Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Sep 2026

Effect of proactive and retroactive medication reconciliation in the admission time on the reduction of medication error in patients with acute coronary syndrome: a randomized clinical trial study

Protocol summary

Study aim
To assess the effect of proactive and retroactive medication reconciliation in the admission time on the reduction of medication error in patients with acute coronary syndrome

Design
This is a Phase III randomized clinical trial with a control group, in which eligible patients will be randomly assigned to the intervention and control groups using drawing of lots.

Settings and conduct
This study will be conducted at the Farshchian Heart Hospital in Hamadan city, involving 162 eligible patients with acute coronary syndrome. The patients will be randomly assigned to the intervention and control groups through the drawing of lots. However, it should be noted that blinding is not feasible in this trial.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Age of 18 to 70 years Taking at least 5 medications per day, including medications with high interactions or with a narrow therapeutic window Exclusion criteria: Discharge in less than 24 hours Hospitalization in the evening or night shift or on holidays

Intervention groups
Intervention group: In the proactive group, after the patient is hospitalized and before the physician prescribes medication, the researcher prepares a complete history of the patient's medications by referring to the patient's bedside and provides them to the physician in order to prescribe medication according to the obtained medication history. Control group: In the retroactive group, after the patient is hospitalized and the physician prescribes medication, the researcher prepares a complete history of the patient's medications by referring to the patient's bedside, and then the perform medication integration (including the medications prescribed by the physician and previous medications of the disease).

Main outcome variables
Inconsistencies and medication errors

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20120215009014N494**
Registration date: **2024-01-02, 1402/10/12**
Registration timing: **prospective**

Last update: **2024-01-02, 1402/10/12**
Update count: **0**

Registration date
2024-01-02, 1402/10/12

Registrant information

Name
Jalal Poorolajal

Name of organization / entity
Department of Epidemiology & Biostatistics Hamadan University of Medical Sciences

Country
Iran (Islamic Republic of)

Phone
+98 81 1838 0090

Email address
poorolajal@umsha.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2024-01-21, 1402/11/01

Expected recruitment end date

2024-07-21, 1403/04/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of proactive and retroactive medication reconciliation in the admission time on the reduction of medication error in patients with acute coronary syndrome: a randomized clinical trial study

Public title

Effect of proactive and retroactive medication reconciliation in the admission time on the reduction of medication error in patients with acute coronary syndrome

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

Age of 18 to 70 years Taking at least 5 medications per day, including medications with high interactions or with a narrow therapeutic window

Exclusion criteria:

Discharge in less than 24 hours Hospitalization in the evening or night shift or on holidays

Age

From **18 years** old to **70 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **162**

Randomization (investigator's opinion)

Randomized

Randomization description

Random allocation of patients to intervention and control groups by lottery. For this purpose, we prepare two sheets, write "intervention" on one and "control" on the other. Then, with each patient's visit, one of the sheets is randomly taken and the patient is assigned to the intervention or control group.

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 Hamadan University of Medical Sciences

Street address

Vice-chancellor for Research and Technology, Hamadan University of Medical Sciences, Fahmideh Ave

City

Hamadan

Province

Hamadan

Postal code

6517838695

Approval date

2023-12-30, 1402/10/09

Ethics committee reference number

IR.UMSHA.REC.1402.624

Health conditions studied

1

Description of health condition studied

Acute coronary syndrome

ICD-10 code

I24.0

ICD-10 code description

Acute coronary thrombosis not resulting in myocardial infarction

Primary outcomes

1

Description

Inconsistencies and medication errors

Timepoint

In the first 24 hours of hospitalization

Method of measurement

By taking history and reviewing the medical record

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: In the proactive group, after the patient is hospitalized and before the physician prescribes medication, the researcher prepares a complete history of the patient's medications by referring to the patient's bedside and provides them to the physician in order to prescribe medication according to the obtained medication history.

Category
Other

2

Description
Control group: In the retroactive group, after the patient is hospitalized and the physician prescribes medication, the researcher prepares a complete history of the patient's medications by referring to the patient's bedside, and then the perform medication integration (including the medications prescribed by the physician and previous medications of the disease).
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Farshchian Heart Hospital in Hamadan city
Full name of responsible person
Mahdiyeh Fateminejad
Street address
Farshchian Heart Hospital, Shahid Fahmideh Ave.
City
Hamadan
Province
Hamadan
Postal code
6517838695
Phone
+98 81 3838 1740
Email
mahdiyehfateminjd@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Hamedan University of Medical Sciences
Full name of responsible person
Dr. Reza Shokoohi
Street address
Hamadan University of Medical Sciences, Fahmideh Ave
City
Hamadan
Province
Hamadan
Postal code
6517838695
Phone
+98 81 3838 0717
Email
info.research@umsha.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Hamedan 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
Hamedan University of Medical Sciences
Full name of responsible person
Mahdiyeh Fateminejad
Position
Student of Pharmacology
Latest degree
Medical doctor
Other areas of specialty/work
Medical Pharmacy
Street address
School of Pharmacy, Hamadan University of Medical Sciences, Fahmideh Ave.
City
Hamadan
Province
Hamadan
Postal code
6517838695
Phone
+98 81 3838 0572
Email
mahdiyehfateminjd@gmail.com

Person responsible for scientific inquiries

Contact
Name of organization / entity
Hamedan University of Medical Sciences
Full name of responsible person
Dr. Maryam Mehrpooya
Position
Pharmacologist
Latest degree
Ph.D.
Other areas of specialty/work
Medical Pharmacy
Street address
School of Pharmacy, Hamadan University of Medical Sciences, Fahmideh Ave.
City

Hamadan

Province
Hamadan

Postal code
6517838695

Phone
+98 81 3838 0572

Email
m_mehrpooya2003@yahoo.com

Person responsible for updating data

Contact

Name of organization / entity
Hamedan University of Medical Sciences

Full name of responsible person
Dr. Jalal Poorolajal

Position
Professor of Epidemiology

Latest degree
Ph.D.

Other areas of specialty/work
Epidemiology

Street address
School of Public Health, Hamadan University of Medical Sciences, Fahmideh Ave

City
Hamadan

Province
Hamadan

Postal code
6517838695

Phone
+98 81 3838 0090

Email
poorolajal@umsha.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
Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available

Analytic Code
Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available