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Student Perception on High-Fidelity Simulation during the Medical Clerkship*

CFS Brandão [a], CF Collares[b], HF Marin[c]

[a]*School of Medicine, Universidade Cidade de São Paulo, Brazil*
[b]*Department of Educational Research and Development Maastricht University, Netherlands*
[c]*Nursing School, Universidade Federal de São Paulo, Brazil*

Abstract and Objective

The undergraduate medical students use high fidelity simulation associated with audio-visual resources in cardiology, trauma care and pediatrics during clerkship using scenarios consistent with knowledge and skills. The captured images are analyzed by all students as well as the facilitator to conduct the debriefing. Through a closed questionnaire students' perception were explored related to the use of this technology. We obtained positive results that support more investments to assure better performance to promote safety.

Keywords: high fidelity simulation; patient safety; high fidelity simulators.

Introduction

Simulation-based training for healthcare providers is established as a viable, efficacious training tool, particularly for the training of non-technical team-working skills that are known to be important in the prevention of error and adverse events[1]. Simulation is a process that replicates patient care scenarios in an environment close to reality[2].Medical students has been raised in the technology age and has come to rely on computers and applications. Therefore, the role of the educator is to understand which technological resources are available and how cab be integrated to the curriculum to achieve optimal learning results[3]. The undergraduate medical course at UNICID uses high fidelity simulation associated to audio-visual resources in cardiology, trauma care and pediatrics. Students participate in these activities during clerkship, and the choices of scenarios are consistent with previous knowledge and skills. Students' attendance is mandatory, but participation in the scenarios is always voluntary. As soon as the volunteers complete the scenario, the captured images are analyzed by students and the facilitator to conduct the debriefing. The sets last about 20 minutes and the debriefing 90 minutes. This study explores the student's perception on the method and how it impacts on the learning process.

Methods

Six closed questions (Likert Scale of 5 points) questionnaire was applied immediately after training to 142 undergraduate medical students during clerkship (sixth and fifth years), exploring the perception and value that students attributed to the simulation program which has been offered since the first semester of 2010.

Results

Simulation scenarios (SS) were applied from April to June 2010, focusing on emergency care. The questions and answers were as follows: Q1. Do you consider SS suitable for learning medical practice? (86% very suitable, 14% suitable); Q2. Have you taken part in SS before? (77% No; 23% Yes); Q3. Do you consider SS to be a correct practice during the internship? (95% totally correct; 5% correct); Q4. Do you think studying before SS helps in the learning process? (98% helps a lot; 2% hinders); Q5. I would not like to participate in SS again (1% strongly agrees, 1% indifferent, 8% disagree, 90% strongly disagree); Q6. I felt exposed during the training. (6% agree, 7% indifferent, 20% disagree, 67% strongly disagree).

Conclusions

Few students have had previous opportunities to learn through high fidelity simulation. The method has been well accepted as a training strategy during clerkship. Students felt secure in this learning environment. These results supported the decision to establish and expand training activities in the internship. The next step will be checking the differences in their practical routine before this new educational strategy.

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Adress for correspondence Carolina Brandão. carolinafs11@gmail.com

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