

Research Article

Building Nursing Students' Confidence through the Integration of Night-Shift Clinical

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Background. With a shortage of clinical placements, nursing faculty, and a growing nursing shortage, alternate clinical placements and experiences must be explored. Traditionally, students have been placed on day shifts, leading to competitive and saturated units with limited ability to participate in care and translate the knowledge they have acquired in the clinical setting. This study examined the satisfaction and confidence of students on both day- and night-shift clinical placements. **Methods.** A comparative quasiexperimental study was conducted using a modified version of the National League of Nursing's Student Satisfaction and Self-Confidence in Learning tool to compare students' satisfaction and confidence in 40 students who participated in day- and night-shift medical-surgical clinical rotations. This was examined using statistics for each of the survey's 12 questions. **Results.** One of the questions related to overall confidence with the clinical experience had higher means in the night-shift clinical group than the day-shift clinical group but was not statistically significant. The remainder of the questions related to confidence with the clinical demonstrated no statistical difference between the groups. There was no statistical difference between the groups for any questions related to satisfaction. **Conclusion.** Nursing programs should consider supplementing night-shift clinical as an alternative to day-shift clinical.

1. Introduction

1.1. The Impact of Night Clinical Rotations on Nursing Student Satisfaction and Confidence. The study examines students' perceptions of satisfaction and confidence after participating in night clinical rotations to explore the practicality of placing students in clinical during this shift. The satisfaction and confidence will be compared between the students completing the day shift and the students completing night-shift clinical rotations. The aim of the study was to determine if there was a statistically significant difference in student confidence and satisfaction when replacing a traditional day-shift clinical experience with a night-shift clinical experience. This study was completed as a result of shortages in clinical space, feedback from clinical partners, and night nurses expressing an interest in teaching without impacting their own scheduled nursing shifts. There has been little

opportunity for night nurses to teach students until recent years, and there is a lack of knowledge regarding the impact of this type of clinical experience.

2. Literature Review

The current global nursing shortage is expected to intensify and persist well into 2030 [1]. Nursing programs have struggled to increase their capacity to meet the demand for registered nurses in the workforce. Thousands of qualified students are turned away from nursing programs each year. One commonly identified reason is the lack of clinical sites [1]. Most healthcare institutions have multiple nursing programs competing for clinical placements at their facilities. Competition for clinical placements and saturation of clinical students on the nursing units, combined with the staffing shortage contributes to staff nurse fatigue and

burnout. This may lead to a lower-quality clinical experience for nursing students [2]. High-quality clinical experiences are integral to nursing education. The clinical setting provides students with opportunities to apply theory to practice, gain experience with nursing roles and skills, and become socialized in healthcare [3]. Quality clinical placements are needed to prepare future nurses for practice in today's healthcare environment and to meet the demand for more nurses in the workforce.

Few nursing programs incorporate night-shift clinical rotations in their clinical education. This may be due to the lack of research on the effectiveness of night-shift clinical. However, Leighton et al. [4] found in their systematic review that the effectiveness of the traditional clinical model used in nursing education programs for years has never been proven. Clearly, now is the time for innovation in the clinical setting. Nursing programs must look at new models of clinical education to increase the number of clinical placements for nursing students without impacting the quality of the clinical experience.

The literature on night-shift clinical practice is limited and has generated varied results. Students typically prefer day-shift clinical over night-shift clinical [5, 6]. Boredom and wasted time are commonly reported themes for students during night-shift clinical [5–7]. Students also commonly report challenges related to fatigue and interruption of sleep patterns as a result of the night-shift clinical, which can impact concentration and focus [6, 8]. Some studies have shown that students tend to experience negative or unwelcoming attitudes from the staff on the night shift [7, 8], while others have reported positive experiences with the night-shift staff [9]. Spending time on non-nursing tasks is another challenge commonly reported by students experiencing night-shift clinical, leaving some students feeling “exploited” by the staff [6–8].

A number of benefits of night-shift clinical have also been identified. Because there is generally more time free of commitments on the night shift, there is more time for students to ask questions and engage in discussion with the nursing staff, which enhances learning as well as socialization to the profession [7–9]. The slower pace of the night shift on some units also provides students with more time to practice technical skills, gain competence, promote safety, and participate in risk reduction [6]. Students also gain experience with managing patient problems that they may not be involved in on the day shift such as disorientation, insomnia, and falls [5]. Because fewer resources and staff are available on the night shift, nurses often manage problems autonomously. This benefits the students by enhancing their critical thinking and clinical judgment skills and fostering independence [6, 7].

The question of whether the benefits of night-shift clinical work outweigh the challenges still exists. While student satisfaction with night clinical has been reported as lower than day-shift clinical, the difference is not statistically significant [6]. The literature suggests that night-shift clinical work should not be routine or primary placements but rather be offered as a viable alternative to day-shift clinical rotations. Further, the literature supports night-shift clinical

as an effective and valuable learning opportunity when the clinical is well planned and executed [5–9]. The purpose of this study is to determine if there is an impact on student confidence and satisfaction between traditional day clinical rotations and night-shift clinical rotations.

3. Study Design

This study was a comparative quasiexperimental study utilizing a convenience sample of nursing students in an undergraduate accelerated baccalaureate nursing program. Approval was obtained from the University Institutional Review Board before the data collection. The inclusion criteria were participation in medical-surgical courses during the Spring, Summer, and Fall semesters. In addition, students scheduled for the day and night shifts in clinical rotations at hospitals in a designated system during the three 2021 semesters were invited to participate. Exclusion criteria were students in other courses at facilities other than the organization that was included in the study.

Permission was obtained from the National League for Nursing (NLN) to use a modified version of the NLN Student Satisfaction and Self-Confidence in Learning tool [10]. The tools were tested for reliability with Cronbach's alpha for the satisfaction tool, which was 0.94, and for self-confidence, it was 0.87 [11]. The original survey was part of a national, multisite, and multimethod research project sponsored by the NLN and Laerdal Medical [11]. Two of the research questions sought to determine if there was a difference in student satisfaction and self-confidence between students participating in simulations involving high fidelity and a paper pencil case study [11].

The study separated the students' satisfaction and self-confidence in learning [11]. The first tool examined student satisfaction in learning and included five items that measured student satisfaction related to the simulation students participated in. The second tool was an eight-item instrument that looked at student confidence levels related to the care provided in the simulation. The current tool is a combination of the two (National League of Nursing, 2006). The tool used a Likert scale that included five options, with 1 = strongly disagree and 5 = strongly agree [10].

In this study, the tool was modified from the original tool which examined satisfaction and confidence with simulation. The modification was made to determine if there was a statistically significant difference in satisfaction and confidence between students who participated in clinical during the day, seven am to seven pm, and students who participated in clinical at night, seven pm to seven am. The modified tool included four questions related to satisfaction and eight to examine confidence. Students received an e-mail with a link to an anonymous Google form after completing their medical-surgical clinical rotation. In addition to the 12 questions, students were asked to identify their hospital, unit, shift, and semester to ensure inclusion and exclusion criteria were met.

One of the clinical partners identified medical-surgical units at three nonmagnet hospitals within the organization. The three hospitals ranged from 599 to 1300 beds.

Permission from the unit managers was obtained to place a 12-hour night-shift clinical group and 12-hour day-shift clinical group on one unit at each hospital. Faculty was recruited for the night-shift clinical rotations who had a current Master's degree or were close to completion. Since students had not been notified about the possibility of night-shift clinical before admission, they could select day- or night-shift clinical. Groups consisted of no more than 6 students with one instructor. Faculty collaborated with the program director and clinical coordinator to ensure the students did not have exams or lab in the days before or after the night-shift clinical so students had adequate sleep and time to adjust their circadian rhythms. No incentive, money, cost, or compensation was provided for participating. There were also no penalties for students completing or not completing the survey.

4. Results

IBM SPSS version 29.0 was used to analyze the data. There were a total of 41 participants who completed the survey. Of these, 23 participated in a 12-hour day-shift medical-surgical clinical, and 17 participated in 12-hour night-shift medical-surgical clinical. Students in semesters two and three each consisted of 31 percent, and senior students consisted of 38 percent of the respondents. Of those who participated, 40 percent attended medical-surgical clinical in the spring semester, 43 percent attended during the summer semester, and 17 percent of students attended clinical in the fall semester of 2021.

A total of 12 questions were included in the survey. Four of the questions looked at student satisfaction and eight measured confidence. Of the four questions related to satisfaction, there was no statistical difference in any of the questions between the day and night clinical students. These questions included the following: the teaching methods used in this clinical were helpful and effective, and the clinical provided me with a variety of experiences to promote my learning. The last two questions were as follows: my clinical experiences were motivating and helped me to learn and I enjoyed how my instructor taught the clinical.

Confidence was measured in the remaining eight questions. The questions included the following: overall my confidence has increased as a result of this clinical experience, I am confident that I am mastering the objectives of the clinical experience, and I am confident that this clinical reinforced the critical content necessary for the mastery of the course objectives. The next few were as follows: I am confident that I am developing the skills and obtaining the required knowledge from this clinical to perform necessary tasks in a clinical, I am confident in my ability to collaborate with members of the interprofessional healthcare team, and I am accountable for my own learning in my clinical experience. The following two were as follows: I am comfortable seeking assistance when I need to in the clinical setting, and I know how to use available resources to safely perform nursing skills.

In addition to evaluating the mean and standard deviation for all of the questions (see Table 1), an independent

t-test was done to determine if there were statistical differences in the questions between the two groups, the day and night clinical groups. Levene's test for equality of variances indicated that there was no statistical difference between groups in any of the questions. For the question, "I am confident that I am mastering the objectives of the clinical experience," the day clinical group had lower means related to confidence ($m = 4.36$, $SD = 1.217$) than the night clinical group ($m = 4.82$, $SD = 0.393$). The significance was 0.054, greater than 0.05, indicating there was not a significant difference between the groups [12].

5. Discussion

Based on the findings of this research study, satisfaction between the day- and night-shift clinical groups was the same. This is consistent with the findings of the other studies that found no statistical significance in satisfaction between groups [6]. Downtime during night clinical or the busy atmosphere on days are factors identified that may impact satisfaction. Downtime during night clinical was perceived negatively by some students, others identified it as an opportunity to look things up and enhance their learning [6, 9]. Bahramirad et al. [7]; (Dobrowolska et al. 2019) had several themes that demonstrated decreased satisfaction with night clinical rotations. Many of these centered around lack of communication, poor communication, and bullying which lead to a lack of ability to new important tasks and being delegated simple tasks [7]. Despite many differences in patient problems, types of activities performed, and units identified by Dobrowolska et al. (2019), satisfaction was identified by students in night clinical at all five countries.

Most of the questions related to confidence showed no statistically significant difference between students participating in day or night clinical rotations. Night-shift students did report having higher overall confidence during their clinical rotation. This is consistent with themes that emerged in the other studies having more time to perform tasks commonly delegated during the day shift, skills, patient care, patient education, and having more time to ask questions and explore the "why" behind challenging situations [6, 9]. Positive themes that may contribute to confidence identified by Rad et al. [7] include increased autonomy, socialization, and learning how to manage time. Finally, having the ability to see the continuity of care and understand the role of the nurse also may contribute to this overall confidence (Dobrowolska et al. 2019). Dobrowolska et al. (2019) did have one theme that may impact both confidence and satisfaction that emerged, the workload of the nurses. The heavy workload resulted in less interaction between the nurses and students, identified as a positive impact of night clinical in other studies [6, 9]; (Dobrowolska et al. 2019).

With many graduates starting on the night shift, developing this confidence may also ease the transition when they begin in practice. Having options may entice students who work night shift in their current positions, increasing admission. In addition, the opportunity to teach for nurses who prefer night shift opens up opportunities to attract faculty who may not want to work during the traditional

TABLE 1: Student satisfaction and confidence results.

Questions	Day-shift clinicals <i>n</i> = 23		Night-shift clinicals <i>n</i> = 17		<i>p</i>
	Mean	(SD)	Mean	(SD)	
Overall my confidence has increased as a result of this clinical experience. The teaching methods used in this clinical were helpful and effective	4.59	(0.796)	4.59	(0.712)	0.496
The clinical provided me with a variety of experiences to promote my learning	4.5	(1.012)	4.71	(0.5880)	0.216
I enjoyed how my instructor taught the clinical	4.64	(0.658)	4.53	(1.179)	0.370
My clinical experiences were motivating and helped me to learn	4.59	(1.008)	4.53	(0.717)	0.413
I am confident that I am mastering the objectives of the clinical experience	4.73	(0.703)	4.71	(0.588)	0.459
I am confident that this clinical reinforced the critical content necessary for the mastery of the course objectives	4.36	(1.217)	4.82	(0.393)	0.054
I am confident that I am developing the skills and obtaining the required knowledge from this clinical to perform necessary tasks in a clinical setting	4.5	(1.058)	4.71	(0.470)	0.203
I am confident in my ability to collaborate with members of the interprofessional healthcare team	4.64	(0.902)	4.59	(0.712)	0.379
I am accountable for my own learning in my clinical experience	4.86	(0.351)	4.65	(0.702)	0.484
I am comfortable seeking assistance when I need to in the clinical setting	4.86	(0.351)	4.76	(0.562)	0.265
I know how to use available resources to safely perform nursing skills	4.64	(0.492)	4.94	(0.243)	0.210
			4.82	(0.529)	0.133

The *p* value represents the significance of the difference between groups. A *p* value < 0.05 would demonstrate statistical significance.

day-shift hours. Faculty, familiar with working night-shift clinical, was also able to discuss the importance of sleep schedules, environment, and sleep aids [13].

6. Limitations and Recommendations

Limitations of this study included the small sample size since it was a convenience sample. In addition, it was over one year, in one program, at one academic site. This study also did not include demographic details such as age, marital status, having children and other family responsibilities, and experience working in the healthcare field that may have allowed further understanding of the results.

Recommendations for future research include using larger cohorts, different types of programs, and clinical experiences in areas other than medical-surgical nursing. It is recommended that night-shift clinical be performed on units with patients and patient problems that align with the course objectives, be structured, have adequate staffing, and allow optimal patient care experiences for the students. These units should be carefully selected in collaboration with the facilities, faculty, directors, and clinical coordinators. They should include opportunities for patient care, assessments, medication administration, various interventions, and documentation.

Developing an orientation to the night-shift clinical rotation is another recommendation. The orientation could guide students who select the night rotation and help acclimate them to changing times and circadian rhythms. Recruiting night-shift nurses to teach the night clinical rotations would also help the students learn from their instructors while in their rotation.

A follow-up study on perceptions of student confidence by the faculty instructors for both day and night clinical instruction and the nurses on the designated units would be interesting information to add to the body of knowledge using a modified version of the same tool for comparison. Adding a qualitative component to the survey or focus groups would also add triangulation as a mixed-method study and enable themes to be identified in the research to compare to prior qualitative studies.

7. Conclusion

The use of night-shift clinical rotations in the medical-surgical courses was found to have increased access and exposure for nursing students. Satisfaction was not impacted when comparing day- and night-shift clinical experiences. While night-shift clinical should not replace the experience of day-shift clinical, it has demonstrated the ability to increase confidence and exposure to care and situations students may not be able to participate in during the day-shift rotation. This also addresses the demand and competition for traditional day-shift clinical rotations, opens up opportunities for night-shift nurses to teach on a shift consistent with their work schedules, and enables an increase in

enrolment by increasing the number of available clinical placements.

Careful consideration of the distance students traveling to the sites, course schedules, and other factors that may preclude the student from participating in night clinical rotations should be included when assigning night clinical rotations. Whenever possible, students should be provided the opportunity to experience the night shift, further reducing the stress on the day-shift nurses, providing night-shift nurses the ability to teach, and reducing the number of students on the units at one time.

Data Availability

The quantitative survey data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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