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Virtual Community Simulations to Help With High Stakes Testing

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Introduction: Virtual simulation programs are an educational innovation that are being used more frequently in nursing education. Liaw, Chan, Chen, Hooi, & Siau (2014) found that virtual patient simulations were just as effective as using mannequin-based simulations. As clinical sites continue to be a challenge for nursing education these virtual programs are an option for students to be exposed to real world nursing situations. Many nursing programs struggle to find adequate clinical sites and willing registered nurses as preceptors. This is especially true in a community nursing course and using virtual simulation can help ensure that all students have the opportunity to experience the same types of patients and situations during the students' time in clinical. **Background:** Community nursing in a traditional nursing program can be challenging for students to relate this experience to nursing practice, as students report not being able to use many of their previously learned hands on skills. However, in community nursing students should be learning to formulate different ideas and ways of thinking to help patients with health promotion, disease prevention, and management of disease processes. Virtual clinical will allow for clinical instructors to bring these virtual patients into post conferences to allow for deeper discussion to help students with clinical reasoning. Using simulations that focus on the community nursing course offers students an opportunity to provide care to vulnerable populations and focus on health disparities. Within these virtual simulations all of the patients are from vulnerable populations, as this is very important for nursing students to have the opportunity to understand the challenges of caring for these patients. Another issue in community nursing is the lack of clinical sites that are able to take a group of eight students. When using virtual simulations this will allow a smaller number of students to be at clinical sites, as half of the group could attend clinical while the other students are able to attend clinical virtually. **Educational Theory:** The constructivist learning theory supports this research study, as students in nursing education have varying learning styles. Many nursing students report that clinical is where they are able to real make connections with content presented in the classroom. Knowledge translation is an active and dynamic process that happens in clinical practice (Menon, Boruff, Rodriguez, & Ahmed, 2014) Students are able to work at their own pace through each one of the virtual case scenarios. The virtual simulations allow for students to work through pre-simulation activities, complete the virtual simulation and then take a post-quiz. This post quiz can then be used as a grade in the clinical course. Nursing students need to learn to gather, assess, and analyze information and apply to individual patient situations. As this can help students learn to recognize critical cues needed to intervene before a situation becomes a serious. **Study Aims:** This study aims to identify if using virtual clinical activities can increase the students mean high stakes testing scores. **Methods:** This retrospective study will analyze high stake testing scores of students who used a virtual

clinical program, to students who did not use virtual clinical program. **Results:** Data is currently being collected. **Discussion:** The primary goal of nursing education is to prepare nursing students to provide safe and effective care to their patients. Clinical is the setting where students are able to make connections from textbooks and classroom information to real patient situations. Using a virtual clinical program is an option for nursing education consider to help students connect content to real nursing situations. The NCLEX is the tool used to measure if the students have the ability to clinically reason to safely care for patients in healthcare settings. Forsberg, Georg, Ziegert, & Fors (2014) reported that virtual patients helped nursing students with clinical reasoning and was a good method for assessment. Planning activities for students to be active participating members in their education in now becoming more critical as changes to the NCLEX will be occurring in the near future. Using virtual clinical experiences allow for students to work through information at their own pace to ensure a basic understanding of the information and then put the information together during the virtual simulation when caring for patients. Further study is needed to assess whether virtual simulation can help students with high stakes testing. **Conclusion:** Using a virtual clinical program allows students to care for patients in community settings that they might not experience in real life clinical settings. Not all clinical sites provide students with the opportunity to care for vulnerable patients' experiencing health problems. Using a virtual program allows for all students to have the same clinical experiences. Tilton, Tiffany and Hoglund (2015) found that debriefing helped students gain a deeper understanding of chronic care management in community settings. This gives both clinical instructors and faculty patient scenarios to use in both in post conference and the classroom setting to help build the nursing students clinical reasoning and critical thinking skills.

Title:

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Abstract Summary:

Virtual simulation programs are an educational innovation that is being used more frequently in nursing education. This research project explored if using virtual simulation in a community nursing course had an effect on the students' high stakes test score.

Content Outline:

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 - Size of students in clinical groups
 1. Clinical Instructors to Help with clinical reasoning
 1. All students exposed to same situations
 2. Post conference discussion
 2. Vulnerable populations
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6. Results
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2. NCLEX success
 - Students independently work on virtual simulations
3. Conclusion
1. Virtual Patient Consistency
2. Clinical Sites
3. Clinical reasoning/Critical Thinking

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Author Summary: Tami has been teaching in nursing education for the last 14 years. She uses many new teaching innovations in all aspects of nursing education. She has conducted several research studies on new emerging technologies.