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

Dawn I. Blue DNP AGACNPc 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

Introduction
- Nursing education began using simulation in earnest 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 non-nursing programs
- Improve communication in a team environment

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
- Four distinct multidisciplinary simulation exercises
- Over an academic quarter.

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

Confidence in Learning via Simulations

<table>
<thead>
<tr>
<th>Confidence in Learning via Simulations</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor taught simulation suitable to how I learn</td>
<td>2.33%</td>
<td>2.33%</td>
<td>52.30%</td>
<td>24.65%</td>
<td>15.78%</td>
</tr>
<tr>
<td>知 how to use simulation activities to learn important aspects</td>
<td>2.33%</td>
<td>2.33%</td>
<td>52.30%</td>
<td>24.65%</td>
<td>15.78%</td>
</tr>
<tr>
<td>Student responsible for learning in simulation</td>
<td>2.33%</td>
<td>2.33%</td>
<td>52.30%</td>
<td>24.65%</td>
<td>15.78%</td>
</tr>
<tr>
<td>Instructors helpful resources for simulation</td>
<td>2.33%</td>
<td>2.33%</td>
<td>52.30%</td>
<td>24.65%</td>
<td>15.78%</td>
</tr>
<tr>
<td>Confident developing skills and developing knowledge</td>
<td>2.33%</td>
<td>2.33%</td>
<td>52.30%</td>
<td>24.65%</td>
<td>15.78%</td>
</tr>
<tr>
<td>Confident Simulation covered critical content</td>
<td>2.33%</td>
<td>2.33%</td>
<td>52.30%</td>
<td>24.65%</td>
<td>15.78%</td>
</tr>
</tbody>
</table>

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.

Applicability
Can be used to design future studies to improve graduation preparation for practice.

References