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Evaluating the effectiveness of crisis resource management training for simulation-based hypoglycemia (low blood sugar) experience

Submission date 29/07/2020	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [_] Record updated in last year
Registration date 04/08/2020	**Overall study status** Completed	
Last Edited 04/08/2020	**Condition category** Other	

Plain English summary of protocol

Background and study aims
Crisis Resource Management (CRM) is used to prevent accidents during emergency situations. The causes of the accident can be recognized and prevented beforehand when the human factors are effectively internalized and used by all people in a team. The aim of this study is to evaluate the effectiveness of simulation-based Crisis Resource Management training given to nursing senior students for the management of hypoglycemia (a condition in which blood sugar [glucose] level is lower than normal).

Who can participate?
Senior nursing students at Acibadem Mehmet Ali Aydinlar University.

What does the study involve?
Participants will be randomly allocated to receive hypoglycemia training with or without additional CRM training. The training lasts 3 hours. After 15 days the participants take part in a simulation scenario to assess their abilities.

What are the possible benefits and risks of participating?
Improving the awareness of the potential benefits of CRM skills during undergraduate training will better prepare nursing students for their future clinical practice and understand their professional roles in an interdisciplinary environment. No risk.

Where is the study run from?
Acibadem Mehmet Ali Aydinlar University (Turkey)

When is the study starting and how long is it expected to run for?
May 2017 to April 2019

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
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Contact information

Type(s)
Public

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Additional identifiers

Protocol serial number
20171423

Study information

Scientific Title
Comparing clinical approaches of senior nursing students with and without crisis resource management skills training during crisis situations like hypoglycemia

Study objectives
The Crisis Resource Management training has a positive effect on student's performance in simulation-based hypoglycemia scenario

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 24/08/2017, Acibadem University Ethics Committee (Kayısdagı street no:32 Atasehir, Istanbul, Turkey; +90 2165004444; atadek@acibadem.edu.tr), ref: none provided

Primary study design
Interventional

Study design

Interventional randomized controlled trial

Study type(s)
Other

Health condition(s) or problem(s) studied
Training in the area of crisis resource management for hypoglycaemia.

Interventions
Experimental and control groups will be established with simple random sampling method by using random.org website. In the data collection; Demographic Information Form, Hypoglycemia Management Information Form, Hypoglycemia Scenario Control Form and Student Satisfaction and Self-Confidence in Learning Scale will be used.

Crisis Resource Management and hypoglycemia training will be given to the Experimental group while only hypoglycemia training will be provided to the control group. Hypoglycemia training will be given for 2 h, Crisis Resource Management training will be given 3 h.
The training content is composed of two parts. In the first part, Situational Awareness, Teamwork, Leader – Team Member, Workload Distribution, Communication, Management of Resources and Management Skills were explained with references used for aviation. In the second part, the steps of CRM developed by David Gaba et al. are described in association with hypoglycemia attack and nursing approaches.
After the data collection process, CRM training will be given to the students in the control group.

Simulation Scenario Application and Post-test: 15 days after the theoretical training, all students are divided into groups of three and participate in the simulation scenario application carried out with the standardized patient. Simulation scenarios take 10 - 15 min for each group, debriefing sessions take 30 - 40 min for each group. “Student Satisfaction and Self-Confidence in Learning Scale” and post-test will be applied after the debriefing.

Intervention Type
Behavioural

Primary outcome(s)
Knowledge level of students measured using the Hypoglycemia Management Information Form at baseline and 15 days

Key secondary outcome(s)
Students satisfaction and self-confidence measured using the “Student Satisfaction and Self-Confidence in Learning Scale” after the simulation scenario (15 days)

Completion date
30/04/2019

Eligibility

Key inclusion criteria
Senior nursing students

Participant type(s)

Health professional

Healthy volunteers allowed
No

Age group
Adult

Sex
All

Total final enrolment
61

Key exclusion criteria
Does not want to be a volunteer

Date of first enrolment
14/01/2019

Date of final enrolment
03/04/2019

Locations

Countries of recruitment
Türkiye

Study participating centre
Acibadem Mehmet Ali Aydinlar University
Kayısdagı street no. 32
Atasehir
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Sponsor information

Organisation
Acıbadem University

ROR
https://ror.org/01rp2a061

Funder(s)

Funder type
Other

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan
All data generated or analysed during this study will be included in the subsequent results publication.

IPD sharing plan summary
Other