

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 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)

Phone

+98 25 1292 4521

Email address

sheidari@muq.ac.ir

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

pulse 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 monitoring

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

Qom

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

Full name of responsible person

Saeide Heidari

Position

Master of Nursing

Other areas of specialty/work

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Person responsible for scientific inquiries

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Position

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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

Person responsible for updating data**Contact****Name of organization / entity**

School of Nursing and Midwifery- Qom University of
Medical Sciences

Full name of responsible person

Saeide Heidari

Position

Master of nursing- faculty

Other areas of specialty/work