Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The effect of comprehensive airway suctioning criteria education on the number of suction in mechanically ventilated patients

Protocol summary

Study aim
The Effect of Training on Comprehensive Suction Tract Airway Techniques on the Suction Rate in Patients under Mechanical Ventilation in the Intensive Care Unit

Design
Outcomes research with pretest design, post-test with 250 samples of suction with the cooperation of nursing staff of the intensive care units of Shahid Rajaee and Firoozgar Hospitals

Settings and conduct
First, the total suction rate based on the hourly care of the patients in the intensive care unit having an tracheal tube is collected at a given time point (72 hours). The researcher conducted a training course on comprehensive suctioning standards. At the end of the training program, a training booklet will be provided to the participating staff. Two weeks after training the comprehensive airway suctioning standards, the researcher again, at a given time point (72 hours), will collect information on the total number of suction units based on the time of care of patients admitted to the intensive care unit with an tracheal tube. .

Participants/Inclusion and exclusion criteria
All cases of airway suction that are performed within 72 hours of sampling before and after intervention for patients with positive pressure mechanical ventilation in the research environment will be selected as the research sample.

Intervention groups
Synthetic airway suctioning training for nurses working in the intensive care unit of Firoozgar and Shahid Rajaee hospitals

Main outcome variables
Frequency of suction

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20180910040989N1**
Registration date: **2019-02-15, 1397/11/26**
Registration timing: **retrospective**

Last update: **2019-02-15, 1397/11/26**
Update count: **0**

Registration date
2019-02-15, 1397/11/26

Registrant information

Name
Maryam Khalili

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 21 8888 2885

Email address
ghamari.f@kar.iums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2018-09-03, 1397/06/12

Expected recruitment end date
2018-12-03, 1397/09/12

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of comprehensive airway suctioning criteria education on the number of suction in mechanically ventilated patients

Public title
The effect of comprehensive airway suctioning criteria education on the number of suction
Purpose
Education/Guidance
Inclusion/Exclusion criteria
Inclusion criteria:
All cases of airway suction that are performed within 72 hours of sampling before and after intervention for patients with positive pressure mechanical ventilation in the research environment will be selected as the research sample.
Exclusion criteria:
No criteria for leaving the study for research samples are considered.
Age
No age limit
Gender
Both

Phase
3
Groups that have been masked
No information
Sample size
Target sample size: **250**
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
Ethics committee of Iran University of Medical Sciences
Street address
Shahid Hemmat Highway
City
Tehran
Province
Tehran
Postal code
۱۴۴۹۶۱۴۵۳۵
Approval date
2018-08-26, 1397/06/04
Ethics committee reference number
IR.IUMS.REC.1397.193

Health conditions studied

1

Description of health condition studied
Training on Comprehensive Suction Tract Artificial Airway
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Frequency of suction
Timepoint
72 hours before and after intervention; The number of suction per patient is recorded three times for up to 72 hours
Method of measurement
Researcher made questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
An educational program of 2 hours in three parts: 1- View patient's clinical status. 2. Findings of the mechanical ventilation and monitoring system. 3. The changes observed in paraclinical outcomes are taught to nurses and a training booklet will be provided to the participating staff. The next week, again, at a time interval of 72 hours, information is collected on the total number of suctioning done by the nurses and will be compared with the pre-training.
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
firoozgar and shahid rajaee hospitals
Full name of responsible person
Nooredin Mohammadi
Street address
Rashid yasemi St. valie asr Ave.
City
Tehran
Province
Tehran
Postal code
۱۹۹۶۷۱۳۸۸۳
Phone
+98 21 8820 1978

Email
Nooredin.mohammadi@yahoo.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Iran University of Medical Sciences
Full name of responsible person
Dr. kazem Malakoti
Street address
Shahid Hemmat Highway
City
tehran
Province
Tehran
Postal code
1449614535
Phone
+98 21 8670 2503
Email
research@iums.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Iran 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
Iran University of Medical Sciences
Full name of responsible person
Maryam khalili
Position
student
Latest degree
Bachelor
Other areas of specialty/work
Nursery
Street address
Rashid yasemi st. valie asr Ave.
City
Tehran
Province
Tehran
Postal code
۱۹۹۶۷۱۳۸۸۳
Phone
+98 21 8820 1978
Email
khalili.ma923@gmail.com

Person responsible for scientific inquiries

Contact
Name of organization / entity
Iran University of Medical Sciences
Full name of responsible person
Nooredin Mohammadi
Position
Associate Professor
Latest degree
Medical doctor
Other areas of specialty/work
Nursery
Street address
rashid yasemi St. Valeasr Ave
City
Tehran
Province
Tehran
Postal code
۱۹۹۶۷۱۳۸۸۳
Phone
+98 21 8820 1978
Email
Nooredin.mohammadi@yahoo.com

Person responsible for updating data

Contact
Name of organization / entity
Iran University of Medical Sciences
Full name of responsible person
Maryam Khalili
Position
Student
Latest degree
Bachelor
Other areas of specialty/work
Nursery
Street address
Rashid yasemi st. valeiasr Ave
City
Tehran
Province
Tehran
Postal code
۱۹۹۶۷۱۳۸۸۳
Phone
+98 21 8820 1978
Email
khalili.ma923@gmail.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Yes - There is a plan to make this available
Statistical Analysis Plan
Yes - There is a plan to make this available
Informed Consent Form
Yes - There is a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Yes - There is a plan to make this available
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
If requested, researchers will be shared.
When the data will become available and for how long
Six months after printing results
To whom data/document is available
researcher
Under which criteria data/document could be used
Citing data sources
From where data/document is obtainable
School of nursing and Midwifery . Maryam Khalili email: Khalili.ma923@ gmail.com
What processes are involved for a request to access data/document
Email your request
Comments