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Faculty Development for Simulation-Based Education: Different Evidence-Informed Approaches

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Purpose:
Simulation-based experiences (SBE) are now the norm in nursing education that prepares healthcare practitioners for the complexities of the clinical environment. The National Council of State Boards of Nursing (NCSBN) landmark study (Alexander et al., 2015) allows up to 50 percent of clinical to be replaced with simulation, provided the International Nursing Association of Clinical Simulation in Learning (INACSL) Standards of Best Practice: Simulation[SM] are instituted and faculty are qualified to use this teaching methodology. This includes strategic faculty development that addresses the main concepts for SBE. In this presentation, the results of an integrative review using Whittemore and Knafl's (2005) approach, focusing on faculty development for SBE will be discussed. Application of evidence-informed exemplars will be presented.

The purpose of the integrative review was to appraise formal training efforts of educators who use SBE. Further, the aim of this study was to: 1) summarize the topics that compromise formal training, 2) describe the structure of formal training programs, and 3) explore evaluation methods of educators.

Methods:
Search strategies located 1,135 articles published between 2013-2018. Application of inclusion/exclusion criteria yielded 32 articles that comprised the review. Eighteen research articles were appraised with the Simulation Research Evaluation Rubric (Fey et al., 2015). Fourteen non-research reports were appraised for theoretical rigor and relevancy. An iterative process of examining the data for patterns, themes, and relationships was conducted independently by two authors.

The New World Kirkpatrick Model (Kirkpatrick & Kirkpatrick, 2016) provided the theoretical underpinning for this study as a framework that evaluates four levels of training. The majority of the studies (50%) evaluated the educator at level two, or the degree to which educators were engaged in the training efforts resulting in knowledge acquisition, skill development, and confidence. Few studies evaluated the educator at higher Kirkpatrick levels, or the degree to which they apply in practice what they have learned in the training session.

Results:
Analysis identified consistent topics necessary for training, yet themes pertaining to learning theories, instructional design, and human factors were missing from the literature. The most cited topics for training programs included debriefing, coaching, feedback, scenario design, and creating a supportive environment (Cheng et al., 2017). It was noted that structure to training programs include time for practice, feedback, self-

reflection, and ongoing education and evaluation. Literature is lacking on methods to evaluate the educator.

Conclusion:
Faculty development for SBE is recognized as a formalized process which includes a complement of didactic, time for practice, ongoing feedback, and the opportunity to engage in reflective practice (Steinert, 2000). Two evidence-informed methods in structuring faculty development programs include use of a tiered approach and mentorship. A tiered approach happens when the educational program occurs longitudinally as the educator acquires theoretical knowledge and experience in use of SBE. Mentorship, as a formalized method of educator development using SBE provides opportunity for practice and application of SBE concepts, while receiving ongoing feedback and self-reflection exercises.

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Keywords:
New World Kirkpatrick Model, formal educator training and simulation-based education

Abstract Summary:
This session reports on an integrative review to appraise faculty development for educators using simulation-based education, with a focus on the topics that comprise formal training, the structure of training programs and evaluation methods of educators using simulation-based education. Exemplars of professional development strategies for simulation educators will be presented.

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