Simulation in Nursing Education

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Introduction

Nursing as a profession is undergoing massive changes, this is due to the shift in focus on the delivery of care. Many hospitals that were traditionally teaching hospitals are not making themselves available to student nurses. The scarcity of placements leaves faculty scrambling to find proper placements and sometimes forcing them to close clinical sections. Therefore this creates a future scenario of having graduate nurses with little to no clinical experience (Huston, 2014). Another concern is that under certain stressful situations such as emergencies and complex care unit care nursing students don’t know what to do. Whether it is communicating therapeutically, being confident, critical thinking or clinical judgement. The safe delivery of care is compromised if the student is not capable of doing that in stressful situations.

Throughout this paper I will seek to examine what type of simulation are nursing students currently participating? Simulation offers wide of variety modules that can be adjusted so the students can benefit the most. For example, a disaster nursing simulation was a scenario that City Tech BS students took part of in spring 2016 at Bellevue hospital. Then this leads us to ask whether simulations are being done for high risk areas such as mental health, intensive care unit, emergency room, maternity, and labor and delivery?

One undeniably has to ask how simulation impacts the future of nursing education. If simulation have a positive effect on the nurses’ future performance in these areas mentioned above. If simulating clinical scenarios becomes a mainstream educational pathway. Will simulation become part of the NCLEX in the near future, as a way to evaluate patient care? If these things become a reality in the near future. Then the question we must ask ourselves will simulation become a basic requirement to be met throughout every ADN or BS program?

The growing need for simulation

Nursing has been historically a teaching profession that relies on the clinical placements. These placements ensure that students acquire their practical skills. An issue that has recently come into play is the lack of institutions that are opening their doors to undergraduate nursing students. Due to a variety of reasons such as students not abiding by institutional policies, for example not using ID tags when on premises. Another great threat is the restructuring of healthcare organizations. Since the aim of healthcare has shifted from hospital inpatient setting to community settings. In New York City the closing of institutions such as Long Island College Hospital, Saint Vincent’s Hospital and soon Beth Israel Hospital has had mayor impact on clinical practice for student nurses.

The lack of placements will have implications on the quality of clinical experience novice nurses will experience. Therefore simulation comes in the picture to ensure that those critical skills are acquired and mastered. This of course should take place before the student begins to practice as a professional registered nurse (RN). One can rant about the benefits or the limitations that simulation has for nursing students. We should further examine what the most current research indicates since nursing is an evidenced based profession. To determine whether simulation can have an impact or it is a waste of the student’s time. In the next section of this paper we will examine what trends the literature supports.

Literature Search

Upon detailed examination of the existing current literature I found the impact of simulation in nursing is well documented. Perhaps one could argue that simulation is only used in the United States. While researching I found two very diverse articles from other countries that are utilizing simulation as teaching instrument. The first one from South Korea by Kim et al. titled *Effects of Simulation-based Education on Communication Skill and Clinical Competence in Maternity Nursing Practicum.* This article used a non-equivalent control pretest and post-test design. With both a group of subjects that were participating and a control group. The simulation-based education in maternity nursing practicum consisted of two clinical situation scenarios a normal delivery and a high risk delivery. The second article is from Singapore by Chia titled, *Using a virtual game to enhance simulation based learning in nursing education.* This researcher utilized a questionnaire to aid the students self-assess their perception on whether a virtual gamed helped their educational learning experience. In the article by Orr et al. titled, *The distress of voice-hearing: The use of simulation for awareness, understanding and communication skill development in undergraduate nursing education.* This studysought to involve nursing students in a simulation in which the participants had to wear an MP3 player and headphones. The students were instructed that they would hear play prerecorded voices simulating auditory hallucinations. These prerecorded voices were meant to teach students what voice-hearers experience in their daily lives.

In the article by Berndt et al. titled *Collaborative Classroom Simulation (CCS): An Innovative Pedagogy Using Simulation in Nursing Education.* This study focused on second year baccalaureate students at a University in the Midwest. The students participated in a simulation that sought to teach them the likely complications of a patient who underwent surgery and has congestive heart failure. Utilizing a low fidelity mannequins students determined the appropriate interventions. They were debriefed both pre and post-simulation sessions and then they self-assessed their experience. In the last study that I analyzed was by Sideras et al. titled *Making Simulation Come Alive: Standardized Patients in Undergraduate Nursing Education.* The researchers utilized standardized patients whom were paid actors who bring to life the scenario. The utilization of real people, makeup and props facilitates the student to act as a provider that is delivering care in a real life scenario. The researchers indicated that despite the budgetary constraints to make the scenarios more realistic for the students they relied on the generous donations from staff members, students and local thrift shops.

Implications on nursing future

 All these articles seem to point out an increasing consensus that simulation is in fact having a positive impact on students. This is despite being on different geographical locations, being enrolled in different types of programs and most important of all these programs had different types of curricula. When students are instructed and guided throughout the simulation process it is clearly evidenced that confidences is magnified and clinical judgment improves. In the study conducted by Orr et al. one can see the relevance of simulation in nursing education; because it actually shows a group of student who participated in a mental health simulation. This article shows us how vital it is for a RN to understand their client’s experiences. Voice-hearing is a complex mental health and many of us are oblivious to the implications on daily lives of our clients that experience it. It showed that the participation of nursing students in these simulations can enhance and help in the future revision of nursing curricula. Using technology that is currently available such as virtual reality and video games. We can begin to understand how a client with COPD reacts to oxygen therapy. Also what are the appropriate nursing interventions for newly diagnosed and those with long term COPD diagnosis (Chia, 2013).

In the study conducted by Berndt et al. which utilized Collaborative Classroom Simulation (CCS) it concluded that “this learning strategy can integrated into the course design. Use of the unique CCS pedagogy provided an alternative to the traditional classroom teaching techniques and should be further explored as an active learning strategy” (2015, p. 402). The reader can understand how using actors’ aids in the development of therapeutic communication skills, critical thinking skills, augments clinical judgement. Hence fostering the development of a confident future RN. In their study that took place in South Korea conducted it concluded that “The simulation-based education in maternity nursing practicum is effective in promoting communication skill and clinical competence. With application of diverse clinical situation scenarios, it is recommended to develop and apply simulation-based education using a high-fidelity simulator in the area of maternity nursing” (Kim, Ko, & Lee, 2012, p. 312). Labor and delivery is a high risk area filled with unpredictable variable which can hinder the participation of students in the clinical site. Births can go from normal vaginal birth to and emergency C-section.

The use of simulation in the NCLEX is a subject that is often talked about in our profession. Up to this day the NCLEX is a computer adaptive test. That seeks to measure the minimum competencies for registered nurses seeking a license to practice. Perhaps the utilization of simulation scenarios to demonstrate these basic skills should be considered in the future. We have grasped understood what the literature findings have established. A positive trend favoring the application and utilization of simulation in nursing education.

Conclusion

 In conclusion the topic of simulation can sometimes be a controversial one. The traditional educator might feel a little reluctant to adapt to the always changing fast pace of technology. But we must acknowledge that nursing is a profession of innovators and constant change. Nursing has always led the adaptation of innovate ways to deliver care. Pedagogy is an art that is mastered by skilled instructors that are dedicated and flexible. The benefit of the students should always outweigh one’s personal preferences. There’s an undeniable shift in the way care is being delivered with the focus being that care is delivered in the community. The lack of clinical places should not hinder the education of the future generation of nurses. Instead we should embrace the shift and produce it into an opportunity to have graduate nurses that are able to perform in complex areas in which care is rendered. Registered nurses that are prepared to keep up with the pace of any unit even the specialized ones.

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