

RESEARCHPOP: ID# 101826

Title:

Use of Online Tools Can Validate Knowledge Transference to Clinical Practice in Acute Care Setting

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ACCEPTED

Session Title:

Meet the Poster Authors Session

Slot:

PST: Friday, March 27, 2020: 2:30 PM-3:15 PM

Abstract Describes: Ongoing Work/Project

Preferred Presentation Format: Poster

Applicable Category: Clinical, Academic

Keywords: educational methods, multigenerational nurses and online technology

Abstract Summary:

Poster Review: Online classroom tools allowed unit-based educators to develop content specific to unit initiatives and knowledge gaps. Through online technology using multiple modes of content delivery, nurses demonstrated knowledge transference based on case scenarios and practice change.

References:

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- Shin, J. Y., Issenberg, S. B., & Roh, Y. S. (2017). The effects of neurologic assessment E-learning in nurses. *Nurse education today*, 57, 60-64.
- Liu, X., Cheng, J., & Huang, S. (2019). Mobile Phone Training Platform for the Nursing Staff in the Emergency Department. *Telemedicine and e-Health*, 25(1), 66-70.
- Van de Steeg, L., Ijkema, R., Wagner, C., & Langelaan, M. (2015). The effect of an e-learning course on nursing staff's knowledge of delirium: a before-and-after study. *BMC medical education*, 15(1), 12.
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- Härkänen, M., Voutilainen, A., Turunen, E., & Vehviläinen-Julkunen, K. (2016). Systematic review and meta-analysis of educational interventions designed to improve medication administration skills and safety of registered nurses. *Nurse Education Today*, 41, 36-43.

Abstract Text:

Purpose:

Effective unit-based education is multifaceted and impacts both the healthcare system as well as the needs of the professional nurse. Learner styles and preferences differ leaving unit-based educators challenged with providing meaningful education. The growing demands of the Healthcare System has translated into increased responsibilities for unit-based educators allowing less time for conventional teaching methods. Traditional self-directed learning methods though proven convenient have had little impact on clinical practice and patient outcomes. Face-to-face instructional methods are arduous yet effective in translating into nursing practice. Often enough hospital-based electronic education does not meet the timely needs or requirements of an individual unit. In using an alternative online option, unit-based educators can create well-timed E-learning modules that deliver the content in an effective and meaningful way for nurses. Innovative teaching strategies using online applications can appeal to all staff differing in learning styles and preferences. Using an online program with various interactive modalities allow for validation of knowledge, immediate feedback, and the ability to track and trend areas of widespread knowledge deficits.

Methods:

Retrospective review of educational programs comparing pre-online technology (2016-2017) and post-implementation of online technology (2018-2019). A comparison review of completion percentage and validation of knowledge transference or practice change was utilized. The learning tool we selected has versatile functionality. Staff education included a simple handout explaining the two-step process on how to access and join the online lesson. The electronic self-learning modules were created using didactic information, clinical based scenarios, and questions to validate knowledge transference. Practice changes were measured using chart audits and observation of work.

Results:

Prior to online technology, traditional methods of self-learning with paper post-test validation had a high completion rate however the audits revealed little practice change. Manual trending of information was time consuming and faced inaccuracy. Face-to-face programs over 30-minutes had a much lower participation rate resulting in insignificant overall unit practice changes. E-Learning modules had a high rate of learner completion with a significant improvement in desired practice changes. Staff reported satisfaction with the online program as they liked having the ability to access the learning via their mobile phone and the instant feedback that the application provided. Digital natives

within the staff exhibited minimal challenges in accessing the application but quickly resolved with a face-to-face demonstration.

Conclusion:

Online learning is an effective method to facilitate unit-based practice changes. Educators can easily develop content and relevant scenarios allowing lessons to be meaningful for staff and pertinent to a unit's specialized needs. Applications with interactive multifunctional capability allow for a high level of learner engagement and motivation to learn.