

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Modulating effect of Iranian traditional music in Šūr and Homāyoun Dastgāh on cardiac sympathovagal balance

Protocol summary

Summary

Heart rate is the result of interaction between sympathetic and parasympathetic fibers and sinoatrial node pulse-maker properties. Therefore, measuring heart rate variability (HRV) is a non-invasive method to assess cardiac autonomic nervous system. Various factors are able to influence cardiac autonomic nervous system and in this way they lead to modify HRV indexes. Various studies demonstrated that music is one of the factors, which can influence cardiac autonomic modulation. The purpose of this study is to explore the effect of Iranian Traditional music on HRV indexes. The design of this study determines that meanwhile each subject (of the total subjects n=15) has to listen to music or white noise with a 15 minute interval, ECG lead II continuously is recorded for five min. Then, time and frequency domains of heart rate variability criteria are calculated. The inclusion criteria are being male and age of 19 to 24 and the exclusion criteria are chronic diseases (such as diabetes, hypertension, epilepsy, etc.), smokers, and chronic medication consumers. The interventions of the study include the Iranian traditional music Šūr and Homāyoun Dastgāh and the white noise. The mean and standard deviation of sequential R-R intervals are the primary outcomes of the study.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013011011236N3**

Registration date: **2016-12-09, 1395/09/19**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2016-12-09, 1395/09/19

Registrant information

Name

Esmaeil Akbari

Name of organization / entity

Mazandaran University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Deputy for Research, Mazandaran University of Medical Sciences

Expected recruitment start date

2016-12-10, 1395/09/20

Expected recruitment end date

2017-01-10, 1395/10/21

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Modulating effect of Iranian traditional music in Šūr and Homāyoun Dastgāh on cardiac sympathovagal balance

Public title

Effect of Iranian traditional music on cardiac sympathovagal balance

Purpose

Basic science

Inclusion/Exclusion criteria

Inclusion criteria: female; ages between 19-24 years old.

Exclusion criteria: chronic disease (i.e. diabetes mellitus, hypertension, epilepsy and etc); smoker; under regular

medication.

Age
From **19 years** old to **24 years** old

Gender
Female

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **19**

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 Mazandaran University of Medical Sciences

Street address
Department of Physiology, School of Medicine,
Mazandaran University of Medical Sciences, Sari, Iran

City
Sari

Postal code

Approval date
2015-07-07, 1394/04/16

Ethics committee reference number
IR.MAZUMS.REC.94.1257

Health conditions studied

empty

Primary outcomes

1

Description
RR interval

Timepoint
before and after hearing of white noise or music

Method of measurement
Mean and Standard deviation of Time domain of ECG

Secondary outcomes

1

Description
High frequency power spectrum

Timepoint
before and after hearing of white noise or music

Method of measurement
Frequency domain analysis of ECG

2

Description
Low frequency power spectrum

Timepoint
before and after hearing of white noise or music

Method of measurement
Frequency domain analysis of ECG

Intervention groups

1

Description
White noise

Category
Other

2

Description
music

Category
Other

Recruitment centers

1

Recruitment center

Name of recruitment center
School of Medicine, Mazandaran University of Medical Sciences

Full name of responsible person
Esmaeil Akbari

Street address

City
sari

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Deputy for Research, Mazandaran University of Medical Sciences

Full name of responsible person
Ahmad-ali Enayati

Street address
Deputy for Research, Moalem Square, Buil. No 2,

Mazandaran University of Medical Sciences, Sari, Iran.

City

Sari

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Deputy for Research, Mazandaran University of Medical Sciences

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

Name of organization / entity

Department of Physiology, School of Medicine,
Mazandaran University of Medical Sciences, Sari

Full name of responsible person

Esmail Akbari

Position

Associate Professor

Other areas of specialty/work

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Web page address

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