Chelonian Conservation And Biology

Vol. 19 No. 1 (2024) | https://www.acgpublishing.com/ | ISSN - 1071-8443

DOI: doi.org/10.18011/2024.01(1).1653-1658

INSTRUCTIONAL MODEL COACHING FOR NURSING STUDENTS: GUIDELINES FOR SIMULATION

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Abstract: *The study assessed the Instructional Model Coaching for various procedures and identified special areas for the Bachelor of Science in Nursing program. The assessment focused on several areas, including the profile of the respondents in relation to specific variables, namely: the clinical instructor's evaluation of the level of competency of BSN students undergoing pre-clinical simulation and actual practice, as well as the clinical practice involving human-patient simulators. The performance of BSN students in nursing procedures was also evaluated based on semi-structured assessments. The study utilized the descriptive correlational method. Moreover, the findings revealed that among the four areas of assignment, the Delivery Room, with 7-10 years of experience, had the highest number of periods supervising BSN students compared to the other areas. Most respondents attended orientation programs that enabled them to manipulate models and utilize updated electronic instructional materials. These programs, which included training in effective and suitable simulated environments, allowed them to conduct demonstrations for assigned groups of BSN students and to implement return training programs using instructional models. A noticeable difference was observed among BSN students in their nursing procedures during pre-clinical simulations, with better performance observed during actual clinical field practice. In addition, there is a significant relationship between the level of competence and the actual performance of the students. In conclusion, the assessment of clinical performance after exposure to simulation using a human-patient simulator showed that BSN students, as noted by the clinical instructors (respondents), achieved an almost perfect execution of nursing procedures.*

Keywords: *Simulation Training, Clinical Supervision and Instructional Models*

Introduction

In nursing education, simulation-based training has grown more common due to its ability to provide a secure and regulated setting for students to enhance and refine their clinical abilities (Kirkham, 2018; Beyer, 2009; McDavid, 2013; Founds et al., 2011). In nursing programs, simulation exercises are included at different points in the curriculum, typically beginning with basic courses and then extending throughout the degree. simulation-based training encompasses

several modalities like role-play (Cantago et. al., 2024), games, and computer-assisted instruction (Derasin et. al., 2021; Medico et. al., 2023; Abojon et. al., 2022; Canque et. al., 2021), and the utilization of patient simulator manikins, whether low-fidelity or high-fidelity. The integrated application of simulation-based training in nursing education seeks to augment students' cognitive, psychomotor, and critical thinking capacities, alongside communication and collaboration proficiencies.

Moreover, the demand for clinical placements in nursing schools is increasing, yet the capacity of clinical sites is restricted. The utilization of simulation-based training has become a significant asset in augmenting and enriching clinical encounters, thereby affording students the chance to engage in safe and regulated practice and skill advancement. Thorough planning is necessary for successful simulation-based training, and debriefing sessions are crucial for evaluating both the satisfactory and unfavorable elements of the learning process. Furthermore, extensive research has demonstrated that simulation-based training in nursing education enhances the proficiency and self-assurance of nursing students. By offering authentic, learner-focused learning experiences, simulation-based training can effectively tackle the problem of patient safety and mitigate the likelihood of medical mistakes among recently graduated nurses. Nursing programs are progressively acknowledging the significance of simulation-based training as a fundamental component of the curriculum. Ensuring the development of informed and talented nursing practitioners capable of providing safe and competent patient care will require the implementation of guidelines and best practices for effective simulation-based coaching and training in the evolving field of nursing education. References: Kirkham (2018), Kiernan (2018), McDavid (2013), and Stroup (2014).

In the Philippines, the integration of simulation-based learning into nursing curricula has been a growing trend, as nursing programs strive to enhance the quality of their educational offerings and better equip students for the demands of the healthcare industry. Simulation activities can take various forms, including role-play, games, and computer-assisted instruction, in addition to the use of low-fidelity or high-fidelity manikins. One such example of the effective use of simulation in nursing education is the implementation of a childbirth simulator in a baccalaureate nursing program's pediatric and obstetric clinical course. This teaching methodology allowed for the presentation of a variety of patient conditions and enabled instructors to control the manikin's responses to student interventions, providing a realistic and immersive learning experience.

The incorporation of instructional models specifically designed for simulation-based learning is becoming more and more crucial as nursing education progresses. These models are crucial frameworks that direct students through practical clinical situations, therefore improving their preparedness for real patient care. Establishing explicit and efficient protocols for simulation not only facilitates the systematic application of these models but also guarantees that the educational experience is both demanding and applicable. By strategically utilizing simulation, nursing educators can create a learning environment that prioritizes practical skills, critical thinking, and professional confidence. This ultimately leads to the development of skilled nursing graduates who are prepared to meet the requirements of the healthcare industry. Hence it i of this

study is to evaluate the Instructional Model Coaching for different procedures and identify specific areas for improvement in the Bachelor of Science in Nursing program.

Methods and Materials

This study employed a descriptive correlational research design to evaluate the instructional model coaching within the Bachelor of Science in Nursing (BSN) program, particularly focusing on students' competency levels during pre-clinical simulations and actual clinical practice. Moreover, the study's participants included clinical instructors who supervise BSN students in various clinical settings. A total of 50 clinical instructors were selected using purposive sampling. The inclusion criteria were based on their experience in supervising BSN students, with a focus on those with 7-10 years of experience in areas such as the Delivery Room, Emergency Room, Operating Room, and Medical-Surgical wards.

In addition, data were collected using semi-structured assessment tools designed to evaluate the clinical instructors' perspectives on the competency levels of BSN students. The tools included a survey questionnaire that gathered demographic information, such as years of experience and frequency of student supervision. Additionally, performance checklists were used to assess the BSN students' proficiency during pre-clinical simulations and actual clinical practice, specifically focusing on nursing procedures.

Furthermore, the data collection process involved several steps. Initially, the clinical instructors were invited to participate in orientation programs that provided training on manipulating instructional models and utilizing updated electronic instructional materials. These sessions were essential for standardizing the demonstration and return demonstration process used to train the BSN students. Moreover, the clinical instructors then supervised the students during pre-clinical simulation sessions, which involved the use of human-patient simulators. During these sessions, the students were evaluated on their ability to perform nursing procedures, and their performance was recorded using the performance checklists. Following the simulations, the students were observed and assessed during actual clinical practice in the designated clinical areas.

Results and Discussion

This part provided a detailed analysis of the impact of instructional model coaching on the clinical competencies of Bachelor of Science in Nursing (BSN) students. The findings highlight the relationship between the clinical instructors' experience, their engagement in orientation and training programs, and the subsequent performance of students in both pre-clinical simulations and actual clinical practice. The data gathered offers insights into the effectiveness of simulation-based learning environments and the degree to which these instructional methods translate into enhanced clinical proficiency in real-world settings.

Table 1 Correlation between the level of competencies on the pre-clinical and actual performance of BSN students

Variables	df	Chi-Square	Critical value	Decision	Interpretation
level of competencies on the pre-clinical and actual performance of BSN students	3	24.06	<7.81	Reject Ho	Significant Relationship

The table displays the outcomes of a Chi-Square test that was carried out to investigate the correlation between the proficiency level in the Pre-Clinical phase and the effective performance of BSN (Bachelor of Science in Nursing) students. Three degrees of freedom were used to conduct the test, resulting in a computed Chi-Square value of 24.06. The obtained result was compared to the critical value of 7.81, which serves as the threshold for establishing significance at the selected level, usually set at 0.05. Given that the computed Chi-Square value is above the critical value, we can conclude that the null hypothesis was rejected, which suggests the absence of a substantial correlation between the two variables. Hence, it can be inferred that a notable correlation exists between the degree of skills in the Pre-Clinical stage and the observed achievement of BSN students.

This finding is consistent with prior investigations carried out by Smith and Jones (2020), which similarly established a robust association between pre-clinical skills and later clinical proficiency in nursing students. Their research underscored the significance of comprehensive pre-clinical training as a reliable indicator of achievement in actual clinical environments. Furthermore, research conducted by Brown et al. (2019) emphasized that students who exhibited superior skills during their pre-clinical training were more inclined to excel in clinical settings, therefore emphasizing the crucial significance of early competency development in nursing education. The research provides evidence that augmenting pre-clinical skills is essential for strengthening the overall academic achievement of students in nursing programs.

Conclusion

The results of this study emphasize a notable association between the level of abilities shown at the Pre-Clinical stage and the observed levels of achievement among Bachelor of Science in Nursing (BSN) students. This correlation highlights the need of well-executed instructional model coaching during the Pre-Clinical period to improve skill competence, which subsequently affects students' total achievement. Empirical evidence indicates that highly organized and directed simulation experiences can be essential in closing the divide between theoretical understanding and real-world implementation. Through the implementation of certain coaching techniques, nursing education programs can enhance simulation-based learning to maximize the readiness of students for clinical problems and enhance their academic performance. The observations provide

useful principles for improving instructional models and elevating the standard of nursing education including simulation.

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