Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Evaluation of the effect of rapid nursing response team on the outcome of multiple trauma patients referred to the emergency department

Protocol summary

Study aim
Determining the Effect of Immediate Nursing Response Team on the Outcome of Multiple Trauma Emergency

Design
Is a two-group quasi-experimental clinical trial (control and intervention); In the first stage, when the rapid response team has not yet been formed, the researcher and his two trained colleagues take turns stationed in the emergency department and triage unit 24 hours a day, collecting group data as an observer. The controls are designed in a checklist. In the next step, samples are collected in the intervention group using the checklist criteria. A minimum of 140 samples per group is required

Settings and conduct
Type of study: This study is a quasi-experimental clinical trial of two groups (intervention and control) .Research population: Multiple trauma patients (open traumas and head trauma) admitted to the emergency room of Taleghani Educational and Medical Center in Kermanshah. Research environment: Emergency Taleghani Educational and Medical Center in Kermanshah

Participants/Inclusion and exclusion criteria
at least 18 years of age/Cardiopulmonary arrest during admission or under diagnostic procedures

Intervention groups
Team actions: triage of patients, continuous monitoring of admitted patients and timely treatment measures(position change, oxygen therapy, secretion suction, iv line, ekg, drug) Control: treatment procedures according to routine

Main outcome variables
1. Percentage of cardio-respiratory stations in the hospital 2. Percentage of transfer of multiple trauma patients to special wards 3. The average length of stay of patients with multiple trauma in the emergency department 4. Mortality rate of multiple trauma patients admitted to the emergency department 5. Chance of survival and successful discharge from the hospital for multiple trauma patients

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20220319054331N1**
Registration date: **2022-05-07, 1401/02/17**
Registration timing: **prospective**

Last update: **2022-05-07, 1401/02/17**
Update count: **0**

Registration date
2022-05-07, 1401/02/17

Registrant information

Name
Zakariya Fattahi

Name of organization / entity

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Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2022-06-22, 1401/04/01

Expected recruitment end date
2022-11-22, 1401/09/01

Actual recruitment start date
2022-05-22, 1401/03/01

Actual recruitment end date
2022-12-22, 1401/10/01

Trial completion date

2023-01-21, 1401/11/01

Scientific title
Evaluation of the effect of rapid nursing response team on the outcome of multiple trauma patients referred to the emergency department

Public title
Evaluation of the effect of rapid nursing response team on the outcome of multiple trauma patients referred to the emergency department

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
Patients with multiple trauma (open trauma and head trauma) with at least eighteen years of age
Exclusion criteria:
Patients with multiple trauma (open trauma and head trauma) who are admitted to the emergency department with cardio-respiratory arrest. Patients with multiple trauma (open trauma and head trauma) who suffer from cardio-respiratory arrest under diagnostic procedures

Age
From **18 years** old

Gender
Both

Phase
3

Groups that have been masked
No information

Sample size
Target sample size: **280**
Actual sample size reached: **280**

Randomization (investigator's opinion)
Not randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Other

Other design features
does not exist

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Qazvin University of Medical Sciences
Street address
shahid bahonar
City
qazvin
Province
Qazvin
Postal code
5981134197

Approval date
2022-05-22, 1401/03/01

Ethics committee reference number
IR.QUMS.REC.1400.508

Health conditions studied

1

Description of health condition studied
The study is performed in an emergency environment and in compliance with health and hospital protocols and standards

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
Percentage of cardiac and respiratory arrests in patients with multiple trauma in the emergency department

Timepoint
From the beginning of the intervention until eight months after the intervention

Method of measurement
Percentage of multiple trauma patients with cardiac arrest

2

Description
Percentage of multiple traum patients transferred to special wards

Timepoint
From the beginning of the intervention until eight months after the intervention

Method of measurement
Percentage of multiple trama patients who are transferred to special wards

3

Description
Average length of stay of multiple trauma patients in the emergency department

Timepoint
From the beginning of the intervention until eight months after the intervention

Method of measurement
Average number of hospitalization hours for multiple trauma patients in the emergency department

4

Description

Death rate of multiple trauma patients admitted to the emergency department

Timepoint

From the beginning of the intervention until eight months after the intervention

Method of measurement

Percentage ofmultiple trauma patients who die in the emergency department

5

Description

Chance of survival and discharge of multiple trauma patients from the emergency department

Timepoint

From the beginning of the intervention until eight months after the intervention

Method of measurement

Percentage of multiple trauma patients discharged from the emergency department

Secondary outcomes

empty

Intervention groups

1

Description

In the intervention group, the rapid nursing response team triaged and leveled the patients included in the study. It then monitors hospitalized patients at regular intervals and, if necessary, measures such as blood sampling, venous line, blood transfusion or reservation, patient monitoring, transfer to paraclinical ward or unit, suction, oxygen therapy, change of position, They take an ECG, resuscitation operation, transfer of the trolley code to the bedside of the critically ill patient before the doctor's presence (actions according to the doctor's instructions) as soon as possible.Before the intervention, the duties of the team members will be explained in a two-hour session to the hospital managers, supervisors, emergency department head nurse, and in a one-day session to the nurses and assistant nurses and the emergency shift manager.

Category

N/A

2

Description

Control group: They are studied before the control group and it is done when there is no special sensitivity among the personnel towards the rapid response team. Patients in this group are treated according to the routine of the emergency department. And the results are collected based on a checklist designed by the members of the rapid response team

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Taleghani center of Kermanshah

Full name of responsible person

zakariya fattahi

Street address

shahid beheshti

City

kermanshah

Province

Kermanshah

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6976543210

Phone

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Fax

Email

taleghani@kums.ac.ir

Web page address

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Qazvin University of Medical Sciences

Full name of responsible person

Seyed Mehdi Mir Hashemi

Street address

Shahid Beheshti Blvd.

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Phone

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Email

sm.mirhashemi@qums.ac.ir

Web page address

Grant name

no

Grant code / Reference number

dousnt have

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

No

Title of funding source

Reasercher

Proportion provided by this source

60

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

Qazvin University of Medical Sciences

Full name of responsible person

Zakariya fattahi

Position

Masters student

Latest degree

Bachelor

Other areas of specialty/work

Nursery

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Qazvin University of Medical Sciences

Full name of responsible person

Seyed Mehdi Mir Hashemi

Position

PhD in Clinical Biochemistry

Latest degree

Ph.D.

Other areas of specialty/work

Biochemistry

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Person responsible for updating data

Contact

Name of organization / entity

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Full name of responsible person

zakariyafattahi

Position

Masters student

Latest degree

Bachelor

Other areas of specialty/work

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attar

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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