad
Province
Razavi Khorasan
Postal code
9691793718
Phone
+98 915 533 9768
Email
tbaloochi@gmail.com

Person responsible for updating data

Contact
Name of organization / entity
Gonabad University of Medical Sciences
Full name of responsible person
Reza Moazzen
Position
Student
Latest degree
Bachelor
Other areas of specialty/work
Nursery
Street address
No. 28, 7 Shahid Beheshti St
City
kashmar
Province
Razavi Khorasan
Postal code
9671953133
Phone
+98 51 5525 2730
Email
rezamoazzen34@gmail.com

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
Yes - There is 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
Only part of the data, such as information related to the main outcome, should be shared.
When the data will become available and for how long
The access period starts 6 months after the results are published
To whom data/document is available
Only for researchers working in academic and scientific institutions
Under which criteria data/document could be used
In order to use statistics to conduct other similar researches
From where data/document is obtainable
Using the researcher's email: rezamoazzen34@gmail.com Or Reza Mozen's phone: 09153358696
What processes are involved for a request to access data/document
Using the researcher's email: rezamoazzen34@gmail.com Or Reza Mozen's phone: 09153358696
Comments