Perceptions of Undergraduate Faculty on Virtual Simulations: A Mixed Methods Study

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Background & Significance: A report on Technology Trends in Nursing Education by the National League for Nursing (NLN) and Wolters Kluwer (2021a) found that 48% of nursing programs across the United States are planning to increase investments in virtual simulation to replace or augment clinical learning experiences. As virtual simulations are projected to become mainstream by 2025 (Wolters Kluwer, 2021a), attention to best practices for teaching and learning with these tools is paramount. Ensuring that virtual simulations are just as meaningful as in-person simulations is vital so that programs can continue to meet clinical learning objectives and produce clinically competent new graduate nurses in the setting of the COVID-19 pandemic.

Clinical Question: The purpose of this study is to determine whether simulation educational best practices (SEBP) were present in virtual simulations and identify which are most important to undergraduate nursing faculty. This study explored the followed research questions: 1) Which simulation educational best practices are present in virtual simulations according to undergraduate nursing faculty? 2) Which simulation educational best practices in virtual simulations are most important to undergraduate nursing faculty? 3) How do undergraduate nursing faculty perceive simulation educational best practices in virtual simulations? 4) What support do undergraduate faculty need to implement simulation educational best practices in virtual simulations?

Evidence: In a systematic review on virtual simulation in nursing education, Foronda et al. (2020) called for future research to address several best practice topics. Currently, there is no research reporting whether undergraduate nursing faculty implemented virtual simulations with the same adherence to simulation best practices as in-person simulations during the COVID-19 pandemic.

Intervention Implementation: A parallel convergent mixed methods survey design was chosen to understand and explore the perceptions of nursing faculty using diverse data. In this study, quantitative and qualitative survey data were collected in a single phase to measure the perception of simulation educational best practices in virtual simulations.

Evaluation: Open-ended survey data were thematically analyzed using the NLN Jeffries Simulation Theory as a framework. Closed-ended survey data were analyzed with descriptive and inferential statistics using the software, SPSS.

Results: The expected outcome of this research is first, identifying which simulation best practices are present in virtual simulations and second, identifying which best practices are most important to faculty. This research will also provide insight into the experiences and needs of faculty who teach with virtual simulations. Significant relationships between demographic variables and perception of virtual simulations will be highlighted.

Significance/Conclusion: The results of this study provide valuable insight into integration and facilitation best practices, along with identifying areas for professional development and other support necessary to ensure virtual simulations are as meaningful as in-person simulations and clinical learning experiences.