

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Sep 2026

The Effect of Using a Safe Pad Tool on The Incidence of Needle Stick in Health Care Workers

Protocol summary

Study aim

Determining the effect of safety pad tool on the incidence of needle stick in staff working in Imam Hossein Hospital, Shahid Beheshti University of Medical Sciences, Tehran

Design

One-group quasi-experimental study, without blinding, non-random and on 387 subjects

Settings and conduct

The research tool, which includes two questionnaires of demographic information and information about Needle Stick, will be provided to nurses and nurse assistances and also by referring to the Infection Prevention and Control Department, the necessary information will be obtained in the last six months. Then, by teaching the personnel participating in the study how to use the safe pad tool, the safe pad will be used for six months. Finally, after a six-month period of using the Safe Pad tool, the use of the needle stick during the six months will be reviewed and compared with the six-month period before using the tool.

Participants/Inclusion and exclusion criteria

Inclusion criteria: nurses and nurse assistances with at least six months of work experience. Exclusion criteria: health care workers who do not used safe pad tool at six consecutive month.

Intervention groups

In this study, a patented safe pad tool is used to prevent needle sticks among hospital staff for six months, and after using it for six months, it is compared with the six-month period before using the tool.

Main outcome variables

Incidence of needle stick in hospital staff

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20220316054307N1**

Registration date: **2022-04-11, 1401/01/22**

Registration timing: **prospective**

Last update: **2022-04-11, 1401/01/22**

Update count: **0**

Registration date

2022-04-11, 1401/01/22

Registrant information

Name

Nima yadollahzade

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 11 3262 3308

Email address

n.yadollahzade@sbmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-07-23, 1401/05/01

Expected recruitment end date

2023-03-20, 1401/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effect of Using a Safe Pad Tool on The Incidence of Needle Stick in Health Care Workers

Public title

The Effect of Using a Safe Pad Tool on The Incidence of

Needle Stick in Health Care Workers

Purpose
Prevention

Inclusion/Exclusion criteria
Inclusion criteria:
 Nurses and Nurse Assistance with work experience of at least six months prior to using the Safe Pad tool Study tools were used in the bed for six months by the subjects to enter the third stage
Exclusion criteria:
 Do not use the safe pad tool for six consecutive months
 People who are transferred to the part where the tool is not used during the six-month period of using the Safe Pad tool.

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **387**

Randomization (investigator's opinion)
N/A

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research Ethics Committees of School of Pharmacy and Nursing & Midwifery- Shahid Beheshti University

Street address

Schools of Pharmacy, Nursing and Midwifery, Shahid Beheshti University of Medical Sciences,. Valiasr St., Niayesh Highway Junc,

City

Tehran

Province

Tehran

Postal code

1985717443

Approval date

2022-03-15, 1400/12/24

Ethics committee reference number

IR.SBMU.PHARMACY.REC.1400.332

Health conditions studied

1

Description of health condition studied

صدمات ناشی از نیدل استیک

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

The Incidence of Needle Stick

Timepoint

Measure the incidence of needle stick six months before the intervention and six months after the intervention

Method of measurement

Demographic Information Questionnaire and Needle Stick Information

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: In the first stage, the questionnaire tool, which includes two sections of demographic information and information about Needle Stick, will be provided to nurses and nurse assistance Also, by referring to the Infection Prevention and Control Department, the necessary information is obtained in a period of six months. In the second stage, by teaching how to use the Safe Pad tool, by installing educational posters on how to use the Safe Pad tool in the wards, as well as teaching face to face to the wards head nurses, the Safe Pad tool will be used for six months. The invented Safe Pad tool is a plexiglass cube in which there are a 40 kg/m3 density sponge and a double-sided glue inside and bottom side of that, respectively which the nurse can insert into a kidney dish or tray and take to the patient side. The two sides of this cube are open and in the time of vein puncturing, the needle taken out of the angiocath is inserted into the sponge with only one hand. By using this small tool, hospital clinical staff remove all kinds of sharp tools such as angiocath, needles, syringes, suture needles, and scalpels immediately, then after filling the sponge with the needles, the sponge is removed from the cube with a special clip and can be placed in the safety box. Finally, in the third stage, after six months of using the safe pad tool, a two-part questionnaire is given to the participants again and by referring to the Infection Prevention and Control Department, the necessary information is obtained during the use of the tool. And will be compared with the time period of six months before using the tool.

Category

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Hossein Hospital

Full name of responsible person

Dr. Alireza Manafi Rathi

Street address

Imam Hossein Sq., Shahid Madani Street

City

Tehran

Province

Tehran

Postal code

1617763141

Phone

+98 21 7343 2416

Email

info@ehmc.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

دکتر افشین زرقي

Street address
Shahid Beheshti University of Medical Sciences,.
Taleghani Hospital Near,. Shahid Arabi St,. Yemen St,.
Shahid Chamran Highway
City

Tehran

Province

Tehran

Postal code

1985717443

Phone

+98 21 2243 9781

Email

zarghi@sbmu.ac.ir

Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Shahid Beheshti 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

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Nima yadollahzade

Position

University student

Latest degree

Bachelor

Other areas of specialty/work

Nursery

Street address
No. 608, Goolbagh1st Alley., Ahangarkolaye bozorg
Village., Shahid Salehi Ave
City

Babol

Province

Mazandaran

Postal code

4734116194

Phone

+98 11 3262 3308

Email

yadollahzade.nima1998@gmail.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Mitra zandi

Position

Associate Professor

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

Street address
Department of Medical-Surgical Nursing, School of
Nursing and Midwifery, Shahid Beheshti University of
Medical Sciences, Valiasr St., Niayesh Highway Junc.
City

Tehran

Province

Tehran

Postal code

1985717443

Phone

+98 21 8865 5363

Email

mitra.zandi@yahoo.com

Person responsible for updating data

yadollahzade.nima1998@gmail.com

Contact

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Nima yadollahzade

Position

University student

Latest degree

Bachelor

Other areas of specialty/work

Nursery

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City

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Province

Mazandaran

Postal code

4734116194

Phone

+98 11 3262 3308

Email

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