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Evaluating the Effectiveness of Digital Clinical Experiences

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Background

Digital Clinical Experiences (DCEs) are a unique way to meet the educational needs for students by technology in learning systems. Students are presented with patient scenarios by interactions with a digital patient. Without ever laying hands on a real life patient, DCEs immerse the student learner through the steps of assessment, diagnosis, and treatment. Upon completion of these experiences, learners are provided with an instant evaluation of their digital experience. Specific technology that was utilized in this study was Shadow Health. An online learning system which provided a life-like patient, "Tina Jones". Tina Jones is a simulated patient that has the ability to interact with students on a one-on-one basis. She provides the opportunity to collect a health history and as her story develops, students are presented with complex health care issues. In this study, the DCE technology was first utilized by Advanced Health Assessment students in their second year of a Doctor of Nursing Practice (DNP) program. These students will be able to sit for boards to become licensed Advanced Practice Registered Nurses (APRNs), who will be expected to provide competent healthcare to patients in the future. DCEs provide students with the opportunity to interact with digital patients by engaging in conversation to extract a specific patient data, in turn, strengthening their communication skills. Like any real patient, Tina displays emotions related to an acute illness, evoking empathy from the learner. The purpose of the DCE is to supplement didactic and clinical learning by improving the student's critical thinking and clinical reasoning skills and preparing them for their role as Advanced Practice Nurses (APRNs). Through questioning and virtual assessment, students may see improvement in their ability to thoroughly gather subjective information, establish a diagnosis, and formulate a treatment plan. In the Advanced Health Assessment course there are eight digital cases students are assigned to. Topics include head, ears, eyes, nose and throat (HEENT), cardiovascular, neurological, musculoskeletal, gastrointestinal, respiratory, and mental health assessments. The assigned case studies take anywhere from one to two hours to complete and students are provided with feedback on their performance with completion of the assigned case. With the feedback, students are presented clinical areas that can be improved, the opportunity to remediate and re-do the case until proficiency has been met.

Purpose

The purpose of this study is evaluate the effectiveness of the digital clinical experiences incorporation into the BSN to DNP curriculum from the student perspective.

Data Collection

Data will be collected from December 1st, 2018 through February 1st, 2019 by an anonymous 10 question survey that utilizes a 5-point likert scale. Questions are focused on the student's confidence in the areas of gathering a health history, communicating with patients, performing advanced practice skills, formulating a diagnosis and developing a treatment plan. Additional questions focus on the DCE program and how it has prepared the student for primary care practicum, interactions with real-life patients, and overall benefit to the BSN-DNP program. Inclusion criteria for the selection of subjects include students who have completed the Advanced Health Assessment course, and have completed their first semester of Primary Care courses of the curriculum. Students will be required to sign a consent form and will be assured all surveys will remain anonymous and have no bearing on their progression in the BSN-DNP program.

Results

Upon completion of data collection, the survey results will be analyzed using SPSS software. The results of the study will illustrate how the incorporation of DCEs into the Advanced Health Assessment course have prepared students in certain areas and how it has impacted their progression through the BSN-DNP program. With this information, DCEs may be incorporated into other courses in the curriculum, such as Advanced Pharmacology.

Title:

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Keywords:

Advanced Health Assessment, BSN-DNP Students and Digital Clinical Experience

References:

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Abstract Summary:

This study discusses the effectiveness of digital clinical experiences (DCEs) in the BSN-DNP curriculum. Students who have utilized Shadow Health technology will evaluate how effective the DCE is in improving communication, advanced health assessment skills, clinical decision making, and preparation for Primary Care Practicum.

Content Outline:

I. Introduction

Digital Clinical Experiences (DCEs) have been incorporated into the BSN-DNP Curriculum providing students with unique patient scenarios through interactions with a digital patient.

II. Body

With the incorporation of DCEs into the Advanced Health Assessment course, students have the ability to practice their advanced health assessment skills, formulate a diagnosis, and develop a treatment plan.

III. Conclusion

This study is currently in progress. Students who have completed the Advanced Health Assessment course through Shadow Health, and who have started the Primary Care courses will evaluate their perception on how the digital experience improved their clinical skills in preparation for Primary Care Practicum. They have been given a questionnaire consisting of 10 questions that utilize a 5 point likert scale. The study has been launched to examine DCE incorporation into the curriculum from the student's perspective.

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