Evaluating the Impact of Supplemented Simulation Learning Experiences on Clinical Decision Making and Clinical Competence

Aimee Woda PhD, RN BC Assistant Professor Marquette University
Theresa Schnable MS, RN ACNS-BC Simulation Coordinator and Clinical Instructor Marquette University, Penny Alt-Gehrman, MSN, RN Doctoral Student

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Background/Literature Review: An emerging nursing education trend is to substitute a portion of hospital-based learning experiences (HLEs) with simulated learning experiences (SLEs) as a means to optimize student clinical competency and decision-making skills. Studies support the efficacy of SLEs within nursing curricula to decrease students’ anxiety, increase CDM skills, self-confidence, and overall competency. Little is known if supplementing HLEs with SLEs versus substituting has a greater impact on learner outcomes and, ultimately, on patient care.

Purpose: The purpose of this study was to determine whether additional supplementation of simulated learning experiences (SLEs) influences the development of graduating nursing students. Specifically, this study explored if there are differences in clinical decision making (CDM), CDM-related self-confidence and anxiety, and clinical competence between two groups of students in their final semester prior to licensure.

Description of Sample: The sample included 71 final semester seniors in a baccalaureate nursing program. A quasi-experimental design was used to compare CDM and CDM-related self-confidence and anxiety, and clinical competence between two groups of the 71 senior-level nursing students. Students who had either no SLEs or had SLEs substituted within their medical-surgical HLEs (Group 1) were compared to a group of students who had robust supplementation of SLEs in addition to HLEs (Group 2).

Setting: The study took place at a Midwestern baccalaureate nursing program.

Results: There were 35 students in Group 1 and 36 students in Group 2. Outcomes were measured with two self-report surveys and one objective measure, all with established reliability and validity. The Clinical Decision Making in Nursing Scale (CDMNS) measured students’ perceptions of CDM and Nurse Anxiety and Self-Confidence with Clinical Decision Making (NASC-CDM) measured students’ perceptions of their level of CDM-related self-confidence and anxiety. Clinical competency was measured with the Creighton Competency Evaluation Instrument (C-CEI) which rates students on four areas of competency: assessment, communication, clinical judgment, and patient safety. When comparing the demographic characteristics between the two groups differences were non-significant except for employment in healthcare. Group 2 had significantly more participants who were employed as a certified nursing assistant or nurse intern/extern (p < .01). When comparing perceived CDM, self-confidence and anxiety, there were not significant differences between groups. With regard to clinical competency, Group 2 had significantly higher C-CEI total scale scores when compared to Group 1 (p < .01). Further analysis of the subscale scores of the C-CEI revealed that only the assessment subscale was significantly higher among Group 2 participants (p < .01). Although not significant, Group 2 had higher scores than Group 1 on the clinical judgment and patient safety subscales.

Conclusion: Supplementation vs. substitution along with increased health care experience may have impacted clinical competency. These findings suggest that offering increased exposure to patient care experiences resulted in graduating nursing students that performed better patient assessments, had increased clinical judgment, and provided safer care in the simulated environment.