

Clinical Trial Protocol

Iranian Registry of Clinical Trials

31 May 2026

Assessment the effect of concept map teaching on procedural skills and creativity in first year nursing students at school of nursing and midwifery, Tehran 1391-92

Protocol summary

Summary

Promoting meaningful learning is one of the main objective of education and an important factor in promoting students creative thinking, critical thinking and problem-solving abilities in learners. Due to development of educational system and importance in the nursing profession, the necessity of using appropriate instructional methods for new theoretical and procedural skills is clear. The concept map is a method for facilitating thinking, teaching, learning and assessment. The present investigators aimed to evaluate and compare procedural skills and creativity in two groups, using (concept-map) or not using it (traditional). We used a quasi-experimental study on two groups with pre(creativity)-post test design (procedural skill-creativity), 70 first semester nursing students were selected through convenience sampling and then randomly divided into two groups (experimental and control). After pretest, control and experimental group received education for 4 sessions during 1 month, either lecturing method or concept map, respectively. The teaching schedule comprised 4 sessions of practical fundamental of nursing concerning: Intra venous Canulation, Intramuscular injection, airway suctioning and Nasogastric tube. Then, used a post test at the end of second and fourth week of teaching for procedural skills (checklist) and for creativity (by Abedi creativity questionnaire), respectively. The data were analyzed using SPSS statistical software (Version 22).

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013121015742N1**

Registration date: **2014-02-07, 1392/11/18**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-02-07, 1392/11/18

Registrant information

Name

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Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Deputy of Research, Tehran University of Medical Sciences

Expected recruitment start date

2013-04-04, 1392/01/15

Expected recruitment end date

2013-06-21, 1392/03/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessment the effect of concept map teaching on procedural skills and creativity in first year nursing students at school of nursing and midwifery, Tehran 1391-92

Public title

Assessment the effect of concept map teaching on procedural skills and creativity in nursing students

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria: older than 19; Students that have taken the practical fundamental of nursing course; student consent to participate in this project from the beginning

Age

From **19 years** old to **149 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **70**

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**

Tehran University of Medical Sciences, School of Nursing and Midwifery

Street address

School of Nursing and Midwifery, East Nosrat Avenue, Tohid Square, Tehran

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Postal code

1419733171

Approval date

2013-03-16, 1391/12/26

Ethics committee reference number

130/3393/91/3

Health conditions studied**1****Description of health condition studied**

procedural skill,creativity

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

Procedural skill In Fundamental Of Nursing

Timepoint

Two weeks after the intervention

Method of measurement

Checklist

Secondary outcomes**1****Description**

Creativity in four dimension elaboration, flexibility, originality, fluency

Timepoint

Before and 4 weeks after intervention

Method of measurement

Abedi creativity questionnaire

Intervention groups**1****Description**

experimental group: The course items chosen for teaching is practical fundamental of nursing included 4 procedures comprises Intra venous Cannulation, Nasogastric tube, Airway suctioning and Intramuscular injection and taken in the first semester. The researcher taught this educational material by Concept map to the experimental group.

Category

Other

2**Description**

Control group: The course items chosen for teaching is practical fundamental of nursing included 4 procedures comprises Intra venous Cannulation, Nasogastric tube, Airway suctioning and Intramuscular injection and taken in the first semester. The researcher taught this educational material by using lecture by using audiovisual material to the control group

Category

Other

Recruitment centers**1****Recruitment center**

Name of recruitment center

School of Nursing and Midwifery, Tehran University of Medical Sciences

Full name of responsible person

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Deputy of Research, Tehran University of Medical Sciences

Full name of responsible person

Dr Aliakbar Fotuhi

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Sixth Floor, central university organization, ghods street, keshavarz bulvar, Tehran

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Deputy of Research, Tehran 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

Contact

Name of organization / entity

Tehran University of Medical Sciences, School of Nursing and Midwifery

Full name of responsible person

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Position

MSc student of nursing

Other areas of specialty/work

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Person responsible for updating data

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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