

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Sep 2026

Investigation of the effect of PBL aducation on knowledge and satisfaction of Clinical Biochemsitry PhD students in Advanced Molecular Biology course

Protocol summary

Summary

Teaching in post-graduated students, especially in PhD has many challenges for the teachers. The aim of this study is to investigate the effect of problem-based learning (PBL) education on knowledge and satisfaction of Clinical Biochemsitry PhD students in Advanced Molecular Biology (ADB) course. PBL is designed in half of the course based on the standard protocols. ADB course is divided in two sections and the first section is taught with lecture-based learning and the rest is based on PBL. An inclusion criterion is the PhD students taking the course will be participated in the study. Teaching based on PBL method is the intervention in this study. Primary outcome measures in this study are knowledge and satisfaction.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201110267916N1**

Registration date: **2011-11-08, 1390/08/17**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2011-11-08, 1390/08/17

Registrant information

Name

Reza Meshkani

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 6405 3426

Email address

rmeshkani@tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Tehran University of Medical Sciences

Expected recruitment start date

2011-12-01, 1390/09/10

Expected recruitment end date

2012-12-01, 1391/09/11

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigation of the effect of PBL aducation on knowledge and satisfaction of Clinical Biochemsitry PhD students in Advanced Molecular Biology course

Public title

Problem based learning in molecular biology

Purpose

Other

Inclusion/Exclusion criteria

Students that have taken the molecular biology course

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size
Target sample size: **20**

Randomization (investigator's opinion)
N/A

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Tehran University of Medical Sciences

Street address
Pour Sina Ave

City
tehran

Postal code

Approval date
2011-10-26, 1390/08/04

Ethics committee reference number
90/130/1577/ص

Health conditions studied

1

Description of health condition studied
Molecular biology course

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
Knowlwdge and satisfaction

Timepoint
At the end of term

Method of measurement
Exam and satisfaction questionnare

Secondary outcomes

empty

Intervention groups

1

Description
Problem base learning method

Category
N/A

Recruitment centers

1

Recruitment center

Name of recruitment center
Tehran University of Medical Sciences

Full name of responsible person
Reza Meshkani

Street address
Pour Sina Ave

City
Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Tehran University of Medical Scieces

Full name of responsible person
Dr. Foutohi

Street address
Pour Sina Avve

City
Tehran

Grant name

Grant code / Reference number

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

Title of funding source
Tehran University of Medical Scieces

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
Tehran UNiversity of Medical Sciences

Full name of responsible person

Reza Meshkani

Position

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Other areas of specialty/work

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Reza Meshkani

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Other areas of specialty/work

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Web page address

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