Collaborative nursing education in perioperative nursing care using clinical simulation

**Background:** The use of clinical simulation in nursing education provides many opportunities for students to learn and apply theoretical principles of perioperative nursing care in a safe environment. We've collaborated with clinical instructors and given a practicum using clinical simulators setting up five perioperative-specific situations, post-anesthesia care, postoperative ambulation, wound care, preoperative respiratory training and drain management, during clinical training in perioperative nursing since 2011. Each situation consisted of 10 students for 50 minutes.

**Aim:** The purpose of this study was to evaluate simulated clinical experiences as a learning method to increase the knowledge, technical skills and self-efficacy of nursing students for the perioperative nursing practice during their clinical training in the third and fourth year.

**Methods:** A sample of 195 students completed surveys, indicating their basic knowledge of perioperative care (15 questionnaires), self-efficacy scales (16 items) and the availability of clinical simulation (5-point Likert scale), before the simulation experience and after clinical training. The data was collected in 2014 and 2015 and we analyzed the data using statistical procedure. The study was approved by a research and ethics committee.

**Results:** Results indicated that mean knowledge scores were significantly increased (p<.001). Students experienced a significant increase in overall self-efficacy (p<.001). The majority of the students identified the simulations as realistic and valuable. Furthermore, students agreed that the knowledge and skills learned in the clinical simulation could transfer to their nursing care plans and a real clinical setting.

**Discussion:** Clinical simulation enables small groups of students to practice in a safe and controlled environment, learning how to react adequately in a critical patient care situation. This type of training is very valuable to equip students with specific nursing knowledge and skills just before they use them in real practice settings.

**Biography**

Megumi Ikeda is an Associate Professor at Juntendo University, where she has been since 2008. She teaches both post and under graduate programs. She has more than 10 years of experience as an Advanced Intensive Care Nurse and Infection Control Practitioner. Her research interests span both nursing education and preventing healthcare associate infections. Much of her work has been on improving quality of nursing practices using simulations and infection control practices in Japan and the UK.

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