Sigma's 30th International Nursing Research Congress
An Assessment of Errors and Near-Misses From Pre-Licensure Student Nurses
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Purpose: Approximately one-half of new nurses with less than one year of experience who were involved in adverse patient events identified that their formal education preparation was a causal factor in their error (Saintsing, Gibson & Pennington, 2011). However, the concern arises that there is little to no standardized measurement or assessment practice that measures safe and effective practice at various points in the time frame that precedes graduation (Docherty & Dieckmann, 2015). As there is little consensus and often contention in the determination of what precise behaviors and attitudes constitute a passing nursing student clinical grade, and as there is often further pressure amongst academic administrations and schools of nursing to demonstrate a significant student success percentage, these variables may in fact promote an academic climate of failing to fail. Students being rated as successful in a clinical setting that actually employ behaviors that do not promote a culture of safety have serious, immediate and long-lasting consequences that will affect public health, safety, and welfare (NCSBN, 2011).

To assist with the identification of students and clinical errors and near misses, a Student Opportunity for Improvement (SOFI) form is completed by our clinical faculty for each error or near miss at our hospital based Associate Degree Nursing (ADN) Program research site. SOFI reporting forms are considered part of the institution's clinical paperwork and all of the faculty at this hospital based ADN program have been trained regarding the criterion standards for the completion of the SOFI.

The purpose of the SOFI is to assist the student in the identification of the event, potential patient consequences, and actions that might have prevented the event(s) in question. Secondary purposes of the SOFI are to assist in the identification of student(s) requiring remediation as well as to assist in the identification and tracking of trends. This identification and measurement intervention process is essential to the provision of optimal, safe care.

An examination of quality and safety measures of a current hospital based associate degree nursing (ADN) educational program provided data regarding errors committed by prelicensure students. Tracking and analysis of frequency and type of student clinical errors provided for identification of similarities and an opportunity for system evaluation and improvements. The purpose of my project was to identify the number, types and categories of Student Opportunity for Improvement (SOFI) reports from a hospital based ADN program over a four-year period from July 30th 2012 through July 30th 2016 and compare the numbers of SOFIs by academic term, the student's previous healthcare experience, and student age. My project also examined the number of errors in the ADN hospital based program after a curricular change was implemented to condense the previously existing 24-month program to 18 months.

Methods: A twenty-four month retrospective comparative design was utilized, in a private, non-profit 2-year ADN program in the northeastern region of the United States with an enrollment of approximately 300 students. The target population was all enrolled prelicensure nursing students between the ages of 18 and 60 who have had a SOFI report filed. A convenience sample was utilized. Students who were dismissed from the

program due to either academic or clinical failures but who have had at least one SOFI filed were included in the study population. The number and types of SOFI reports generated with the previously discussed demographic variables were measured.

Results: A total of 266 SOFI forms were examined. The difference in the number of errors/near misses and therefore SOFI reports between semesters one and two (M=0.4, SD=.49) as compared with semesters three and four (M=0.6, SD= .49) of the program was statistically significant at an alpha level of 0.05. The number of LPN students completing SOFI forms (M=.25, SD =.43) compared to those that had no healthcare experience (M=.75, SD = .43) was also statistically significant at an alpha level of 0.05. Students aged 30 years or older were associated with 64.3% of the SOFI forms (M=.64, SD = .48), demonstrating a statistical significance at an alpha level of 0.05. The difference in SOFI reports constructed during the 24-month curriculum (M=.63, SD = .49) and the 18-month curriculum (M =.63, SD = .49) was statistically significant at an alpha level of 0.05.

Conclusion: This analysis indicates a potential deficit in students' assimilation and application of nursing principles. The findings of this particular research study highlight the necessity of classroom and clinical instruction regarding safe, appropriate care and techniques for error management. The impact of national safety patient programs on nursing curricula need to be assessed, and potentially need stronger implementation efforts. Since the publication of *To Err is Human* (IOM, 1999), there has been considerable time, attention and effort invested in the training and preparation of those who might be associated with medical errors.

While errors are often considered to be part of the learning process of pre-licensure students, the challenge associated with nursing education is building an educational foundation and the promotion of an appropriate culture wherein students can learn from their mistakes and near-misses while the errors/near-misses are caught before they reach the patient. A broader and increased knowledge base regarding the clinical errors and near-misses that are conducted by pre-licensure RN students can only assist faculty with regard to the more thorough preparation of these future providers.

Title:
An Assessment of Errors and Near-Misses From Pre-Licensure Student Nurses

References:
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National Council of State Boards of Nursing (NCSBN) (2011). *Public Policy Agenda.*
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Abstract Summary:

An examination of quality and safety measures of a current hospital based associate degree nursing (ADN) educational program provided data regarding errors committed by prelicensure students. Tracking and analysis of frequency and type of student clinical errors provided for identification of similarities and an opportunity for system evaluation and improvements.

Content Outline:
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Abstract Summary: An examination of quality and safety measures of a current hospital based associate degree nursing (ADN) educational program provided data regarding errors committed by prelicensure students. Tracking and analysis of frequency and type of student clinical errors provided for identification of similarities and an opportunity for system evaluation and improvements.
Learning Objectives:

1. The learner will be able to assess the number and types of the clinical errors and near misses of pre-licensure ADN students.
2. The learner will be able to demonstrate modalities to track the number and type of student clinical errors.

Key words:
search terms "pre-licensure nursing safety", "medication safety", "student nurse safety" and "nursing safety education".

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identification and measurement intervention process is essential to the provision of optimal, safe care.

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Objectives: To identify the number, types and categories of Student Opportunity for Improvement (SOFI) reports generated by a hospital based ADN program over a four-year period from July 30th 2012 through July 30th 2016 and to compare the reports by academic term, the student's previous healthcare experience, and student age.

Methods: A twenty-four month retrospective comparative design was utilized, in a private, non-profit 2-year ADN program in the northeastern region of the United States with an enrollment of approximately 300 students. The target population was all enrolled prelicensure nursing students between the ages of 18 and 60 who have had a SOFI report filed. A convenience sample was utilized. Students who were dismissed from the program due to either academic or clinical failures but who have had at least one SOFI filed were included in the study population. The number and types of SOFI reports generated with the previously discussed demographic variables were measured.

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Author Summary: Megan Wolfe is currently a faculty member at an associate degree nursing institution and earned her doctorate in healthcare quality from the George Washington University in Washington DC. Prior to beginning her career in nursing education, she spent many years as a staff nurse, twelve years as a high school science teacher, and several as a registered dietitian.