

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

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<b>Registration date</b> 04/08/2020	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 04/08/2020	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## 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?  
Zehra Belhan, zehraitas@gmail.com

## 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 (Kayisdagi street no:32 Atasehir, Istanbul, Turkey; +90 2165004444; atadek@acibadem.edu.tr), ref: none provided

**Study design**  
Interventional randomized controlled trial

**Primary study design**

Interventional

### **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 Aydınlar University

Kayısdagi street no. 32

Atasehir

Istanbul

Türkiye

34752

## **Sponsor information**

**Organisation**

Acibadem 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