Simulation as a Multidisciplinary Team Approach in Health Care Programs in an Urban University Setting



Dawn I. Blue DNP AGACNP-BC RN, Geraldine C. Fike, DNP, MSN/Ed, RN, CCRN, José A. Muñoz, PhD, Guillermo Escalante, DSc, MBA, ATC, CSCS, Yeon Kim DNP, MSN, RN, CCRN

Department of Nursing, Kinesiology, Sociology, California State University San Bernardino

Background/objectives

- Nursing education started using simulation in the 1990's.
- The study in 2014 by the National Council of State Boards of Nursing (NCSBN) has shown that using simulation for up to 50% of the clinical experience is as effective as bedside patient care for preparing nurses for practice.

Simulation in health care involves a scenario in which students care for a patient, followed by debriefing. During the scenario, the students care for the patient, by assessing the situation and implementing interventions using critical thinking. Faculty members serve as facilitators to observe and provide cues. Active debriefing facilitated by the educator, should challenge the student to reflect on their actions and clinical judgment.

Goal

- Increase usage of the simulators in nonnursing programs
- Improve communication in a team

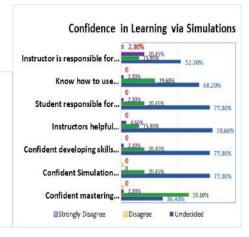


Methods

- Mixed methodological approach
- Convenience sample of students in various disciplines
- Volunteered for the interdisciplinary simulation
- Simulation Learning System, developed by Elsevier was used for the scenarios.
- Data was collected anonymously by computer survey immediately following the experience
- Student Satisfaction and Self-Confidence in Learning Scale created by Jeffries for NLN with comment section

Sample

- A total of 44 students
- Majors in nursing, kinesiology, sociology, and psychology
- Five distinct multidisciplinary simulation exercises over an academic year



Student comments included:

- recognizing the culture, religion and social aspect of the patient in consideration of the patient as a whole
- responded great or excellent to the experience of the simulation project
- the experience helped them apply the theory to actual patient care scenarios
- felt it was realistic of what to expect in the real practice of caring for the patient
- recommended more multidisciplinary simulation experiences
- recognized the need for and value of collaboration
- had more confidence after working with other disciplines
- more comfortable working and acknowledging the chain of command process
- encourage other students to participate in future simulation projects
- helps students recognize areas to improve and strengthen in the care of the patients
- reinforced the importance of connecting theory to bedside care of the patient

Applicability

Can be used to design future studies to improve graduate preparation for practice

Conclusions

- Faculty plan to use simulation in other health care disciplines along with nursing to prepare the students for practice.
- Students found the experiences helpful to increase confidence in collaborating and communicating in a multidisciplinary situation.

References

Bradley, P.(2006). The history of simulation in medical education and possible future directions. Medical Education. 254-262.

Casper, M. J., and D. R. Morrison. "Medical sociology and technology: Critical engagements." Journal of Health and Social Behavior 2010;51:120-S132.

Hayden, J., Smiley, R., Alexander, M., Kardong-Edgren, S., & Jeffries, P. (2014). The NCSBN national simulation study: A longitudinal, randomized, controlled study replacing clinical hours with simulation in prelicensure nursing education. Journal of Nursing Regulation, S1-S64.

Jefferies, P.R. (Ed.) (2007). Simulation in Nursing Education: From Conceptualization to Evaluation. New York, NY: National League for Nursing.

Maxfield, D., Grenny, J., Lavandero, R., & Groah, L. (2011, September). The silent treatment: Why safety tools and checklists aren't enough. Patient Safety & Quality Healthcare. Retrieved from https://www.psqh.com/analysis/the-silent-treatment-whysafety-tools-and-checklists-arent-enough/

Murphy, M., Curtis, K., & McCloughen, A. (2016). What is the impact of multidisciplinary team simulation training on team performance and efficiency of patient care? An integrative review. Australasian Emergency Nursing Journal, 19(1), 44-53. doi:10.1016/j.aenj. 2015.10.001

Wong, H. J., Caesar, M., Bandali, S., Agnew, J., & Abrams, H. (2009). Electronic inpatient whiteboards: Improving multidisciplinary communication and coordination of care. International Journal of Medical Informatics, 78(4), 239-247. doi.10.1016/j.ijmedinf. 2008.07.012