Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Evaluating the in-person and virtual education Program based on the Extended Parallel Process Model (EPPM) on encouraging teachers over 50 years old for colorectal cancer screening

Protocol summary

Study aim
Evaluation of a virtual and in-person education on encouraging to FIT test doing

Design
The present experimental study has three groups before and after . A list of teachers is received and eligible individuals are selected by telephone. In the next stage, 50 eligible people in each group are randomly assigned to the three aforementioned groups. Then, pre-test questionnaires are completed and after entering the SPSS software, initial analyses are performed, educational needs are identified and a curriculum plan based on model structures is developed. It is anticipated that 4-6 training sessions will be implemented in person for the in-person training group. Also, educational content in the form of clips, short educational films, and podcasts is prepared for the virtual education group and sent to them via social media (ETA and WhatsApp).

Settings and conduct
The educational intervention in the face-to-face group will be conducted in four 75-90 minute sessions . In the virtual group, educational content via social networks (WhatsApp and ETA).

Participants/Inclusion and exclusion criteria
Inclusion criteria: Not having undergone a fit test in the last three years, being over 50 years old, willing to participate in study. Exclusion criteria: having digestive disorders and colon cancer.

Intervention groups
In the intervention group, an in-person educational program on colon cancer and its importance with the aim of encouraging people to take the fit test, in the virtual group through the ETA and WhatsApp channels, providing educational content according to the goals of the face-to-face group, in the control group, no intervention until the post-test, and then, in order to comply with ethics, providing educational content similar to the virtual group

Main outcome variables
FIT: Fecal Immunochemical Test

General information

Reason for update

Acronym
EPPM

IRCT registration information
IRCT registration number: **IRCT20180703040316N1**
Registration date: **2025-11-29, 1404/09/08**
Registration timing: **retrospective**

Last update: **2025-11-29, 1404/09/08**
Update count: **0**

Registration date
2025-11-29, 1404/09/08

Registrant information

Name
Mostafa Nasirzadeh

Name of organization / entity

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Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2025-07-23, 1404/05/01

Expected recruitment end date
2025-08-23, 1404/06/01

Actual recruitment start date

2025-07-23, 1404/05/01

Actual recruitment end date

2025-08-23, 1404/06/01

Trial completion date

2025-10-22, 1404/07/30

Scientific title

Evaluating the in-person and virtual education Program based on the Extended Parallel Process Model (EPPM) on encouraging teachers over 50 years old for colorectal cancer screening

Public title

The impact of in-person and virtual education Program for FIT screening

Purpose

Screening

Inclusion/Exclusion criteria

Inclusion criteria:

Failure to perform a fit test in the last three years Age over 50 years Willingness to participate in research

Exclusion criteria:

Suffering from digestive disorders Having colon cancer

Age

From **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Data analyser

Sample size

Target sample size: **50**

Actual sample size reached: **48**

Randomization (investigator's opinion)

Randomized

Randomization description

The randomization unit in this study was the individual (teachers over 50 years of age). Simple randomization was used to assign participants to the intervention and control groups. The allocation sequence was prepared by an independent researcher using a random number table in Excel software. The allocation list was placed in opaque, numbered envelopes, and when each individual entered the study, the envelope was opened and the individual was allocated to the designated group. This method ensured allocation concealment.

Blinding (investigator's opinion)

Single blinded

Blinding description

Participants in the in-person and virtual intervention groups and the instructor were also aware of the groups. However, the statistical analysis specialist was not aware of the groups. In the software, the names of the groups were identified by numbers.

Placebo

Not used

Assignment

Parallel

Other design features

Based on the estimated sample size for the three in-person, virtual, and control intervention groups (50 people in each group), eligible individuals will be randomly assigned to the three aforementioned groups. In order to avoid differences in this behavior in the three groups and to ensure that the groups are homogeneous, the selection of each individual for each group will be in order from the beginning of the organized list. For example, the first person will enter the in-person intervention group, the second person will enter the virtual intervention group, and the third person will enter the control group. Then, pre-test questionnaires are completed and after entering the SPSS software, initial analyses are performed, educational needs are identified, and a curriculum plan based on model structures is developed. It is anticipated that 4-6 in-person training sessions (Table 2) will be conducted for the in-person training group. Also, for the virtual training group, educational content in the form of clips, short educational films, and podcasts will be prepared and sent to them via social media (ETA and WhatsApp). We will communicate with teachers online twice a week through the aforementioned virtual networks to conduct interactions and questions and answers. Immediately after completing the training program, screening intention will be assessed, and two months later, post-test completion and screening status will be compared in the three groups. To comply with research ethics, those whose fit test is positive will be consulted in person for colonoscopy, and educational content prepared for the virtual group will also be sent to the control group after the study ends (post-test completion).

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

The ethical committee of Rafsanjan University of Medical Sciences

Street address

Emam Ali Blv

City

Rafsanjan

Province

Kerman

Postal code

7719779136

Approval date

2025-01-04, 1403/10/15

Ethics committee reference number

IR.RUMS.REC.1403.157

Health conditions studied

1

Description of health condition studied

Colon with rectum cancer

ICD-10 code
C19

ICD-10 code description
Malignant neoplasm of rectosigmoid junction

Primary outcomes

1

Description
intention

Timepoint
immediately

Method of measurement
Research-made Questionnaire

2

Description
FIT: Fecal Immunochemical Test

Timepoint
2 months after education

Method of measurement
Medical school laboratory confirmation sheet or health center report

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: In-person training: The training program was held in four 75-90 minute sessions using lecture, group discussion, and question and answer methods with the goals of explaining the importance of the disease, screening, and sensitizing the patient.

Category
Behavior

2

Description
Intervention group: Virtual education: In this group, educational content including films, podcasts, and pamphlets were provided to participants via social networks (WhatsApp and ETA) with the same goals as in-person meetings.

Category
Behavior

Recruitment centers

1

Recruitment center

Name of recruitment center
Rafsanjan Health Center

Full name of responsible person
Narges Moenfar

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Rafsanjan University of Medical Sciences

Full name of responsible person
Mohammad Reza Dehghani

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Grant name

Grant code / Reference number

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

Title of funding source
Rafsanjan 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
Rafsanjan University of Medical Sciences

Full name of responsible person
Mostafa Nasirzadeh

Position
Associate Professor

Latest degree
Ph.D.

Other areas of specialty/work
Health Promotion

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Person responsible for scientific inquiries

Contact

Name of organization / entity
Rafsanjan University of Medical Sciences

Full name of responsible person
Mostafa NAsirzadeh

Position
faculty member

Latest degree
Ph.D.

Other areas of specialty/work
Health Promotion

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Person responsible for updating data

Contact

Name of organization / entity
Rafsanjan University of Medical Sciences

Full name of responsible person
Mostafa Nasirzadeh

Position
faculty member

Latest degree
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Other areas of specialty/work
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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
Not applicable

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Not applicable

Title and more details about the data/document

Article/paper

When the data will become available and for how long

from 2026

To whom data/document is available

The general public and researchers

Under which criteria data/document could be used

To benefit from the results - conduct further research

From where data/document is obtainable

The journal and index in which the article is published and viewed.

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

Search on Google or in a magazine

Comments