

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Clinical trial comparing the effect of two kinds of written- oral feedback and written feedback in formative assessment to increase arterial blood gases interpretation skill in ICU nurses

Protocol summary

Summary

This is a controlled non-randomized clinical trial that the effect of two kinds of feedback in formative assessment on arterial blood gas interpretation skills in ICU (intensive care unit) nurses will be discussed. The study population were 90 nurses working in ICU on Erfan Hospital (Group one with formative assessment and written and oral feedback), Moheb Hospital (Group two with formative assessment and written feedback) and Bahman Hospital (Control group). The inclusion criteria is working in hospital's intensive units specially CCU or ICU. Exclusion criteria are the absence of regular participations in classes. Arterial blood gas interpretation skills in nurses were measured before and after intervention. Control group (without formative assessment) will be only educated. In group one (formative assessment and written and oral feedback), before educational session a written quiz will be taken from the educated items in previous session. After correcting papers, moreover, the correction will be determined and correct answers will be checked and necessary description will be written for correct answers. Also oral discussion will be held about participant's errors and oral feedbacks will be given to participants. In group two (formative assessment and written feedback) before educational session a written quiz will be taken from the educated items in previous session. After correcting papers, only errors will be determined and correct answers will be checked and all the papers will be returned to participants. Finally recorded data will be analyzed using descriptive and inferential statistical methods with SPSS 16.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015062922979N1**

Registration date: **2015-08-28, 1394/06/06**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-08-28, 1394/06/06

Registrant information

Name

Abolfazl Adhami Bajgiran

Name of organization / entity

Tehran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 2302 1142

Email address

a_adhami@razi.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Tehran University Of Medical Sciences.

Expected recruitment start date

2015-07-04, 1394/04/13

Expected recruitment end date

2015-08-04, 1394/05/13

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Clinical trial comparing the effect of two kinds of written-oral feedback and written feedback in formative

assessment to increase arterial blood gases interpretation skill in ICU nurses

Public title

The effect of formative assessment and feedback on arterial blood gases interpretation skill

Purpose

Other

Inclusion/Exclusion criteria

Inclusion Criteria: 1. Working in one of the intensive care units 2. Intensive unit's nurses with less than 5 years clinical experiences 3. The prior absence or be in an arterial blood gas interpretation training course at the same time 4. Willing to participate in the study. Exclusion criteria: 1. Absence of regular participants in classes 2. Absence of regular participants in tests 3. Withdrawal of participants after starting classes for any reason.

Age

From **26 years** old to **40 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **90**

Randomization (investigator's opinion)

Not randomized

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 Tehran University Of Medical Sciences.

Street address

Ghods St, Keshavarz Blvd, Tehran, Iran.

City

Tehran.

Postal code

Approval date

2015-05-16, 1394/02/26

Ethics committee reference number

IR.TUMS.REC.1394.53

Health conditions studied

1

Description of health condition studied

Comparison of formative assessment and provide appropriate feedback on arterial blood gases interpretation skill.

ICD-10 code

Z76.9

ICD-10 code description

Person encountering health services in unspecified circumstances

Primary outcomes

1

Description

Arterial blood gas interpretation skills

Timepoint

Before and one month after intervention

Method of measurement

27 questions with multiple choices questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

In group of formative assessment with written and oral feedback, before educational session a written quiz will be taken from the educated items in previous session. After correcting papers, moreover, the correction will be determined and correct answers will be checked and necessary description will be written for correct answers. Also oral discussion will be held about participant's errors and oral feedback will be given to participants.

Category

Other

2

Description

In group of formative assessment with written feedback, before educational session a written quiz will be taken from the educated items in previous session. After correcting papers, only errors will be determined and correct answers will be checked and all the papers will be returned to participants.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Erfan hospital

Full name of responsible person
Manager of hospital

Street address
Bakhshayesh St, West Sarv St, Saadat abad, Tehran, Iran

City
Tehran

2

Recruitment center

Name of recruitment center
Bahman hospital

Full name of responsible person
Manager of hospital

Street address
Iranzamin St, Shahrake gharb, Tehran, Iran

City
Tehran

3

Recruitment center

Name of recruitment center
Moheb hospital

Full name of responsible person
Educational Supervisor

Street address
Lida lane, Vanak Square, Tehran, Iran

City
Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice chancellor for research, Tehran University Of Medical Sciences

Full name of responsible person
Masud Yunesian

Street address
Ghods St, Keshavarz Blvd, Tehran, Iran.

City
Tehran

Grant name

Grant code / Reference number

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

Title of funding source
Vice chancellor for research, Tehran 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
Tehran University of Medical Sciences

Full name of responsible person
Abolfazl Adhami Bajgiran

Position
Executive

Other areas of specialty/work

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Person responsible for scientific inquiries

Contact

Name of organization / entity
Tehran University of Medical Sciences

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Maryam Esmaeili

Position
Ph.D.

Other areas of specialty/work

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Position
Master of Science

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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