

Clinical Trial Protocol

Iranian Registry of Clinical Trials

13 Jul 2026

The effect of educational intervention based on Freire's educational model on the digital health literacy (DHL) of health care workers in Bojnord city

Protocol summary

Study aim

Determining the effect of educational intervention based on Freire's model on electronic health literacy of health care workers in Bojnord city

Design

All health care workers working in comprehensive health service centers are included in the study by a simple random method

Settings and conduct

The health care workers of the health centers of Bojnord city will be placed in one of the intervention and control groups with a simple random method, and the demographic and electronic health literacy questionnaires will be completed and the data will be recorded and analyzed using the SPSS 24 software. and the structure and stages of the Freire model, the training program will be designed and adjusted by a health education specialist and a computer engineer in 5 face-to-face sessions along with the presentation of 8 virtual training packages, and will be implemented by a health education specialist at each stage. Then the health care workers will be followed up immediately and two months later, and the electronic health literacy questionnaire will be completed for them. Finally, the results will be compared in the intervention and control groups.

Participants/Inclusion and exclusion criteria

Health care workersThe criterion for inclusion in the study is the official and corporate health care workers working in the bases covered by comprehensive health service centers in Bojnord city, with the informed and voluntary consent of the health care workers. having more than 2 absences of health care workers of Bojnord city in the training classes or the refusal of the care workers to continue working in the research project

Intervention groups

The effect of educational intervention on e-health literacy of health care workers

Main outcome variables

E-health literacy, educational intervention, skill level in using the Internet

General information

Reason for update

Acronym

DHL

IRCT registration information

IRCT registration number: **IRCT20231023059818N1**

Registration date: **2024-01-04, 1402/10/14**

Registration timing: **retrospective**

Last update: **2024-01-04, 1402/10/14**

Update count: **0**

Registration date

2024-01-04, 1402/10/14

Registrant information

Name

Mehdi khankolabi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 58 3151 3440

Email address

m.khankolabi@nkums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-10-29, 1402/08/07

Expected recruitment end date

2023-11-28, 1402/09/07

Actual recruitment start date

empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of educational intervention based on Freire's educational model on the digital health literacy (DHL) of health care workers in Bojnoord city

Public title
The effect of educational intervention on e-health literacy of health care workers

Purpose
Education/Guidance

Inclusion/Exclusion criteria
Inclusion criteria:
 All the official and corporate health care workers working in the bases covered by comprehensive health service centers in Bojnord Voluntariness of health care workers With the informed consent of health care providers
Exclusion criteria:
 Having more than 2 absences of health care workers of Bojnord city in training classes Caregivers' refusal to continue working in the research project

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **86**

Randomization (investigator's opinion)
Randomized

Randomization description
All attached and non-attached health centers under the coverage of comprehensive urban health service centers will be included in the study and will be placed in one of the intervention and control groups using a simple random method. (Due to the lack of transfer of educational information of the caregivers in the intervention and control groups to each other, the bases were randomly selected)

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" North Khorasan University of Medical Sciences

Street address

Arkan Road, Faculty of Health

City

Bojnoord

Province

North Khorasan

Postal code

74877-94149

Approval date

2023-10-22, 1402/07/30

Ethics committee reference number

IR.NKUMS.REC.1402.088

Health conditions studied

1

Description of health condition studied

Electronic health literacy in health care workers

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Digital health literacy

Timepoint

Before the educational interventions - the end of the educational interventions - two months after the end of the educational interventions

Method of measurement

Questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: For the intervention group, based on the results of the statistical analysis of the questionnaires, which is actually an educational needs assessment, and also based on the structure and stages of the Freire model, the training program will be presented by a health education specialist and a computer engineer in 5 face-to-face sessions (theory and practical) along with 8 virtual training packages will be designed and organized and will be implemented by health education specialists at each stage. These 5 face-

to-face sessions are in accordance with the stages and structure of Freire's model and are as follows: 1- Conversation 2- Awareness 3- Thinking action 4- Transformation 5- Critical awareness in the form of group discussion, reflection, role playing, experimental project and case study. Model structures will be discussed.

Category

Behavior

2**Description**

Control group: no intervention will be done for the control group.

Category

Behavior

Recruitment centers**1****Recruitment center****Name of recruitment center**

Health centers of Bojnourd University of Medical Sciences

Full name of responsible person

Masoumeh Ahmadzadeh

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Bojnourd University of Medical Sciences

Full name of responsible person

Vice Chancellor for Research & Technology

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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

Bojnourd 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**

Bojnourd University of Medical Sciences

Full name of responsible person

Mehdi Khanklabi

Position

Faculty of Health

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**

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Full name of responsible person

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is 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

Not applicable

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

The research results will be published as an article. This research is only educational interventions for healthy people.

When the data will become available and for how long

The research results will be sent as an article for acceptance and publication to relevant journals for publication.

To whom data/document is available

Health decision makers and policy makers

Under which criteria data/document could be used

For further studies

From where data/document is obtainable

Contact with the researchers

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

Send to the researchers

Comments

Person responsible for updating data

Contact

Name of organization / entity

Bojnourd University of Medical Sciences

Full name of responsible person

Mehdi Khankolabi

Position

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Latest degree

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Other areas of specialty/work

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