Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Investigation the impact of performing heart triage scale on time indices and triage error in patients with chest pain in emergency unit of Faraby hospital.

Protocol summary

Summary

The purpose of conducting this study was to determine the impact of performing heart triage scale on time indices and triage error in patients with chest pain who visited emergency unit of Farabi hospital in Mashhad. The current research is a two-group clinical trial which has been conducted in emergency unit of Farabi hospital during 2014-2016 in Mashhad. In this research, the samples were selected purposefully and were divided randomly into two groups, an experimental (30 patients) and a control group (30 patients). Inclusion criteria of the study were complaining about chest pain, having the age ranged from 18-65 and not having the history of chest trauma. The exclusion criteria were considered as having incomplete or manipulated information of the patient case and sending the patient to other health care centers. The patients in the experimental group were triaged based on designed algorithm peculiar to cardio patient, and the patients in control group were triaged based on common algorithm of Emergency Severity Index. And finally, the amount of error in the triage and the intended time indices including (the first visit of general physician and expert physician, the period of taking the first electrocardiogram and the time of checking the physicians' order by the nurse) were compared in the groups using researcher- made validated and reliable forms.

General information

Acronym

-

IRCT registration information

IRCT registration number: **IRCT2016042326858N3**
Registration date: **2016-05-16, 1395/02/27**
Registration timing: **retrospective**
Last update:
Update count: **0**

Registration date

2016-05-16, 1395/02/27

Registrant information

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Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Mashhad University of Medical Sciences

Expected recruitment start date

2014-06-22, 1393/04/01

Expected recruitment end date

2016-04-07, 1395/01/19

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigation the impact of performing heart triage scale on time indices and triage error in patients with chest pain in emergency unit of Faraby hospital.

Public title

Examining the impact of performing heart triage on the

period of giving care to patients and the amount of occurring error in triage (patients' categorization)

Purpose

Treatment

Inclusion/Exclusion criteria

inclusion criteria: complaining about chest pain; having the age ranged from 18-65; not having the history of chest trauma; having one available phone number for informing . Exclusion criteria: having incomplete or manipulated information of the patient case; sending the patient to other health care centers.

Age

From **17 years** old to **64 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

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

Mashhad University of Medical Sciences

Street address

Daneshgah Streets, Doktora Crossroads, Ebne sina Streets, School of Nursing and Midwifery

City

Mashhad

Postal code

-

Approval date

2014-01-22, 1392/11/02

Ethics committee reference number

920553

Health conditions studied

1

Description of health condition studied

Acute Myocardial Infarction

ICD-10 code

I21

ICD-10 code description

Acute Myocardial Infarction

Primary outcomes

1

Description

triage error

Timepoint

after the treatment

Method of measurement

Using researcher-made form for measuring triage error

2

Description

time indices

Timepoint

The amount of time spent for the first visit of general and expert physician, the period of taking the first electrocardiogram and the time of checking the physician's order by the nurse.

Method of measurement

Using the form of recording the spent time in every stage of examining the patient which is mentioned in the patient case.

Secondary outcomes

1

Description

-

Timepoint

-

Method of measurement

-

Intervention groups

1

Description

Experimental group: the patients were triaged according to the designed algorithm peculiar to cardiac patient.

Category

Early detection

2

Description

Control group: patients were triaged based on common algorithm of Emergency Severity Index.

Category

Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Farabi Hospital
Full name of responsible person
Amir Hossein Mirhaghi
Street address
Kosar Street
City
Mashhad

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Azam Fazel
Street address
School of Nursing and Midwifery
City
Mashhad
Grant name
2
Grant code / Reference number
30
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Mashhad 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

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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