

Clinical Trial Protocol

Iranian Registry of Clinical Trials

05 Aug 2026

Investigating the effect of an educational mobile application on the learning of medical interns in general surgery ward

Protocol summary

Study aim

Determining the effect of using mobile phone-based educational aid software on the learning rate of medical interns in the surgery department

Design

A clinical trial with a control group, with parallel groups, without blinding, without randomization, on 140 general surgery interns

Settings and conduct

In general surgery groups of Mashhad teaching hospitals, medical internship students are enrolled in the study by census method.

Participants/Inclusion and exclusion criteria

Interns entering the surgery department who agree to participate in the plan
Interns entering the surgery department who have a smart mobile phone with the ability to install the application
Not agreeing to participate in the plan
Failure to attend the pretest or posttest
Not having a smart phone
Guest interns
Interns who have completed the general surgery course more than once
Students who did not want to continue the project

Intervention groups

The interns who entered the general surgery course in the first period of the study, pass the course without using the mentioned software and form the control group of the study. In the intervention group, the virtual surgery training application is used among the interns of the surgery department.

Main outcome variables

At the beginning and end of each course, students' learning rate of different subjects is measured by pretest-posttest method, and the scores obtained in the two groups will be considered as the main outcome of the study.

General information

Reason for update

Acronym

Surgilearn

IRCT registration information

IRCT registration number: **IRCT20230820059194N1**

Registration date: **2023-09-11, 1402/06/20**

Registration timing: **prospective**

Last update: **2023-09-11, 1402/06/20**

Update count: **0**

Registration date

2023-09-11, 1402/06/20

Registrant information

Name

Fariba Zabihi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 51 3342 6624

Email address

zabihi2010@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-09-23, 1402/07/01

Expected recruitment end date

2024-03-20, 1403/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigating the effect of an educational mobile application on the learning of medical interns in general

surgery ward

Public title
Investigating the impact of educational software on the training of surgical interns

Purpose
Education/Guidance

Inclusion/Exclusion criteria
Inclusion criteria:
Interns entering the surgery department who agree to participate in the plan
Interns entering the surgery department who have a smart mobile phone with the ability to install the application
Exclusion criteria:
Not agreeing to participate in the plan
Failure to attend the pretest or posttest
Not having a smart phone
Guest interns
Interns who have completed the general surgery course more than once
Students who did not want to continue the project

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **140**

Randomization (investigator's opinion)
N/A

Randomization description

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 of Mashhad University of Medical Sciences
School of Medicine, Mashhad University of

Street address

School of Medicine, Mashhad University of Medical Sciences, East door of Ferdowsi University, Azadi Sq.

City

Mashhad

Province

Razavi Khorasan

Postal code

9177948564

Approval date

2023-05-10, 1402/02/20

Ethics committee reference number

IR.MUMS.MEDICAL.REC.1401.123

Health conditions studied

1

Description of health condition studied

Educational level in general surgery interns

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Post test score

Timepoint

The end of the study (8 weeks after the start of the intervention)

Method of measurement

Test

2

Description

Pre test score

Timepoint

The beginning of the study (before the start of the intervention)

Method of measurement

Test

Secondary outcomes

1

Description

The level of learning and satisfaction of interns with the software

Timepoint

The end of the study (8 weeks after the start of the intervention)

Method of measurement

Visual analog scale (VAS)

Intervention groups

1

Description

Intervention group: General medicine interns in the general surgery department of Mashhad teaching hospitals who are included in the study by census method. The intervention in this study will be done by installing the software (application) designed for virtual surgery training on the mobile phones of the interns in the intervention group. This software includes four

sections of educational videos, prescription writing, order writing, introduction of commonly used drugs and introduction to surgical tools in the department.

Category

N/A

2

Description

Control group: General medicine interns in the general surgery department of Mashhad teaching hospitals who are included in the study by census method. The interns of the control group will learn clinical training in the department without using the software.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Qaem, Imam Reza, Akbar and Velayat hospitals

Full name of responsible person

Reza Shojaeian

Street address

Qaem Hospital, Department of General Surgery

City

Mashhad

Province

Razavi Khorasan

Postal code

9176699199

Phone

+98 51 3840 0001

Email

shojaeianr@mums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Majid Ghayour Mobarhan

Street address

Research assistant of Mashhad University of Medical Sciences, Ghoreschi BLDG, in front of Daneshgah 18th, Daneshgah AVE

City

Mashhad

Province

Razavi Khorasan

Postal code

9138813944

Phone

+98 51 3841 2081

Email

GhayourM@mums.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Mashhad 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

Mashhad University of Medical Sciences

Full name of responsible person

Fariba Zabihi

Position

resident

Latest degree

Medical doctor

Other areas of specialty/work

General Surgery

Street address

Qaem Hospital, Department of General Surgery

City

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Province

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Postal code

9176699199

Phone

+98 51 3840 0001

Email

zabihi2010@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Reza Shojaeian

Position

Associate Professor

Latest degree

Subspecialist

Other areas of specialty/work

Pediatric surgery

Street address

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Phone

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Email

shojaeianr@mums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Fariba Zabihi

Position

resident

Latest degree

Medical doctor

Other areas of specialty/work

General Surgery

Street address

Ghaem Hospital, surgery department office

City

Mashhad

Province

Razavi Khorasan

Postal code

9176699199

Phone

+98 51 3840 0001

Email

zabihi2010@yahoo.com

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

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

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

Data Dictionary

Not applicable

Title and more details about the data/document

Only part of the data, such as information related to the main outcome or similar, can be shared.

When the data will become available and for how long

Data access will start 6 months after the results are published.

To whom data/document is available

The data will be available to researchers working in academic and scientific institutions and people working in industry if action is taken.

Under which criteria data/document could be used

The conditions of using non-identifiable data or other research achievements will be reviewed on a case-by-case basis after sending an official request by the Faculty of Medical Sciences.

From where data/document is obtainable

Fariba Zabihi, Address: Qaem Hospital, Department of General Surgery Postal Code: 9176699199 Email: zabihi2010@yahoo.com Phone: 0098 9155580743

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

The applicant must send the data request with details via e-mail and the request will be provided to the applicant after it is reviewed by researchers and Mashhad University of Medical Sciences.

Comments