Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

The Effectiveness of Mobile Phone–Based Microlearning Emotion-Focused Psychotherapy on Death Anxiety and Emotion Regulation among Patients Hospitalized in Cardiac Intensive Care Units

Protocol summary

Study aim
Determining the Effectiveness of Mobile Phone–Based Microlearning Emotion-Focused Psychotherapy on Death Anxiety and Emotion Regulation among Patients Hospitalized in Cardiac Intensive Care Units

Design
A single-blind, parallel-group, quasi-experimental study with a control group.

Settings and conduct
Cardiac Intensive Care Units (CCUs) of selected hospitals in Shiraz, Iran

Participants/Inclusion and exclusion criteria
Inclusion Criteria Adults aged 40–70 years hospitalized in the CCU, who are clinically stable, able to read and communicate in Persian, have access to and can use a smartphone with internet, are willing to participate and provide written informed consent, and are not enrolled in similar educational programs. Exclusion Criteria... Withdrawal from the study; occurrence of severe stressful events leading to PTSD; moderate-to-severe cognitive impairment (MMSE < 24), delirium, or other conditions preventing participation; significant visual or hearing impairment; clinical deterioration requiring rehospitalization; or failure to complete two consecutive educational sessions.

Intervention groups
Intervention group: Participants in the intervention group will receive an Emotion-Focused Therapy (EFT) program based on the protocols developed by Greenberg et al. (62) and Simmons et al. (63), delivered using a mobile phone–based microlearning approach. The intervention will last for three weeks and will consist of daily 10–20-minute educational video sessions. The standardized educational videos will be uploaded to a mobile application, allowing participants to access the microlearning content at their convenience. Control group: Participants in the control group will receive no intervention during the study period.

Main outcome variables
Death Anxiety and Emotion Regulation

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20251109067926N2**
Registration date: **2026-06-30, 1405/04/09**
Registration timing: **prospective**

Last update: **2026-06-30, 1405/04/09**
Update count: **0**

Registration date
2026-06-30, 1405/04/09

Registrant information

Name
Mohammad Hadi Ayati

Name of organization / entity

Country
Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2026-08-06, 1405/05/15

Expected recruitment end date
2026-10-07, 1405/07/15

Actual recruitment start date
empty

Actual recruitment end date
empty
Trial completion date
empty

Scientific title
The Effectiveness of Mobile Phone–Based Microlearning Emotion-Focused Psychotherapy on Death Anxiety and Emotion Regulation among Patients Hospitalized in Cardiac Intensive Care Units

Public title
The Effectiveness of Emotion-Focused Psychotherapy in Patients with Cardiovascular Disease
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria:
Ability to read and write at a basic level to comprehend the educational content Ability to understand and communicate in Persian Age between 40 and 70 years Access to a smartphone with an active internet connection and the ability to use it Not participating concurrently in any other similar educational programs Willingness to participate in the study and provide written informed consent Hospitalization in the Cardiac Intensive Care Unit (CCU) Clinically stable condition allowing participation in brief educational activities
Exclusion criteria:
Withdrawal of consent or unwillingness to continue participation in the study at any point during the research. Experience of a highly stressful life event, either recently or during the study period, resulting in Post-Traumatic Stress Disorder (e.g., the loss of a close family member), as determined by self-report, family report, or available health records. Presence of moderate to severe dementia or a Mini-Mental State Examination (MMSE) score < 24 (or an equivalent validated cognitive assessment), as determined by self-report, family report, or available health records. Presence of delirium or any medical condition that precludes participation in mobile-based educational interventions. Visual or hearing impairment that prevents participation in the interactive educational activities. Clinical deterioration during the intervention requiring rehospitalization. Failure to view two consecutive educational sessions provided during the intervention.
Age
From **40 years** old to **70 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **84**
Randomization (investigator's opinion)
Not randomized
Randomization description
Blinding (investigator's opinion)
Single blinded
Blinding description
In this study, blinding will be implemented such that the research assistant responsible for data collection and the statistician responsible for data analysis will remain blinded to group allocation until the completion of the study.
Placebo
Not used
Assignment
Parallel
Other design features
This study is designed as a single-blind, parallel-group, quasi-experimental study with a control group.

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Research Ethics Committee of the Schools of Nursing and Midwifery and Health Management and Medical
Street address
Vice Chancellor for Research, 7th Floor, Central Building of Shiraz University of Medical Sciences, Adjacent to the Red Crescent Society, Zand Boulevard, Shiraz, Iran.
City
Shiraz
Province
Fars
Postal code
71348-14336
Approval date
2026-05-23, 1405/03/02
Ethics committee reference number
IR.SUMS.NUMIMG.REC.1405.018

Health conditions studied

1

Description of health condition studied
Cardiovascular diseases
ICD-10 code
I51
ICD-10 code description
Complications and ill-defined descriptions of heart disease

Primary outcomes

1

Description
Death Anxiety
Timepoint

At baseline (before the intervention), immediately after the intervention, and one month after the intervention.

Method of measurement

Templer Death Anxiety Scale - DAS

2

Description

Emotion Regulation

Timepoint

At baseline (before the intervention), immediately after the intervention, and one month after the intervention.

Method of measurement

Emotion Regulation Questionnaire - ERQ

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Participants allocated to the intervention group will receive an **Emotion-Focused Therapy (EFT)** program based on the protocols developed by Greenberg et al. (62) and Simmons et al. (63), delivered using a **mobile phone–based microlearning approach**. The intervention will be administered over **three weeks** and will consist of **daily 10–20-minute educational video sessions**.The educational content will be developed based on the EFT protocol and reviewed by two faculty members with doctoral degrees in nursing and expertise in psychiatric and mental health nursing. The electronic learning materials will be prepared according to the standards of the Virtual School and E-Learning Center of Excellence of Shiraz University of Medical Sciences and will undergo instructional design, quality assurance, and technical review before implementation. The videos will be narrated and edited using Camtasia software and uploaded to a dedicated mobile application in MP4 format.Before the intervention begins, participants will receive a brief individual orientation session on using the application and accessing the microlearning content. Technical support contact information will also be provided. The application will be designed to allow sequential access to the educational sessions, بحیث participants can view each session only after completing the previous one. The application will also record participants' viewing statistics and, following completion of each video, present two short questions to assess comprehension of the session content. To minimize contamination, downloading or sharing of the educational videos will not be permitted, and the materials will be accessible only within the application.Consistent with the theoretical framework proposed by Greenberg et al., the intervention is designed to facilitate the identification, processing, expression, and regulation of emotions. To reinforce learning, each session will begin with a brief review of the previous session. Participants will be able to submit questions, share their experiences, and communicate with the research team through the application's discussion platform. In addition, brief telephone follow-up calls (1–2 minutes) will be conducted at predetermined intervals throughout the intervention period to promote adherence and reduce attrition.Outcome measures will be assessed at **baseline, immediately after completion of the intervention, and one month after the intervention** in both the intervention and control groups. The collected data will be entered into **SPSS** software for statistical analysis.**Control group:** Participants in the control group will receive **routine care only** and will not receive any components of the EFT microlearning intervention during the study period.

Category

Behavior

2

Description

Control group: Participants in the control group will receive routine hospital care and will not receive any components of the study intervention during the trial. However, in accordance with ethical principles, the complete educational materials will be made available to participants in the control group after completion of the study and analysis of the study results

Category

Behavior

Recruitment centers

1

Recruitment center

Name of recruitment center

Cardiac Care Units (CCUs) of selected hospitals affiliated with Shiraz University of Medical Science

Full name of responsible person

Sorur Javanmardifard

Street address

School of Nursing and Midwifery, Namazi Square, Zand Boulevard, Shiraz, Iran

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Province

Fars

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7193613119

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+98 71 3647 4258

Email

soror.javanmardi@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shiraz University of Medical Sciences

Full name of responsible person

Hamid Mohammadi

Street address
7th Floor, Central Administration Building, Shiraz University of Medical Sciences, Adjacent to the Red Crescent Society, Zand Boulevard, Shiraz, Iran

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vcrdep@sums.ac.ir

Grant name

Grant code / Reference number

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

Title of funding source
Shiraz 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
Shiraz University of Medical Sciences

Full name of responsible person
Sorur Javanmardifard

Position
Assistant Professor

Latest degree
Ph.D.

Other areas of specialty/work
Nursery

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School of Nursing and Midwifery, Namazi Square, Zand Boulevard, Shiraz, Iran

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Position
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Other areas of specialty/work
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available

Study Protocol
Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

The primary study outcomes will be made publicly available.

When the data will become available and for how long

Access will begin 6 months after publication of the study results.

To whom data/document is available

Researchers and individuals affiliated with academic institutions

Under which criteria data/document could be used

The data will be provided for informational purposes only.

From where data/document is obtainable

The data are available upon request via email at soror.javanmardi@yahoo.com

What processes are involved for a request to access data/document

The data are available upon request via email at soror.javanmardi@yahoo.com

Comments