

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

03 Sep 2026

### Comparison of the effect of web based education and booklet on nurses' knowledge, attitude and performance about ventilator-associated pneumonia and its prevention in intensive care units

#### Protocol summary

##### Study aim

comparing effect of instruction with web based software and booklet about ventilator associated pneumonia and its prevention on knowledge, attitude and performance of nurses in intensive care units

##### Design

Parallel group randomized trial in which participants will be divided into two groups randomly. Sample size is determined 40 in each group

##### Settings and conduct

2 hospitals with most intensive Care Units will be selected as study environment, and then allocated as each intervention environment randomly. Nurses working in these ICUs who have inclusion criteria will be selected randomly.

##### Participants/Inclusion and exclusion criteria

inclusion criteria: At least 6 month ICU work experience, satisfaction to participation in study, availability of internet

##### Intervention groups

intervention group using web based software receive instructional content about ventilator associated pneumonia and its prevention in form of a web based software, and intervention group using booklet receive instructional content about ventilator associated pneumonia and its prevention as a PDF file.

##### Main outcome variables

knowledge, attitude and performance of nurses about ventilator associated pneumonia

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20160525028060N2**  
Registration date: **2021-09-29, 1400/07/07**

Registration timing: **registered\_while\_recruiting**

Last update: **2021-09-29, 1400/07/07**

Update count: **0**

##### Registration date

2021-09-29, 1400/07/07

##### Registrant information

###### Name

Fereshteh Dehghanrad

###### Name of organization / entity

Shiraz University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 71 3235 4285

###### Email address

dehghanrad@sums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2021-09-23, 1400/07/01

##### Expected recruitment end date

2022-01-05, 1400/10/15

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparison of the effect of web based education and booklet on nurses' knowledge, attitude and performance about ventilator-associated pneumonia and its prevention in intensive care units

## Public title

Comparison of the effect of web based education and booklet on nurses' knowledge, attitude and performance about ventilator-associated pneumonia and its prevention

## Purpose

Prevention

## Inclusion/Exclusion criteria

### Inclusion criteria:

satisfaction to participation in study at least 6 month ICU work experience availability of internet

### Exclusion criteria:

## Age

No age limit

## Gender

Both

## Phase

N/A

## Groups that have been masked

No information

## Sample size

Target sample size: 80

## 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 Shiraz University of Medical Sciences

##### Street address

Central building of Shiraz University of Medical Sciences, Zand streer

##### City

Shiraz

##### Province

Fars

##### Postal code

7134814336

##### Approval date

2021-09-04, 1400/06/13

##### Ethics committee reference number

IR.SUMS.NUMIMG.REC.1400.008

## Health conditions studied

### 1

#### Description of health condition studied

Ventilator Associated Pneumonia

#### ICD-10 code

#### ICD-10 code description

## Primary outcomes

### 1

#### Description

Nurses knowledge about ventilator associated pneumonia

#### Timepoint

before intervention, after intervention and 1 month after intervention

#### Method of measurement

knowledge questionnaire

### 2

#### Description

Nurses attitude about ventilator associated pneumonia

#### Timepoint

Before intervention, after intervention and 1 month after intervention

#### Method of measurement

attitude questionnaire

### 3

#### Description

Nurses performance about prevention of ventilator associated pneumonia

#### Timepoint

before intervention, after intervention and 1 month after intervention

#### Method of measurement

self reported performance questionnaire

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group1: Education group using web based software: The participants receive educational content in form of web based software. They use this software within 1 week.

#### Category

Other

### 2

#### Description

Intervention group2: Education group using booklet: The participants receive educational contents in form of a PDF file and will study the content within 1 week.

**Category**

Other

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Namazi hospital

**Full name of responsible person**

Dr Mohammad Sadegh Masoudi

**Street address**

Namazi square, Zand street

**City**

Shiraz

**Province**

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**Postal code**

7193613311

**Phone**

+98 71 3647 4326

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Nemazee\_inf@sums.ac.ir

**2**

**Recruitment center**

**Name of recruitment center**

Emtiyaz hospital and Shahid Rajaei surgery emergency

**Full name of responsible person**

Dr Amin Niakan

**Street address**

Chamran Blvd.

**City**

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**Province**

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**Postal code**

7194815711

**Phone**

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**Email**

rajaeehospital@sums.ac.ir

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

Shiraz University of Medical Sciences

**Full name of responsible person**

Dr Mehrzad Lotfi

**Street address**

Zand street

**City**

Shiraz

**Province**

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**Postal code**

7134814336

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+98 71 3230 5410

**Email**

info@sums.ac.ir

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Shiraz 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**

Shiraz University of Medical Sciences

**Full name of responsible person**

Fereshteh Dehghanrad

**Position**

Instructor

**Latest degree**

Master

**Other areas of specialty/work**

Nursery

**Street address**

Fatemeh college of nursing, namazi square, Zand street

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**Province**

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dehghanrad@sums.ac.ir

**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

Shiraz University of Medical Sciences

**Full name of responsible person**

Fereshteh Dehghanrad

**Position**  
Instructor  
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## Person responsible for updating data

**Contact**  
**Name of organization / entity**  
Shiraz University of Medical Sciences  
**Full name of responsible person**  
Fereshteh Dehghanrad  
**Position**  
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dehghanrad@sums.ac.ir

## Sharing plan

**Deidentified Individual Participant Data Set (IPD)**  
Undecided - It is not yet known if there will be a plan to make this available  
**Study Protocol**  
Undecided - It is not yet known if there will be a plan to make this available  
**Statistical Analysis Plan**  
Not applicable  
**Informed Consent Form**  
Undecided - It is not yet known if there will be a plan to make this available  
**Clinical Study Report**  
Not applicable  
**Analytic Code**  
Not applicable  
**Data Dictionary**  
Not applicable