

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

The effect of clinical audit process on the endo-tracheal and tracheostomy suctioning skills of nurses working in the critical care units (ICU) in AJA hospitals in Tehran

Protocol summary

Summary

This is a randomized controlled trial study that was conducted to evaluate the effect of clinical audit process on the level of tracheostomy and endotracheal tube suctioning skill in nurses and anesthesia technicians working in intensive care units in 2013-14. Research setting was AJA hospitals in Tehran, Iran that had intensive care units and were randomly allocated in two groups of intervention (3 hospitals) and control (3 hospitals). All of nurses and anesthesia technicians working in intensive care units (70 in the intervention group and 65 in the control group) recruited by census method. Inclusion criteria included anesthesia technicians and nursing staff in the intensive care units with an associate degree or higher and at least two months work experience in the intensive care units. Exclusion criteria were unwillingness to maintain in the study and having very good score in the pre-intervention phase. The intervention was conducted via implementation of the five-stage clinical audit in the intervention group. For detection of endotracheal and tracheostomy tube suctioning skill in subjects, pre- and post intervention, the checklist was used.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015080123446N1**
Registration date: **2015-10-05, 1394/07/13**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-10-05, 1394/07/13

Registrant information

Name

Fatemeh Teymouri

Name of organization / entity

AJA University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 5588 0283

Email address

z.farsi@ajaums.ac.ir

Recruitment status

Recruitment complete

Funding source

This research was funded by a grant from Vice chancellor for research of AJA University of Medical Sciences.

Expected recruitment start date

2013-07-23, 1392/05/01

Expected recruitment end date

2014-02-20, 1392/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of clinical audit process on the endo-tracheal and tracheostomy suctioning skills of nurses working in the critical care units (ICU) in AJA hospitals in Tehran

Public title

The effect of clinical audit process on the suctioning skills of nurses

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: anesthesia technicians and nursing staff in the ICUs with an associate degree or higher; at least two months work experience in the ICUs. Exclusion criteria: unwillingness to maintain in the study; having very good score in the pre-intervention phase.

Age

No age limit

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: 135

Randomization (investigator's opinion)

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**

The Research Council and the Research Ethics committee in the AJA University of Medical Sciences

Street address

AJA University of Medical Sciences, Etemadzadeh St., Fatemi St., Tehran, Iran.

City

Tehran

Postal code**Approval date**

2013-11-18, 1392/08/27

Ethics committee reference number

9214

Health conditions studied**1****Description of health condition studied**

Tracheostomy

ICD-10 code

Z43.0

ICD-10 code description

Attention to tracheostomy

Primary outcomes**1****Description**

Endotracheal and tracheostomy Suctioning Skill

Timepoint

pre intervention and one month after intervention

Method of measurement

checklist

Secondary outcomes

empty

Intervention groups**1****Description**

Five-stage of clinical audit including assessment of suction procedure skill, comparison of current situation with standards, identifying weaknesses, face to face education in 45 min, and reassessment of suction procedure skill.

Category

Other

2**Description**

Control group: Assessment of suction procedure skill, comparison of current situation with standards, identifying weaknesses, and reassessment of suction procedure skill.

Category

Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

502 hospital

Full name of responsible person

Sara Rashidifar

Street address

502 Hospital, Intersection of Taleghani and Bahar St., Taleghani St. Tehran, Iran

City

Tehran

2**Recruitment center****Name of recruitment center**

Khanevadeh Hospital

Full name of responsible person**Street address**

Khanevadeh Hospital, Kaj St., Sepah Padegan St., Shariati St., Tehran, Iran

City
Tehran

3

Recruitment center
Name of recruitment center
Beasat Hospital
Full name of responsible person
Street address
Beasat Hospital, Before Afsarieh, Beasat Highway,
Tehran, Iran
City
Tehran

4

Recruitment center
Name of recruitment center
Imam Reza Hospital
Full name of responsible person
Street address
Imam Reza Hospital, Etemadzadeh St., Fatemi St.,
Tehran, Iran
City
Tehran

5

Recruitment center
Name of recruitment center
Golestan Hospital
Full name of responsible person
Street address
Golestan Hospital, before Heravi Square, Saiyad
Shirazi Highway, Tehran, Iran
City
Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
AJA University of Medical Sciences, Vice chancellor for
research
Full name of responsible person
Dr. Kamran Azma
Street address
Vice chancellor for research, AJA University of Medical
Sciences, Etemadzadeh St., Fatemi St., 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
AJA University of Medical Sciences, Vice chancellor for
research
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
AJA University of Medical Sciences
Full name of responsible person
Shahla Aliyari
Position
PhD/ Research Manager
Other areas of specialty/work
Street address
Faculty of Nursing, AJA University of Medical Sciences,
Kaj Street, Shariati Street, Tehran, Iran.
City
Tehran
Postal code
Phone
+98 21 7750 0404
Fax
Email
aliyar_shah@yahoo.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
AJA University of Medical Sciences
Full name of responsible person
Fatemeh Kalrozi
Position
MSC
Other areas of specialty/work
Street address
Faculty of Nursing, AJA University of Medical Sciences,
Kaj Street, Shariati Street, Tehran, Iran.
City
Tehran
Postal code
Phone
+98 21 7750 0404
Fax
Email
f.kalrozi@ajaums.ac.ir
Web page address

Person responsible for updating data

Contact
Name of organization / entity

AJA University of Medical Sciences
Full name of responsible person
Maryam Nezamzadeh
Position
MSc
Other areas of specialty/work
Street address
Faculty of Nursing, AJA University of Medical Sciences,
Kaj Street, Shariati Street, Tehran, Iran.
City
Tehran
Postal code
Phone
00
Fax
Email
nezamzadeh_maryam@yahoo.com
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