

Clinical Trial Protocol

Iranian Registry of Clinical Trials

31 May 2026

The Effect of Conceptual Map and Traditional method on Short and Long Term Learning in Nursing Students in Shahed Bahashti's nursing and midwifery

Protocol summary

Summary

There is a need for more changes in learning systems. The conceptual map (CM) is a method for facilitating thinking, teaching, learning and assessment. The present investigators aimed to evaluate and compare learning levels and mental plans in two groups, using (conceptual map) or not using it (Traditional method) . A quasi-experimental design was used with pre and post tests. The participants were two groups of BS undergraduate students in the second semester who were randomly assigned to either a control or an experimental group. The teaching schedule comprised four sessions concerning water and electrolytes. The conceptual map was used for the experimental group and the traditional method of teaching for the control group. Both groups were instructed by the same teacher and the groups were matched in terms of age and sex. All of student were older than 19 ; BS undergraduate students in the second semester and there were no exclusion criteria. The teacher used a pre test at the start, a post test after finishing, and a retention test at the end of the fourth week. The conceptual map was evaluated by the scoring system of Novak and Gowin (1984). The CMs were assessed separately by three of the investigators and the means of all scores were presented as the final scores. The data were analyzed using SPSS statistical software (Version 16).

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201106241174N6**
Registration date: **2011-07-30, 1390/05/08**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-07-30, 1390/05/08

Registrant information

Name

Atefeh Ghanbari

Name of organization / entity

Guilan University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

vice chancellor for research , Guilan Univeristy of Medical Sciences

Expected recruitment start date

2007-07-01, 1386/04/10

Expected recruitment end date

2008-12-29, 1387/10/09

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effect of Conceptual Map and Traditional method on Short and Long Term Learning in Nursing Students in Shahed Bahashti's nursing and midwifery

Public title

The Effect of Conceptual Map and Traditional method on

Short and Long Term Learning in Nursing Students in Shahed Bahashti's nursing and midwifery faculty

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria: older than 19 ; BS undergraduate students in the second semester. No exclusion criteria .

Age

From **19 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **66**

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

1

Registry name

no

Secondary trial Id

no

Registration date

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethical committee, vice chancellor Guilan university of medical

Street address

Guilan university of medical sciences,Namjoo Street,Rasht,Guilan,Iran

City

Rasht

Postal code

Approval date

2006-12-28, 1385/10/07

Ethics committee reference number

290015215

2

Ethics committee

Name of ethics committee

Ethical committee, vice chancellor Guilan university of medical

Street address

Guilan University of Medical Sciences, Namjoo Street,Rasht,Guilan,Iran

City

Rasht

Postal code

Approval date

2006-08-20, 1385/05/29

Ethics committee reference number

85/10/99/3/132/4511/پ

Health conditions studied

1

Description of health condition studied

Other disorders of fluid, electrolyte and acid-base balance;hyperkalemia;hypokalemia

ICD-10 code

E87

ICD-10 code description

Other disorders of fluid, electrolyte and acid-base balance

Primary outcomes

1

Description

short term learning

Timepoint

end of term

Method of measurement

Questionnaire(Test)

Secondary outcomes

1

Description

long term learning

Timepoint

one month after education

Method of measurement

questionnaire(test)

Intervention groups

1

Description

The course items chosen for teaching included 4 hours (two class sessions) on hyperkalemia and hypokalemia in a total of 8 hours (four class sessions) on water and electrolytes offered in Medical-surgical (I) taken in the second semester. These course items were chosen

because they were the investigators' field of expertise and this helped in the design of a primary CM based on previous studies. The primary CM included hyperkalemia and hypokalemia and covered etiology, signs and symptoms and treatment domains. the control group received the same teaching material using lecture by using audiovisual material

Category

Treatment - Other

2

Description

The course items chosen for teaching included 4 hours (two class sessions) on hyperkalemia and hypokalemia in a total of 8 hours (four class sessions) on water and electrolytes offered in Medical-surgical (I) taken in the second semester. These course items were chosen because they were the investigators' field of expertise and this helped in the design of a primary CM based on previous studies. The primary CM included hyperkalemia and hypokalemia and covered etiology, signs and symptoms and treatment domains. the experimental group received the same teaching material using CM.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Nursing and Midwifery University

Full name of responsible person

Mr Moghadamnia

Street address

Shahed Behashti Highway,Guilan University of Medical Sciences,Namjoo Street,Rasht,Guilan, Iran

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

vice chancellor for research , Guilan University of Medical Sciences

Full name of responsible person

Dr Abdolrasoul Sobhani

Street address

Guilan university of Medical Sciences,Namjoo Street,Rasht,Guilan,Iran

City

Rasht

Grant name

Grant code / Reference number

p/3/132/4529,7/10/85

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

Yes

Title of funding source

vice chancellor for research , Guilan 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

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Full name of responsible person

Atefeh Ghanbari

Position

Assistant Professor

Other areas of specialty/work

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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