

## **Sigma's 30th International Nursing Research Congress**

### **Finding Balance: Quasi-Experimental Evaluation of Trading Final Semester Undergraduate Acute-Care Hours for Leadership Clinical Activities**

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#### **Purpose:**

Newly graduated nurses are expected to possess skills that support their capacity for leadership and performance of clinical skills in today's inclusive healthcare environment. Healthcare Institutions' increased reliance upon collaborative leadership models and teamwork prompted undergraduate nursing programs to ensure newly graduated nurses have developed leadership capacity for practice and are prepared to provide safe care as effective team members (Francis-Shama, 2016; IOM, 2011). To be an effective team member students need opportunities to engage in a full range of nursing activities and roles. Nevertheless, they need practice to increase comfort and competence in commonly used nursing skills.

Leadership is not well-integrated into nursing education. Nurses continue to associate leadership with a management silo rather than understand leadership as integral to all nurses' clinical nursing practices (Curtis, Sheerin, & Vries, 2011). In 2016 Francis-Shama reported that final year undergraduate nursing students year perceived clinical—and not leadership—skills as essential for the new graduate.

A widely reported nation-wide study, however, indicated that most front-line nurse leaders were dissatisfied with newly graduated nurses' competence. Leaders' satisfaction with baccalaureate graduates' non-computer technical skills ranged from only 30 to 44% (Berkow, Virkstis, Stewart, & Conway, 2009). Satisfaction with leadership-related competencies were even lower: 27% were satisfied with students' ability to take initiative and 15% with ability to prioritize (Berkow et al., 2009).

Aldridge's (2017) review identified students' anxiety while performing skills, fearing patient harm. Skill practice is expected to decrease discomfort students experience. Students describe increased self-confidence when they perform skills on real people (Demiray, Kecici, & Cetinkaya, 2016) and less confidence when they lack opportunity to practice them in clinical settings (Wright & Wray, 2012).

While simulation is increasingly used for skill development (Berragan, 2011), it remains unclear how frequently students practice skills in clinical settings. There is little evidence about frequency with which students practice specific nursing skills. One study indicated 9 to 29% of students never had opportunity to perform the most basic nursing skills during clinical (Stat & Merriman, 2013). There are even fewer reports of how much practice is needed to gain competence, comfort, or confidence in nursing skills. Wieland and colleagues (2007) provided some insight into this question with their description of students' increase in skill acquisition and comfort performing skills during an intensive 3-week, precepted clinical during the last year of the BSN program. Students' comfort corresponded to their self-reported competence (Wieland, Altmiller, Dorr, & Wolf, 2007).

Students perceive clinical experiences to become even more important as graduation approaches (Manninen, 1999) and exigency to refine clinical skills in preparation for their first professional nursing position. Yet, clinical site access which allow sufficient practice is becoming more challenging with more competition for student placements, higher adequate instructor-to-student ratios which limit individual student performance of a skill, and liability concerns by clinical placement sites.

Nursing students' transition to practice may be assisted by learning experiences that occur during their final semester. A scoping review of published studies of interventions and factors that contributed to a student's transition during this timeframe included 17 articles, the majority of which used qualitative data analysis (Kaihlanen et al., 2018). Three of the four factors that Kaihlanen and colleagues (2018) identified as facilitating a student's transition to an RN pertain to leadership and nursing skill development: adjusting to the role of a professional nurse, achieved comfort and confidence, and achieved competence.

Despite urgency, curricular changes need careful planning. Finding the right balance is a challenge. Faculty encounter barriers sorting through complex issues involved in making curriculum decisions to facilitate development of student capacities. Changes need to be agreeable to clinical placement facilities. One main barrier to determining optimal clinical experiences and time allocation for skill development is the lack of high-level supportive evidence in the extant literature.

Addressing the gaps requires new approaches in which final year students become motivated to engage in leadership experiences while continuing to dedicate time to refine and enhance comfort with nursing skills. A two-pronged approach is needed.

Educators need to provide students with sufficient opportunity for further practice of nursing skills while also exposing students to clinical experiences that enlighten them of the value of leadership. Instruction needs to promote and facilitate authentic leadership and collaborative team experiences instead of providing mere observation of leaders in management silos.

Faculty at one Midwestern college of nursing identified the need to increase students' development of varied skills while addressing constraints of tightened clinical placement availability with recent increased enrollment. This led to implementation of a new design for the final semester leadership clinical experience. The goal was to expose students to situations uniquely designed to allow students to practice and apply leadership and management skills. This change provided an opportunity to contribute to the literature by comparing outcomes of the prior and revised clinical designs. Altogether students were expected to develop traditional nursing care skills that they were concerned about alongside the leadership skills that nurse leaders felt students lacked. The purpose of this study was to determine if there were differences in how often students performed a variety of nursing activities and their comfort level with each activity between students' who participated in 86 versus 56-hour acute-care experiences during their final semester leadership clinical.

## **Methods:**

A quasi-experimental design was used to compare the extent of skill development dependent upon the number of hours in the acute care setting. Historically the clinical experience included placement at one acute care site for 86 hours plus one day of simulated laboratory experiences. A novel set of clinical experiences was implemented in the Spring 2018 final-semester, leadership clinical. The change included clinical placement at one acute care site for 56 hours, doubling simulation hours with a second day focused on leadership skills and scenarios, plus three additional experiences: a) collaborating with team members in a simulation game designed to stimulate application of systems thinking and data-driven decisions, b) participating in a Political Action Day event at the State Capitol, and c) mentoring beginning nursing students in a long-term care clinical setting (while remaining under the supervision of a nursing instructor).

As part of self-assessments required in this clinical since 2015, students completed questionnaires about performance of 27 select psychomotor, patient education, and process skills in the acute care setting at semester's beginning and end. Prior to students' first leadership clinical, they recorded how often they previously performed each skill and current comfort with each using a 4 point Likert type scale (1 = very uncomfortable to 4 = very comfortable). At semester's end, students completed the questionnaire again, recording frequency during the leadership clinical and current comfort for each skill.

Data from 129 students in the 56-hour leadership clinicals during Spring 2018 were compared to 47 students in the prior 86-hour clinicals. Parametric tests were performed to compare frequency of skills and nonparametric for comparison of comfort. Controlling for the start of semester comfort and frequency of a skill, the end-of-semester frequency and comfort of each skill were examined and compared between groups. Statistical significance was set at  $p < .05$ .

### **Results:**

Students performed 25% (7/27) of the skills more frequently during the leadership clinical than they had during all prior clinicals, regardless of the number of acute care hours. Before the semester started, students in 86-hour clinicals had performed three activities more often; students in 56 hour clinicals had performed six more frequently and were more comfortable with 63% (18/27) of the activities. During the leadership clinical, 86-hour students performed more IV dose/rate calculations; 56 hour students performed more oral/injectable med administrations and physical assessments.

Additionally, 56 hour students were more comfortable with five skills. Even so, comfort with three skills only remained at a comfort level by semester's end. Pre-post comfort level data were correlated for 85% of all skills.

Controlling for pre-clinical performance, 56-hour clinical students performed more physical assessments and oral and injectable drug administrations while 86-hour clinicals hung more IV piggybacks, used lifts, and discharged patients more often. Additionally, the 86 hour students had greater increases in comfort working with IV lines, fluids, and pumps; and performing physical assessments.

### **Conclusion:**

This study is strong in several ways. As a quasi-experimental design, this study addressed Kaihlanen et al.'s (2018) call for evidence built on strong research designs. Also, the analysis considers the confounding influence of prior experience and comfort with skills. This enhances validity of the comparison of skill acquisition and comfort using different acute care hours. The major limitation is the single site setting.

Results of this quasi-experimental study contribute to a small body of evidence, primarily derived from qualitative findings, about the usefulness of specific clinical experiences in preparing final semester students for practice as an RN. Shortened acute care experiences within final semester leadership clinicals may encourage more focus upon skill development and allow sufficient technical skill development pre-graduation. Finally, students' acceptance of leadership is necessary for their effectual collaboration and the future of nursing.

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### **Title:**

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### **Keywords:**

clinical, quasi-experimental design and undergraduate

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### **Abstract Summary:**

New nurses need to possess leadership capacity and clinical competence. Addressing existing gaps, an undergraduate leadership clinical was adjusted, increasing leadership activities and fewer acute care hours. Comparisons will be shared concerning frequency and comfort performing clinical skills between students with 56 versus 86 hours in the acute care setting.

### **Content Outline:**

I. Introduction A. Newly graduated nurses are expected to possess both clinical and leadership skills in today's inclusive healthcare environment. B. Students skill acquisition is dependent upon experience. II. Body A. The extant literature does not provide supportive evidence for balancing complex curriculum decisions with student needs and time allocation. a. Student's perceptions of skill requirements differ from clinical leaders' views of skills required. b. Instruction needs to promote and facilitate authentic leadership and collaborative team experiences instead of providing mere observation of leaders in management silos. B. Faculty at one Midwestern college of nursing implemented a new final semester leadership clinical experience to address students needs to practice both clinical and leadership skills. a. The purpose of this study was to determine if there were differences in how often students performed a variety

of nursing activities and their comfort level with each activity between students' who participated in 86 versus 56-hour acute-care experiences during their final semester leadership clinical. b. Reduction of acute-care clinical hours was traded with hours increasing simulation and practice in leadership skills. C. A quasi-experimental design was used to compare the extent of skill development dependent upon the number of hours in the acute care setting. 1. Each group completed questionnaires focusing on the number of skills performed during the last semester clinical. 2. Parametric tests compared frequency of skills and nonparametric tests were evaluated for the comfort of performing the skills. D. Students performed more skills during the leadership clinical regardless of the number of acute care hours. 1. Differences between groups were found.

1. Some skills were performed more in the 86-hour group and some more in the 56-hour group.
2. Comfort in skill performance also varied.

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