Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Investigating the Effect of Digital Storytelling on Medication Adherence and Reintegration to Normal Life in Patients Undergoing Coronary Artery Bypass Graft

Protocol summary

Study aim
Determining the impact of digital storytelling-based intervention on medication adherence and reintegration to normal life in patients undergoing coronary artery bypass graft in selected hospitals in Tehran.

Design
A randomized, double-blind, clinical trial involving 72 patients will be conducted using block randomization of sealed, opaque envelopes. Data analysis will be performed using SPSS software version 22.

Settings and conduct
The method of intervention is as follows: On the day before the surgical procedure, while admitted to the cardiac surgery ward at Imam Khomeini, Tehran Heart Center, Shariati, Sina, and Baharloo hospitals in Tehran, the researcher will interact with the patient. The purpose of the research is to emphasize all ethical considerations and then complete the demographic information form, medication adherence questionnaire, and the reintegration to normal life. The designed clips are orally explained to the patient and handed over to them. One and three months later, contact is made with the patient again and the questionnaires are completed.

Participants/Inclusion and exclusion criteria
Inclusion criteria include age between 40 and 70 years, planned first-time coronary artery bypass graft (CABG) surgery without accompanying interventions, stable hemodynamic status before surgery as determined by the treating physician, the ability to read and understand Persian language, access to a smartphone or tablet, and written informed consent. Exclusion criteria include the presence of other cardiac issues (such as valve problems, congenital defects, cardiomyopathy, and...).

Intervention groups
Intervention includes a set of three digital multimedia, narrative-based videos. The control group receives only routine hospital care.

Main outcome variables
Medication Adherence - Reintegration to normal life

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20260110068597N1**
Registration date: **2026-01-22, 1404/11/02**
Registration timing: **registered_while_recruiting**

Last update: **2026-01-22, 1404/11/02**
Update count: **0**

Registration date
2026-01-22, 1404/11/02

Registrant information
Name
Maedeh Nasirifar
Name of organization / entity
Country
Iran (Islamic Republic of)
Phone
+98 31 3260 6487
Email address
maedeh73nasiri@gmail.com

Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2026-01-21, 1404/11/01
Expected recruitment end date
2026-03-16, 1404/12/25
Actual recruitment start date
empty
Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigating the Effect of Digital Storytelling on Medication Adherence and Reintegration to Normal Life in Patients Undergoing Coronary Artery Bypass Graft

Public title

Investigating the Effect of Digital Storytelling on Medication Adherence and Reintegration to Normal Life in Patients Undergoing Coronary Artery Bypass Graft

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

CABG surgery procedure for the first time without associated interventions. Stable hemodynamic condition prior to surgery as diagnosed by the treating physician The ability to read and understand the Persian language Access to a smartphone or tablet written informed consent

Exclusion criteria:

Suffering from other heart problems (such as valve issues, congenital defects, cardiomyopathy, and...)

Age

From **40 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **72**

Randomization (investigator's opinion)

Randomized

Randomization description

Random allocation of patients to Group A (intervention) and Group B (control) using paired blocks. Random sequencing by an independent individual from the sampling process. Randomization Tool: matte and sealed envelopes

Blinding (investigator's opinion)

Single blinded

Blinding description

Blinding of participants in the intervention or control group will be carried out through matte and sealed envelopes.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research Ethics Committees of School of Nursing and Midwifery & Rehabilititation Tehran University o

Street address

School of Nursing and Midwifery Tehran Medical Sciences, Dr Mirkhani Ave, Tohid Sq

City

Tehran

Province

Tehran

Postal code

1419733171

Approval date

2026-01-08, 1404/10/18

Ethics committee reference number

IR.TUMS.FNM.REC.1404.234

Health conditions studied

1

Description of health condition studied

Coronary Artery Bypass Graft

ICD-10 code

I25.7

ICD-10 code description

Atherosclerosis of coronary artery bypass graft(s) and coronary artery of transplanted heart with angina pectoris

Primary outcomes

1

Description

The drug adherence score obtained from the Medication Adherence Report Scale-5 questionnaire can be measured before and after the intervention. A score of 8 indicates high drug adherence, a score between 6 and 7 indicates moderate adherence, and a score below 6 indicates low adherence.

Timepoint

Before the intervention begins, one month after the intervention starts, and three months later

Method of measurement

Medication Adherence Report Scale-5 questionnaire

2

Description

Reintegration normal living with a score below 60 indicates a weak return, a score between 60 and 99 suggests a relative return, and a score of 100 signifies a complete return to normal living.

Timepoint

Before the intervention begins, one month after the intervention starts, and three months later

Method of measurement
Reintegration to Normal Living Index

Secondary outcomes

1

Description
Recurrence Assessment: Evaluating the presence or absence of recurrence within three months of discharge through telephone follow-up and medical record review.
Timepoint
Three months after discharge
Method of measurement
Through telephone follow-up and medical record review

Intervention groups

1

Description
Intervention Group: The intervention consists of a series of three digital, narrative-based multimedia videos developed with the collaboration of a team comprising cardiac surgery specialists, clinical nurses, and peer patients with similar conditions who have experienced the surgery and rehabilitation. The clips are edited under scientific supervision by the research team and then validated for credibility by several members of the nursing academic faculty. Each video is five to ten minutes long and covers themes such as medication adherence, recognizing warning signs, gradual return to daily activities, rehabilitation, social support, and self-care improvement. The video narratives are structured using the real-life experiences of discharged patients and incorporate multimedia elements (image, subtitle text, and background music).The intervention process involves the researcher establishing contact with the patient on the day before surgery while they are admitted to the cardiac surgery ward. The purpose of the research is emphasized, along with all ethical considerations, and then demographic information, medication adherence questionnaires, and a form for reintegration to normal life are completed. The designed clips are orally explained to the patient, and a number of clips featuring experiences of patients who have previously undergone the procedure are handed over to them.Post-surgery, two days after the patient is transferred from the intensive care unit to the cardiac surgery ward and with the physician's permission to begin the intervention and use a mobile phone or tablet, the researcher visits the patient and reiterates the steps to the patient and their companion. Two relevant clips are delivered, emphasizing that each clip be viewed at least twice.
Category
Rehabilitation

2

Description
Control group: The control group receives only routine hospital care, including oral education and standard discharge brochures. No additional digital content is provided to them.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Tehran Heart Center
Full name of responsible person
Maedeh Nasirifar
Street address
North Kargar Ave, Jalal Al-Ahmad Hwy
City
Tehran
Province
Tehran
Postal code
1411713138
Phone
+98 21 8802 9600
Email
thc@tums.ac.ir

2

Recruitment center
Name of recruitment center
Shariati hospital
Full name of responsible person
Maedeh Nasirifar
Street address
North Kargar, Three-way Jalal Al-Ahmad in front of the Faculty of Economics
City
Tehran
Province
Tehran
Postal code
141173135
Phone
+98 21 8490 1000
Email
shariatihosp@tums.ac.ir

3

Recruitment center
Name of recruitment center
Sina Hospital
Full name of responsible person
Maedeh Nasirifar
Street address
Imam Khomeini Ave, Hassan Abad Sq
City
Tehran
Province
Tehran

Postal code
1136746911
Phone
+98 21 6634 8500
Email
hosp_sina@sina.tums.ac.ir

4

Recruitment center
Name of recruitment center
Imam Khomeini Hospital
Full name of responsible person
Maedeh Nasirifar
Street address
East Chamran Hwy, East Bagerkhanern Ave
City
Tehran
Province
Tehran
Postal code
۱۴۱۹۷۳۳۱۴۱
Phone
+98 21 6658 1625
Email
Imamhospital@tums.ac.ir

5

Recruitment center
Name of recruitment center
Baharloo Hospital
Full name of responsible person
Maedeh Nasirifar
Street address
Rahahan Sq, Behdari Ave
City
Tehran
Province
Tehran
Postal code
1339973111
Phone
+98 21 5565 8500
Email
baharloo@sina.tums.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Tehran University of Medical Sciences
Full name of responsible person
Dr. Ramin Kordi
Street address
Central Organization of TUMS, Qods Ave., Keshavarz Blvd.
City
Tehran
Province
Tehran
Postal code
141765383761
Phone
+98 21 8163 3698
Email
vcr@tums.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Tehran 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
Tehran University of Medical Sciences
Full name of responsible person
Maedeh Nasirifar
Position
Master Student Medical-Surgical Nursing
Latest degree
Master
Other areas of specialty/work
Nursery
Street address
School of Nursing and Midwifery Tehran Medical Sciences, Dr Mirkhani Ave, Tohid Sq
City
Tehran
Province
Tehran
Postal code
1419733171
Phone
+98 21 6692 7171
Email
maedeh73nasiri@gmail.com

Person responsible for scientific inquiries

Contact
Name of organization / entity
Tehran University of Medical Sciences
Full name of responsible person
Dr Pegah Matourypour
Position

Associate professor

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

Street address

School of Nursing and Midwifery Tehran Medical Sciences, Dr Mirkhani Ave, Tohid Sq

City

Tehran

Province

Tehran

Postal code

1419733171

Phone

+98 21 6692 7171

Email

p-matourypour@sina.tums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Maedeh Nasirifar

Position

Master Student Medical-Surgical Nursing

Latest degree

Master

Other areas of specialty/work

Nursery

Street address

School of Nursing and Midwifery Tehran Medical Sciences, Dr Mirkhani Ave, Tohid Sq

City

Tehran

Province

Tehran

Postal code

1419733171

Phone

+98 21 6692 7171

Email

maedeh73nasiri@gmail.com

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