

Clinical Trial Protocol

Iranian Registry of Clinical Trials

25 Jul 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 Rajaei 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 Rajaei 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)

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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

۱۳۴۹۶۱۴۵۳۵

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

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
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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
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Maryam khalili
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Person responsible for updating data

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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