Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The effect of music on metabolic, physical and psychological response to stress after cardiac surgery in selected hospitals of Qom, 2010

Protocol summary

Summary

This study investigates the effect of music on physical, metabolic and psychological responses to stress after heart surgery. A total of 60 inpatients in open heart section participate in this study in two experimental (30 patients) and control (30 patients) groups on the first day after the surgery. All the patients will rest in the bed while receiving oxygen and head of the bed is 20-30 degrees elevated. The patients in the intervention group will listen to a light music using mp3 player through a headphone, from 14 to 14:30 pm. The patients in the control group won't receive any intervention. Blood pressure, pulse rate, respiratory rate, mean arterial pressure, oxygen saturation, serum cortisol, oxytocin, pain and anxiety levels will be measured at 14, 14:30, and 15 pm and compared between groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201101045543N1**
Registration date: **2011-02-16, 1389/11/27**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2011-02-16, 1389/11/27

Registrant information

Name

Saeide Heidari

Name of organization / entity

School nursing and midwifery, Qom University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Qom University of Medical Sciences

Expected recruitment start date

2011-01-21, 1389/11/01

Expected recruitment end date

2011-07-23, 1390/05/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of music on metabolic, physical and psychological response to stress after cardiac surgery in selected hospitals of Qom, 2010

Public title

The effect of music on metabolic, physical and psychological response to stress

Purpose

Supportive

Inclusion/Exclusion criteria

Exclusion criteria: emergency surgery, having a temporary pacemaker after surgery, surgery after 12 o'clock, previous cardiac surgery, intubated and critically ill patients, treatment with corticosteroids, presence of thyroid gland diseases, presence of adrenal or pituitary (either hypothyroidism or hyperthyroidism), hearing loss, lack of cooperation to participate in the study at any stage of work and lack of orientation to time, person or place

Age

From **18 years** old to **80 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

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

Qom University of Medical Sciences

Street address

Nursing Department, School Nursing and Midwifery, Lavasani St., Qom

City

Qom

Postal code

3756/37185

Approval date

2010-10-21, 1389/07/29

Ethics committee reference number

12050/34/پ

Health conditions studied

1

Description of health condition studied

Responses physical, psychological and metabolic stress in patients undergoing heart surgery

ICD-10 code

F43-0

ICD-10 code description

Acute stress reaction

Primary outcomes

1

Description

Oxytocin level

Timepoint

Three times, once every 30 minutes

Method of measurement

Laboratory tests

Secondary outcomes

1

Description

Cortisol level

Timepoint

Three times, once every 30 minutes

Method of measurement

Laboratory test

2

Description

pain intensity

Timepoint

Three times, once every 30 minutes

Method of measurement

Visual pain assessment scale

3

Description

anxiety

Timepoint

Three times, once every 30 minutes

Method of measurement

Visual Anxiety Scale

4

Description

Oxygen saturation

Timepoint

Three times, once every 30 minutes

Method of measurement

palse oximetry

5

Description

mean arterial pressure

Timepoint

Three times, once every 30 minutes

Method of measurement

sphygmomanometer of monitoring system

6

Description

respiratory rate

Timepoint

Three times, once every 30 minutes

Method of measurement

Physical Examination

7

Description
pulse rate
Timepoint
Three times, once every 30 minutes
Method of measurement
Physical Examination

8

Description
blood pressure
Timepoint
Three times, once every 30 minutes
Method of measurement
sphygmomanometer of manitoring

Intervention groups

1

Description
The patients will rest in the bed while receiving oxygen and head of the bed is 20-30 degrees elevated and listening to a light music using mp3 player through a headphone, from 14 to 14:30 pm.
Category
Rehabilitation

2

Description
The patients will rest in the bed while receiving oxygen and head of the bed is 20-30 degrees elevated.
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Shahid Beheshti hospital
Full name of responsible person
Saeide Heidari
Street address
Shahid Beheshti hospital, Beheshti St., Qom
City
Qom

2

Recruitment center
Name of recruitment center
Valiaser hospital
Full name of responsible person
Saeide Heidari
Street address
Islamic Republic St., Qom
City
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Qom University of Medical Sciences
Full name of responsible person
Dr Koohpayee
Street address
Nursing Department, School Nursing and Midwifery, Lavasani St., Qom
City
Qom
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Qom 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
Qom University of Medical Sciences
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Saeide Heidari
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Master of Nursing
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Person responsible for updating data

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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