Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Comparing the clinical reasoning grades afterelectronic learning of clinical reasoning in medical students

Protocol summary

Summary

This is a randomized controlled study on the 4th year medical students who will randomly allocate to case (e-learning of clinical reasoning) and control (usual learning) groups. Before and 2 months after e-learning they will examine by clinical reasoning exam (Key feature, Crp, ...). The effect of e-learning will be analyzed by analyzing the pre and post test grades.

General information

Acronym

Clinical reasoning

IRCT registration information

IRCT registration number: **IRCT2013082514466N1**
Registration date: **2013-09-22, 1392/06/31**
Registration timing: **prospective**

Last update:
Update count: **0**

Registration date

2013-09-22, 1392/06/31

Registrant information

Name

Mahnaz Amini

Name of organization / entity

Mashad medical university

Country

Iran (Islamic Republic of)

Phone

+98 51 1859 8818

Email address

aminim@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor of research- Mashhad University of Medical University

Expected recruitment start date

2013-09-23, 1392/07/01

Expected recruitment end date

2014-09-23, 1393/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the clinical reasoning grades afterelectronic learning of clinical reasoning in medical students

Public title

Effect of electronic learning of clinical reasoning on medical students

Purpose

Other

Inclusion/Exclusion criteria

Inclusion citerion: 4th year medical students. Exclusion criteria: unwilling to enter to the study and unable to work with computer.

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **56**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Mashhad University of Medical Sciences
Street address
shahid fakoori st. university campus
City
Mashhad
Postal code
Approval date
2011-09-23, 1390/07/01
Ethics committee reference number
900333

Health conditions studied

1

Description of health condition studied
education of medical students
ICD-10 code
Not Applic
ICD-10 code description
Not Applicable

Primary outcomes

1

Description
Clinical reasoning exams grade
Timepoint
Baseline and after 3 months
Method of measurement
Clinical reasoning exam

Secondary outcomes

empty

Intervention groups

1

Description
Educating clinical reasoning via e-learning
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Mashhad University of Medical Sciences
Full name of responsible person
Street address
City
Mashhad

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Dr Mohsen Tafaghodi
Street address
Daneshgah st., Ghorshi building. Vice chancellor of research
City
Mashhad
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
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Mahnaz Amini
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty