Nursing Students Experience With Virtual Clinical Excursions

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What is VCE?

• Virtual Clinical Excursions is an online program that guides students through a virtual hospital where they interact with virtual patients and conduct a complete assessment of a patient and set priorities for care, collect information, analyze and interpret data, prepare and administer medications (Elsevier, 2017)
Learning in nursing
Study Aims

1. Investigate nursing students’ perceptions about the effectiveness of implementing the VCE in improving their learning experiences.

2. To evaluate the effectiveness of (VCE) in improving students Critical thinking, & knowledge related pharmacology and patient safety.

3. To investigate if the (VCE) improved students oral and written communication skills.
Methodology

• Mixed method descriptive design.
  • Virtual clinical excursion (VCE) integrated in theory course the last hour of lecture.
  • Students assigned virtual patient’s case synchronized with theory content.

• Sample size: The sample included 42 students in the third year nursing program, enrolled in targeted medical surgical course.

• Ethical Considerations: Consent form obtained and IRB.
Sample picture of nursing student in-action.
Measurement tools

- Survey developed to collect data about students’ perceptions about using VCE. Survey included:
  - Demographic data
  - Numeric slider scale questions
  - Likert type questions
  - Open-ended questions to collect qualitative data
- Survey was conducted online via Survey Gizmo
Data analysis & findings

• Data analysis completed using SPSS.
• Descriptive statistics were computed to describe students’ characteristics.
• Significance level of $p < 0.05$. 
1. Study Aim#1: Investigate nursing students’ perceptions about the effectiveness of implementing the VCE in improving their learning experiences.
On scale from 0 to 10, how did the virtual clinical excursion meet your nursing learning needs? (10=Effectively met) ??

Mean = 6.35
Std. Dev. = 2.075
N = 40
Study Aim#2: To evaluate the effectiveness of (VCE) in improving students Critical thinking, & knowledge related pharmacology and patient safety.
The system helped me improve my critical thinking skills in patients care:
Related to Nursing

Mean = 3.93
Std. Dev. = .973
N = 42
21 I developed more competency in patients’ safety:
Related to Nursing

Mean = 3.86
Std. Dev. = 1.049
N = 42
19 I developed more competency in pharmacology: Related to Nursing

Mean = 3.95
Std. Dev. = .962
N = 42
4 Related natural sciences: The e-learning system helped me in understanding (Anatomy, physiology, microbiology, and labs): Related to Nursing

Mean = 3.83
Std. Dev. = .762
N = 42
Study Aim: To investigate if the (VCE) improved students oral and written communication skills.
3 The e-learning system helped me improve my written communication? : Related to Nursing

Mean = 3.5
Std. Dev. = 1.018
N = 42
2 Communication skills: the e-learning system helped me improve my oral communication?: Related to Nursing

Mean = 3.17
Std. Dev. = 1.034
N = 42
Qualitative findings

• Student #11: "E-learning is an immensely helpful tool both in the class & outside. E-learning creates a light-weight versatile approach to the nursing process & learning."

• Student #14: "Lecture can easily be tuned out, but e-learning is very interactive, so it helps engage the students more. We should use it more."

• Student #20: "I think it does help in some ways such as learning what labs are out of the normal range and what medications they are taking."

• Student #36: "It is a great way to connect many materials, including pharmacology and MEDSURG and pathophysiology. It is a great way to make the connections."
Thank you!
Questions