

Clinical Trial Protocol

Iranian Registry of Clinical Trials

05 Aug 2026

Investigation of the effectiveness of a training course for management of common diseases on knowledge and medication error of nurses of Akbar children hospital

Protocol summary

Study aim

Determination of the effectiveness of a training course for management of common diseases on knowledge and medication error of nurses of Akbar children hospital

Design

This clinical trial study has a control group and is conducted on 54 nurses from 9 different sections of Akbar hospital in Mashhad who are randomly selected. Twenty seven nurses receive training and 27 do not receive any training. No blinding is done in this study.

Settings and conduct

This study is conducted on 27 nurses from 9 different departments of Akbar children hospital who are randomly selected and receive training in the year 2019. Three nurses from each department, as intervention group, receive training for 3 months. To assess nurses' knowledge in the field of respective diseases, before the training and after training, a questionnaire will be prepared from the topics discussed. The average score of the nurses before and after training, and also in comparison with the control group will be reported.

Participants/Inclusion and exclusion criteria

Inclusion criteria: All nurses with a work experience of less than 5 years who are willing to participate in the study. Exclusion criteria: Nurses who are reluctant to participate in the study

Intervention groups

Intervention group: This group consists of nurses who are randomly selected and assigned to a group which receives training. Totally, each nurse receives 3 months of technical training regarding a common disease in the related field. Control group: This group includes nurses who are randomly selected and assigned to a group which will not receive training.

Main outcome variables

Knowledge level and rate of nurses' medication error

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20181213041949N1**

Registration date: **2019-02-05, 1397/11/16**

Registration timing: **registered_while_recruiting**

Last update: **2019-02-05, 1397/11/16**

Update count: **0**

Registration date

2019-02-05, 1397/11/16

Registrant information

Name

Ali Khakshour

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 51 3870 9200

Email address

khakshoura@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-01-21, 1397/11/01

Expected recruitment end date

2020-01-21, 1398/11/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigation of the effectiveness of a training course for management of common diseases on knowledge and medication error of nurses of Akbar children hospital

Public title

Assessment of the effectiveness of a training course on knowledge and medication error of nurses

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

All nurses with a work experience of less than 5 years working in Akbar Hospital

Exclusion criteria:

Nurses who are reluctant to participate

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 27

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomization is done through table of random numbers. The researcher at first, determines the direction of reading the numbers (for example from top, bottom, left or right). Then the researcher will assign the numbers to the groups (for example odd ones to intervention group A and even ones to intervention group B)

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 Mashhad University of Medical Sciences

Street address

Central Building of Mashhad University of Medical Sciences (Ghorshi), Daneshgah 16, Daneshgah Street

City

Mashhad

Province

Razavi Khorasan

Postal code

9138813944

Approval date

2018-05-23, 1397/03/02

Ethics committee reference number

IR.MUMS.MEDICAL.REC.1397.296

Health conditions studied

1

Description of health condition studied

Holding a training course for management of common diseases and its effect on knowledge and medication error of nurses

ICD-10 code

Z71.9

ICD-10 code description

Counseling, unspecified

Primary outcomes

1

Description

Evaluation of nurses' knowledge level

Timepoint

Before and after the intervention

Method of measurement

Self-made questionnaire about the materials taught

2

Description

Rate of nursing errors

Timepoint

Before and after the intervention

Method of measurement

Standard questionnaire of nursing medication error validated by Baghaei et al

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Six nurses are randomly selected from each department and based on the table of random numbers are assigned to two groups of 3 people one receiving training and one without passing a course. Each nurse receives 3 months of technical training by the responsible staff regarding a common disease (determined by the staff using available records and statistics in the related department) in the related field. Each nurse's theoretical and practical training will consist of two 3-hour training sessions each month (total of 18

hours each). In order to assess the knowledge of nurses in the field of related diseases, before and after training, a questionnaire will be provided from the topics discussed and the average score of nurses before and after training and also in comparison with the control group will be reported

Category

N/A

2

Description

Control group: Includes nurses who are randomly selected for the control group without passing a training course.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Akbar children hospital

Full name of responsible person

Ali Khakshour

Street address

Akbar children hospital, In front of Shahid kave 14, Shahid Kaveh sq

City

Mashhad

Province

Razavi Khorasan

Postal code

9139963185

Phone

+98 51 3870 9202

Email

khakshoura@mums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Dr Mohsen Tafaghodi

Street address

Central Building of Mashhad University of Medical Sciences (Ghorshi), Daneshgah 16, Daneshgah street

City

Mashhad

Province

Razavi Khorasan

Postal code

9138813944

Phone

+98 51 3841 2081

Email

ramresearch@mums.ac.ir

Grant name

Grant code / Reference number

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

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

Mashhad University of Medical Sciences

Full name of responsible person

Ali Khakshour

Position

Assistant professor

Latest degree

Specialist

Other areas of specialty/work

Pediatrics

Street address

Akbar children hospital, In front of Shahid kave 14, Shahid Kaveh sq

City

Mashhad

Province

Razavi Khorasan

Postal code

9139963185

Phone

+98 51 3870 9202

Email

khakshoura@mums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Ali Khakshour

Position

Assistant professor

Latest degree

Specialist

Other areas of specialty/work

Pediatrics

Street address

Akbar children hospital, In front of Shahid kave 14,
Shahid Kaveh sq

City

Mashhad

Province

Razavi Khorasan

Postal code

9139963185

Phone

+98 51 3870 9202

Email

khakshoura@mums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

Mashhad University of Medical Sciences

Full name of responsible person

Ali Khakshour

Position

Assistant professor

Latest degree

Specialist

Other areas of specialty/work

Pediatrics

Street address

Akbar children hospital, In front of Shahid kave 14,
Shahid Kaveh sq

City

Mashhad

Province

Razavi Khorasan

Postal code

9139963185

Phone

+98 51 3870 9202

Email

khakshoura@mums.ac.ir

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

All data can be shared after patients are made
unidentifiable

When the data will become available and for how long

Data can be accessible 6 months after results are
published

To whom data/document is available

Data will be available for researchers in universities and
other scientific institutes.

Under which criteria data/document could be used

Carrying out analysis on data is permitted.

From where data/document is obtainable

Data can be accessible through sending an email to the
corresponding author.

What processes are involved for a request to access data/document

After sending a request email to the corresponding
author, data will be sent in 1 month.

Comments