

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Effect of planned nursing care protocols on the incidence of early ventilator-associated pneumonia

Protocol summary

Summary

Background: Ventilator-associated pneumonia is the most common nosocomial infection in intensive care units (ICU), leading to increase in mortality and length of ICU and hospital stay as well as duration of mechanical ventilation and hospital charges. In this regard, the present study has been conducted to investigate the effect of planned nursing care protocols on the incidence of early ventilator-associated pneumonia. Methods: In a controlled clinical trial, 117 patients undergoing mechanical ventilation were evaluated in intensive care unit in the two groups including control (n=71) and the intervention (n=46); the former received the ward's routine care, and the latter planned nursing care protocols. Incidence of pneumonia was investigated using CPIS and Mini-BAL method.

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Recruitment status

Recruitment complete

Funding source

Health Research Center and Nursing Faculty of Baqiyatallah University of Medical Sciences

Expected recruitment start date

2010-06-22, 1389/04/01

Expected recruitment end date

2011-06-22, 1390/04/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201201178650N2**

Registration date: **2012-02-27, 1390/12/08**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-02-27, 1390/12/08

Registrant information

Name

Abbas Ebadi

Name of organization / entity

Baqiyatallah University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

Scientific title

Effect of planned nursing care protocols on the incidence of early ventilator-associated pneumonia

Public title

Effect of nursing cares on the incidence of ventilator-associated pneumonia

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: all patients, ranging in age from 18 to 65 years, admitted to intensive care units and intubated were entered in to the study if having no symptoms indicative of pneumonia (high fever, leukocytosis or leukopenia, lung infiltration, and purulent discharge) and underlying lung problems (chronic obstructive pulmonary disease, lung cancer, and chest trauma) and were monitored for 96 hours after intubation to be under the ventilation for more than 48 hours. Exclusion criteria: toothlessness, suspected pneumonia during intubation, pregnancy and lack of consent for participation by

patients and their families, FiO2 >90 and/or PEEP >14cm H2O, and cardiopulmonary arrest and resuscitation.

Age

From **18 years** old to **65 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **90**

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

Nursing Faculty of Baqiyatallah University of Medical Sciences

Street address

Nursing Faculty, Araj, Aqdasieh

City

Tehran

Postal code

Approval date

2010-08-20, 1389/05/29

Ethics committee reference number

25

Health conditions studied

1

Description of health condition studied

pneumonia associated- Ventilator

ICD-10 code

J20- J22

ICD-10 code description

Other acute lower respiratory infection

Primary outcomes

1

Description

incidence of early ventilator-associated pneumonia

Timepoint

96 hour after the intervention

Method of measurement

mini-BAL culture and CPIS

Secondary outcomes

1

Description

reduce of duration of ventilator

Timepoint

seprating of ventilator

Method of measurement

ventilator day

Intervention groups

1

Description

Oral hygiene using 0.2% chlorhexidine mouthwash every eight hours, teeth brushing every 12 hours , elevating the head of bed to 30-45 degrees, especially while gavaging in cases of no contraindications , maintaining the cuff pressure between 20-30 cm H2O , continuous subglottic suctioning , nurses' personal hygiene (hand washing) before and after contact with patients , sterilization observation and ventilator tube's replacement in cases of significant contamination.

Category

Prevention

2

Description

In control group routin nursing cares.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Baqiyatallah hospital

Full name of responsible person

Street address

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Health Research Center and Nursing Faculty of
Baqiyatallah University of Medical Sciences

Full name of responsible person

Dr Jonaidi Neematoghah

Street address

Health Research Center, Baqiyatallah University of
Medical Sciences, Vanak sq.

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Health Research Center and Nursing Faculty of
Baqiyatallah University of Medical Sciences

Proportion provided by this source

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

2

Sponsor

Name of organization / entity

Nursing Faculty of Baqiyatallah University of Medical
Sciences

Full name of responsible person

Dr Abbas ebadi

Street address

Nursing Faculty, Araj, Aqdasiye

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Nursing Faculty of Baqiyatallah University of Medical
Sciences

Proportion provided by this source

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

Nursing Faculty of Baqiyatallah University of Medical
Sciences

Full name of responsible person

Dr Abbas Ebadi

Position

PhD of nursing, boss of Nursing Faculty

Other areas of specialty/work

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**Person responsible for scientific
inquiries**

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Web page address

Person responsible for updating data

Contact

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