

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Jun 2026

Investigating the effect of training based on video motion graphics on the performance of operating room technology students in cataract surgery using the Phaco method: a randomized clinical trial study

Protocol summary

Study aim

Determining the effect of Educational video motion on the performance of operating room students in cataract surgery using the Phaco method

Design

A clinical trial with a control group, with parallel groups, randomized on 36 students of the 6th and 8th semesters of continuous bachelor's degree in the operating room. Students will be randomly assigned to control and intervention groups.

Settings and conduct

The students will be randomly placed in two control and intervention groups. The performance of both groups as a scrub person in cataract surgery using the Phaco method on the first day (before the intervention) and the last day (after the intervention) of the internship was evaluated by a checklist made by the researcher. The educational video will be provided to the students of the intervention group on the first day to watch it as often as they want. But for the control group, there will be no intervention. The aforementioned checklist is based on the standards of the room field. The action will be compiled. The intervention group will be informed to refrain from sharing the video with other students.

Participants/inclusion and exclusion criteria

Inclusion criteria: Passing the theoretical unit of eye surgery technology. Exclusion criteria: Dissatisfaction to participate in the study, unwillingness to continue cooperation, having work experience in the eye field.

Intervention groups

36 people will participate in this study, 18 of them will be given training based on video motion and 18 of them will not receive any intervention.

Main outcome variables

Comparison of the average performance score of operating room students as a scrub person in cataract surgery using the Phaco method on the first day (before

training) and the last day of training (after training) in the intervention and control groups.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20211204053270N1**

Registration date: **2023-04-08, 1402/01/19**

Registration timing: **registered_while_recruiting**

Last update: **2023-04-08, 1402/01/19**

Update count: **0**

Registration date

2023-04-08, 1402/01/19

Registrant information

Name

Behnaz Fatahi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 83 3442 3202

Email address

behnaz.fatahi.ir@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-02-13, 1401/11/24

Expected recruitment end date

2023-06-27, 1402/04/06

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date
empty

Scientific title
Investigating the effect of training based on video motion graphics on the performance of operating room technology students in cataract surgery using the Phaco method: a randomized clinical trial study

Public title
Investigating the effect of video training on students' performance

Purpose
Education/Guidance

Inclusion/Exclusion criteria
Inclusion criteria:
Passing the theoretical unit of eye surgery technology
Exclusion criteria:
Dissatisfaction to participate in the study, unwillingness to continue cooperation and having a clinical work experience in the field of eye surgery.

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **36**

Randomization (investigator's opinion)
Randomized

Randomization description
Students will be randomly placed in two groups, intervention and control. To allocate the participants in the research groups, a computerized list of random numbers was determined by the statistical consultant for the random allocation of subjects in blocks of two. Then the allocation of the participants is done by a member of the research team who is not related to them with a ratio of 1:1 allocation within the training groups. The sequence of allocation is concealed by sequentially numbered opaque envelopes, and the envelopes are opened only after all initial and baseline assessments of participants have been completed. The sequence of random assignment remains confidential from the evaluators and other research colleagues.

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 kermanshah University of Medical Sciences

Street address

Central Building of Kermanshah University of Medical Sciences, Shahid Beheshti Blvd ,Kermanshah

City

Kermanshah

Province

Kermanshah

Postal code

6715847141

Approval date

2022-12-18, 1401/09/27

Ethics committee reference number

IR.KUMS.REC.1401.403

Health conditions studied

1

Description of health condition studied

The performance of operating room technology students in cataract surgery using the phaco method

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Performance score of operating room technology students in cataract surgery using the phaco method based on the checklist

Timepoint

Measuring the performance of students in cataract surgery at the beginning of the study (before the intervention) and 8 days after watching the educational video

Method of measurement

Checklist made by the researcher

Secondary outcomes

1

Description

Clinical education quality score

Timepoint

After completing the eye internship

Method of measurement

Questionnaire of factors affecting the quality of clinical education, Tazkeri and et al

Intervention groups

1

Description

Intervention group: For the video motion graphics intervention group (combination of filming and graphics) cataract surgery using the Phaco method, the content of which will be prepared based on the references of the operating room field and under the supervision of an experienced ophthalmic surgeon, and includes identifying surgical instruments, setting up the surgical table Preparation of surgical drugs, preparation and drape, delivery of tools to the surgeon during the surgical process, etc., will be provided to them on the first day of the internship and through available communication software such as Soroush, Ita, Telegram. ..) is sent by the researcher for the students to watch it for 8 days without limit of times (until the end of the internship period).

Category

Behavior

2

Description

Control group: no intervention is done for the control group.

Category

Behavior

Recruitment centers

1

Recruitment center

Name of recruitment center

Emam Khomeini Hospital

Full name of responsible person

Behnaz Fatahi

Street address

Naghlieh Ave

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6718743161

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Kermanshah University of Medical Sciences

Full name of responsible person

Vice President of Research and Technology of

Kermanshah University of Medical Sciences

Street address

Building No. 2 of Medical Sciences , Shahid Beheshti Blvd

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Kermanshah

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6714673159

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Email

research_it@kums.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Kermanshah 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

Kermanshah University of Medical Sciences

Full name of responsible person

Behnaz Fatahi

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Nursery

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6717718568

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Person responsible for scientific

inquiries

Contact

Name of organization / entity

Kermanshah University of Medical Sciences

Full name of responsible person

Samira Fatahi

Position

Instructor

Latest degree

Master

Other areas of specialty/work

Nursery

Street address

School of Allied Medical Sciences, Daulatabad Blvd.,
Isar square, Kermanshah

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Person responsible for updating data

Contact

Name of organization / entity

Kermanshah University of Medical Sciences

Full name of responsible person

Behnaz Fatahi

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Nursery

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+98 83 3442 3202

Email

behnaz.fatahi.ir@gmail.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be 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

Undecided - It is not yet known if there will be 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

Undecided - It is not yet known if there will be 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

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