

How effective is a preparatory video in reducing fear and anxiety among patients undergoing magnetic resonance imaging?

Submission date 21/07/2026	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 27/07/2026	Overall study status Completed	☐ Statistical analysis plan ☐ Results
Last Edited 24/07/2026	Condition category Other	☐ Individual participant data ☒ Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific, Public, Principal investigator

Contact name
Prof Moawia Gameraddin

Contact details
King Mohammed Bin Abdulaziz
Alrabawa
Al-Madinah
Saudi Arabia
42353
+966 (0)534821130
gameraldinm@gmail.com

Additional identifiers

Study information

Scientific Title
Effectiveness of video-based preparation in reducing anxiety and improving outcomes in mri: a prospective experimental study

Study objectives

Primary objective:

To evaluate the effectiveness of a video-based educational preparation in reducing anxiety among adult patients undergoing magnetic resonance imaging (MRI) compared with standard verbal preparation

Secondary objectives:

1. To compare patient cooperation during MRI between the intervention and control groups
2. To assess patient movement during MRI scanning
3. To evaluate the need for repeat MRI examinations due to patient movement
4. To assess patients' understanding of the MRI procedure and the clarity of the preparation provided
5. To evaluate patients' perceptions of the educational video, including its helpfulness, effect on confidence, and understanding of the MRI examination

Ethics approval required

Ethics approval required

Ethics approval(s)

1. Approved 26/02/2026, The Research Ethics Committee at King Khalid University (HAPO-06-B-001) (King Khalid University, Abha, 61421, Saudi Arabia; 0172417484; ecm@kku.edu.sa), ref: KKU-60-2026-1
2. Approved 26/02/2026, The Research Ethics Committee at King Khalid University (HAPO-06-B-001) (King Khalid University , Abha, Aseer, Kingdom of Saudi Arabia., Abha, 61421, Saudi Arabia; 0172417484.; ecm@kku.edu.sa), ref: KKU-60-2026-1

Primary study design

Interventional

Allocation

Randomized controlled trial

Masking

Blinded (masking used)

Control

Active

Assignment

Parallel

Purpose

Health services research

Study type(s)**Health condition(s) or problem(s) studied**

Magnetic resonance imaging (MRI)-related anxiety in adult patients undergoing MRI examinations

Interventions

Intervention arm 1 (experimental group):

Video-based educational preparation before MRI:

Participants received a standardized educational video immediately before undergoing magnetic resonance imaging (MRI). The video explained the MRI procedure, scanner environment, examination duration, expected acoustic noise, patient positioning, contraindications, and the importance of remaining still throughout the examination. Following the video, participants proceeded with the MRI examination and completed the study questionnaires, as follows:

Experimental group:

Participants viewed a standardized educational video immediately before the MRI. The video explained the MRI procedure, expected noise, examination duration, patient positioning, contraindications, and the importance of remaining still during image acquisition. Following the intervention, participants underwent MRI and completed study questionnaires.

Control group:

Participants received routine verbal preparation according to standard clinical practice before MRI without viewing the educational video. They subsequently underwent MRI and completed the same study assessments.

Method of randomization:

Participants were randomly allocated to either the intervention or control group using a computer-generated allocation sequence. Allocation concealment was ensured using sequentially numbered, sealed, opaque envelopes, which were opened only after participant enrolment.

Intervention Type

Behavioural

Primary outcome(s)

1. MRI-related anxiety measured using Visual Analogue Scale (VAS) at immediately before and immediately after MRI examination

Key secondary outcome(s)

Completion date

02/04/2026

Eligibility

Key inclusion criteria

1. Adults aged 20 years or older
2. Patients scheduled to undergo a magnetic resonance imaging examination at the study site
3. Able to understand the study information and the educational video
4. Able and willing to provide informed consent
5. Able to complete the study questionnaire before and/or after the MRI examination

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

20 Years

Upper age limit

60 Years

Sex

All

Total final enrolment

231

Key exclusion criteria

1. Patients younger than 20 years or older than 60 years (if these were the predefined age limits)
2. Patients unable to provide informed consent
3. Patients with cognitive impairment or communication difficulties that prevented understanding of the educational video or completion of the questionnaire
4. Patients requiring emergency MRI examinations where there was insufficient time to receive the preparatory intervention
5. Patients who declined participation in the study
6. Patients unable to complete the study questionnaire

Date of first enrolment

18/03/2026

Date of final enrolment

27/03/2026

Locations

Countries of recruitment

Saudi Arabia

Sponsor information

Organisation

King Khalid University

ROR

<https://ror.org/052kwzs30>

Funder(s)

Funder type

Funder Name

Deanship of Scientific Research, King Khalid University

Alternative Name(s)

Deanship of Scientific Research at King Khalid University Saudi Arabia, Deanship of Scientific Research at King Khalid University, Deanship of Scientific Research, Scientific Research Deanship, ,

Funding Body Type

Government organisation

Funding Body Subtype

Research institutes and centers

Location

Saudi Arabia

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available