

Clinical Trial Protocol

Iranian Registry of Clinical Trials

30 Jun 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

Email address

a.khazaei@umsha.ac.ir

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

Fax**Email**

a.khazaei@umsha.ac.ir; akhazaei90@yahoo.com;

a.khazaei91@gmail.com

Web page address**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 addressVice-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 sourceVice-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

Full name of responsible person

Afshin Khazaei

Position

MSc Student in Critical Care Nursing

Other areas of specialty/work**Street address**Nursing and Midwifery School, Hamadan University of
Medical Sciences, Shaheed Fahmideh Ave**City**

Hamadan

Postal code

6517838698

Phone

+98 81 1442 4209

Person responsible for scientific inquiries**Contact****Name of organization / entity**Mother and Child Care Research Center, Hamadan
University of Medical Sciences**Full name of responsible person**

Mahnaz Khatiban

Position

Nursing Ph.D

Other areas of specialty/work**Street address**Department of Medical Surgical Nursing, Nursing and
Midwifery School, Hamadan University of Medical
Sciences, Shaheed Fahmideh Ave**City**

Hamadan

Postal code

6517838698

Phone

+98 81 1838 0755

Fax**Email**

m-khatiban@umsha.ac.ir;

mahnaz.khatiban@gmail.com

Web page address**Person responsible for updating data****Contact****Name of organization / entity**

Hamadan University of Medical Sciences

Full name of responsible person

Afshin Khazaei

Position

MSc Student in Critical Care Nursing

Other areas of specialty/work**Street address**Nursing and Midwifery School, Hamadan University of
Medical Sciences, Shaheed Fahmideh Ave**City**

Hamadan

Postal code**Phone**

+98 81 1442 4209

Fax**Email**

a.khazaei@umsha.ac.ir; akhazaei90@yahoo.com;

a.khazaei91@gmail.com

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