Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

The effects of the Emergency Severity Index triage education via problem-based learning on the triage nurses' performance and the patients’ length of stay in the Emergency Department of Besat Hospital in Hamadan

Protocol summary

Summary

The present study is done to determine the effects of the Emergency Severity Index (ESI) triage education via problem-based learning on the triage nurses' performance and the patients’ length of stay in the emergency department of Besat Hospital in Hamadan. This is a quasi-experimental study with a single group pre- and post- test design. The study population is triage nurses. All 13 triage nurses are the samples that Their performances are measuring in two phases, pre- and post-intervention. In each phase, every nurse's performance will be assessed by observational checklist during triage of three patients in three levels of 5-level ESI triage. Thus, the nurses' performances for 78 patients before and 78 patients after the intervention are considered, overall 156 patients. These patients' length of stay in the Emergency Department is also determined by a chronometer. Inclusion criteria: nurses are working in the emergency department and patients admitted to the emergency Department. Exclusion criteria: the nurses, who leave the research for any reason, and patients who die or leave-without-being-seen (LWBS). Intervention: The Emergency Severity Index triage will be trained for triage nurses in the workshop included of three sessions of problem-based learning method and some face-to-face training in the emergency Department over three weeks. The study outcomes are the nurses' performance in the Emergency Severity Index triage and the patients’ length of stay in the emergency department.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013061513675N1**

Registration date: **2013-07-15, 1392/04/24**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2013-07-15, 1392/04/24

Registrant information

Name

Afshin Khazaei

Name of organization / entity

Nursing and Midwifery College, Hamadan university of medical sciences

Country

Iran (Islamic Republic of)

Phone

+98 81 1839 0461

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Recruitment status

Recruitment complete

Funding source

Vice-Chancellor of Research and Technology Hamadan University of Medical Sciences

Expected recruitment start date

2013-07-21, 1392/04/30

Expected recruitment end date

2013-11-21, 1392/08/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
The effects of the Emergency Severity Index triage education via problem-based learning on the triage nurses' performance and the patients' length of stay in the Emergency Department of Besat Hospital in Hamadan

Public title
The effects of the triage education on the triage nurses' performance and the patients' length of stay
Purpose
Health service research
Inclusion/Exclusion criteria
Inclusion criteria for nurses: Triage nurses working in the Emergency Department, Inclusion criteria for Patients: Patients presenting to the Emergency Department, Exclusion criteria for nurses: Anything that may cause nurses to leave (transfer to another department or hospital), Exclusion criteria for patients: Patients who die or left-without-being-seen (LWBS)
Age
No age limit
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **78**
Randomization (investigator's opinion)
N/A
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Single
Other design features
The study has a pretest- posttest single group design

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Hamadan University of Medical Sciences
Street address
Hamadan University of Medical Sciences, Shaheed Fahmideh Ave, Hamedan
City
Hamadan
Postal code
Approval date
2013-06-12, 1392/03/22
Ethics committee reference number
16/30/9/754/د/پ

Health conditions studied

1

Description of health condition studied
Factors influencing health status and contact with health services
ICD-10 code
Z40, Z54
ICD-10 code description
Persons encountering health services for specific procedures and health care

Primary outcomes

1

Description
The triage nurses' performance
Timepoint
Before and after training
Method of measurement
The checklist of nurses' performance in triage

2

Description
The patients' length of stay in the emergency department
Timepoint
Before and after training
Method of measurement
The timing checklist that is filling with a chronometer

Secondary outcomes

empty

Intervention groups

1

Description
Intervention in this study is the Emergency Severity Index triage training for the triage nurses via the workshop included of three sessions of the problem-based learning method and the face-to-face training in the unit over three weeks.
Category
Behavior

Recruitment centers

1

Recruitment center
Name of recruitment center
Hamadan's Besat Hospital

Full name of responsible person
Afshin Khazaei, MSc Student in Critical Care Nursing
Street address
Besat Hospital, Motahari Ave
City
Hamadan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice-Chancellor of Research and Technology of Hamadan University of Medical Sciences
Full name of responsible person
Heidar Tavilani
Street address
Vice-Chancellor of Research and Technology of Hamadan University of Medical Sciences, Shaheed Fahmideh Ave
City
Hamadan
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice-Chancellor of Research and Technology of Hamadan University of Medical Sciences
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
Hamadan University of Medical Sciences
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Afshin Khazaei
Position
MSc Student in Critical Care Nursing
Other areas of specialty/work
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Person responsible for scientific inquiries

Contact
Name of organization / entity
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Full name of responsible person
Mahnaz Khatiban
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Person responsible for updating data

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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