

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jul 2026

### Effect of distraction by virtual reality on pain, anxiety and stress of angiography

#### Protocol summary

##### Study aim

Evaluate the Effect of distraction by virtual reality on pain, anxiety and stress of angiography

##### Design

Intervention group: In the virtual reality group, 4 days before the angiography and during admission, special glasses are placed on the patient's head, and for 15 minutes they distribute images designed to reduce pain. The severity of anxiety and pain will be measured before and after the intervention.

##### Settings and conduct

Intervention group: In the virtual reality group, 4 days before the angiography and during admission, special glasses are placed on the head of the patient, and for 15 minutes they distribute images designed to reduce pain. The severity of anxiety and pain will be measured before and after the intervention. this study will be conducted in Imam Reza Hospital in Mashhad

##### Participants/Inclusion and exclusion criteria

Age 18 to 60 Awareness of time, place and persons at the time of data collection At least the reading and writing skills

##### Intervention groups

patients undergoing angiography

##### Main outcome variables

pain, anxiety and stress

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20171219037966N4**

Registration date: **2019-02-02, 1397/11/13**

Registration timing: **retrospective**

Last update: **2019-02-02, 1397/11/13**

Update count: **0**

##### Registration date

2019-02-02, 1397/11/13

##### Registrant information

###### Name

Amirreza Nasirzadeh

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 51 5722 3028

###### Email address

nasirzadeh@gmu.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2018-07-06, 1397/04/15

##### Expected recruitment end date

2018-11-03, 1397/08/12

##### Actual recruitment start date

2018-08-14, 1397/05/23

##### Actual recruitment end date

2018-12-13, 1397/09/22

##### Trial completion date

2019-01-25, 1397/11/05

##### Scientific title

Effect of distraction by virtual reality on pain, anxiety and stress of angiography

##### Public title

Effect virtual reality on angiography

##### Purpose

Supportive

##### Inclusion/Exclusion criteria

###### Inclusion criteria:

Age 18 to 60 Awareness of time, place and persons at the time of data collection At least the reading and writing skills

**Exclusion criteria:**

The patient's unwillingness to continue the research  
 Continuous use of analgesics 24 hours before  
 intervention Continuous use of anti-anxiety 24 hours  
 before intervention Sight or hearing problems

**Age**

From **18 years** old to **60 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **80**

Actual sample size reached: **80**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

For randomization, the method of permutation blocks (4  
 blocks, 20) is used.

**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 Gonabad University of Medical  
 Sciences

**Street address**

Gonabad University of Medical Sciences, Asian Roads,  
 Gonabad, Khorasan Razavi, Iran

**City**

Gonabad

**Province**

Razavi Khorasan

**Postal code**

9691793718

**Approval date**

2018-01-31, 1396/11/11

**Ethics committee reference number**

IR.GMU.REC.1396.174

**Health conditions studied****1****Description of health condition studied**

Cardiac catheterization

**ICD-10 code**

I20

**ICD-10 code description**

Angina pectoris

**Primary outcomes****1****Description**

Anxiety level

**Timepoint**

4 days prior to angiography, time of the admission

**Method of measurement**

Spielberger state-trait anxiety inventory

**2****Description**

Stress

**Timepoint**

4 days prior to angiography, time of the admission

**Method of measurement**

DASS-21

**3****Description**

pain

**Timepoint**

During Angiography

**Method of measurement**

NSR

**Secondary outcomes**

empty

**Intervention groups****1****Description**

Intervention group: In the virtual reality group, 4 days  
 before the angiography and during admission, special  
 glasses are placed on the head of the patient, and for 15  
 minutes they distribute the images designed to reduce  
 the pain. In supine position, then a few deep abdominal  
 breaths and The diaphragm is closed and comfortable in  
 the best condition in which it relaxes. By providing a  
 quiet, quiet environment and by minimizing  
 environmental stimuli (such as low light, travel  
 restrictions), the client will watch virtual reality imagery.  
 The severity of anxiety, stress, and pain will be  
 measured before and after the intervention.

**Category**

Treatment - Other

**2****Description**

Control group: 4 days before angiography and during

admission without intervention, the intensity of anxiety, pain and pain will be measured during stroke. In this group, there will be no intervention to watch virtual reality movies.

**Category**

N/A

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Imam Reza Hospital

**Full name of responsible person**

Amirreza Nasirzadeh

**Street address**

Imam Reza Hospital, Imam Reza Square, Mashhad

**City**

Mashhad

**Province**

Razavi Khorasan

**Postal code**

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**Phone**

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**Email**

nasirzadeharnz@gmail.com

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

Gonabad University of Medical Sciences

**Full name of responsible person**

Dr. Seyed Ali Sajjadi

**Street address**

Gonabad University of Medical Sciences, Asian Roads,  
Gonabad, Khorasan Razavi, Iran

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Razavi Khorasan

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**Email**

Sajjadi84a@gmail.com

**Grant name**

**Grant code / Reference number**

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

Yes

**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**

Amirreza Nasirzadeh

**Position**

Student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Nursery

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**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

Gonabad University of Medical Sciences

**Full name of responsible person**

kokab basiri moghaddam

**Position**

assistant professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Nursery

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## Person responsible for updating data

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### Contact

**Name of organization / entity**

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**Full name of responsible person**

amirreza nasirzadeh

**Position**

Student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Nursery

**Street address**

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**Province**

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**Phone**

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**Email**

## 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