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Abstract

Technology is interwoven is all aspects of modern nursing. There is an emphasis on including informatics in nursing education, including electronic health records. Clinical simulation education that is enhanced with the use of electronic health records may be used to stimulate critical thinking and enhance nursing care. An integration of these two approaches is shared focusing on the process, attitudes, and the need for further study.

Introduction

According to the IOM (2003), nurses must have knowledge and skill in information and patient technology to provide safe nursing care. AACN (2008) emphasizes the need for nursing education to develop course work and clinical experiences that expose nursing students to a variety of technological applications. Nursing education must prepare students to be able to incorporate these new technologies into daily practice.

Background

Clinical simulation learning is common place in nursing education today. It is through simulation that nursing students are able to prepare themselves for professional practice and learn to make sound clinical decisions. Simulation is defined by the National Council for State Boards of Nursing as an activity that mimics a real clinical environment which includes objectives for demonstrating skill, critical thinking, and decision making. Electronic health records may be used as part of clinical simulation education. An electronic health record refers to any information residing in an electronic system which includes past or present, mental or physical conditions of an individual in order to provide medical care (Gartee & Beal, 2012). Nursing faculty planned a health assessment course for undergraduate students to utilize simulation learning techniques concepts and electronic health records. The goals of this approach were to enhance student understanding of the nursing process, enhance critical thinking and clinical decision making as well as understanding and application of information technologies in nursing practice.

Methods

- Faculty team planning meetings held the semester prior to the health assessment course offering on a weekly basis. Discussed revision of course and goals.
- Revised course to include the following elements:
- *Structured weekly class lectures on the nursing process
- Redesigned weekly lab checklists to include both subjective and objective data to collect.
- Included time in lab session for a problem focused assessment based on a case scenario with a chief complaint related to the body system being studied for the week.
- Brought SimMan 3G® in the lab setting when appropriate to allow students to practice assessment of abnormal findings, for example abnormal lung sounds. This allowed for further practice in documenting abnormal findings.
- Include time in weekly lab session for documentation of assessment findings in the electronic health record using iPads® in the Clinical Learning Center. This was the last 45 minutes of the 3 hour lab and faculty were available to answer questions while the students were documenting.
- Faculty provided weekly feedback on the student documentation by logging in the electronic health record and making corrections or notes in the electronic chart.
- Weekly team meetings during the semester to share progress

Conclusion

Student feedback from course evaluations were overall positive. Students cited the use of SimMan 3G® as enhancing learning in the health assessment lab. Anecdotal feedback from students regarding the use of electronic health records indicated this was an effective learning tool in the course. Students made positive comments about having frequent feedback on documentation. Some students not receiving timely feedback from faculty indicated this was something they felt the needed. Debriefing with the faculty team revealed this was an effective approach to teaching students. The faculty team discussed seeing improvement in student's ability to document as well as work through the phases of the nursing process during the semester. The faculty agreed that further study in this area would be helpful and planned to submit a proposal to the IRB for review.





