

Rising to the COVID-19 Nursing Education Challenges and Transitioning to Online Clinical Practice

Reflecting a Year Later

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The COVID-19 pandemic has created unprecedented times for nursing education and nurse educators. The usual face-to-face teaching and learning methods in the classroom, in simulation, and in the clinical setting came to a sudden halt with the shutdown of schools and businesses. Within a short amount of time, teaching methods in nursing transitioned drastically to online only, and finding suitable clinical and laboratory replacement hours became daunting. During the pandemic, nursing schools have been challenged with providing innovative clinical experiences that allow for distance learning while maintaining the development of clinical reasoning and critical thinking skills. In addition, unexpected day-to-day disruptions to both student and faculty schedules, along with personal situations, caused an added burden to organizational learning continuity, especially for face-to-face instruction in large programs. Furthermore, the constraints on in-person education during the pandemic resulted in limited laboratory experiences to obtain curriculum-required hands-on skills. At our institution, most of the clinical rotations were replaced with a current university-approved virtual simulation platform to maintain and achieve the program's learning outcomes.

Overcoming Challenges

The university's other approved virtual simulation platforms were not sufficient to provide students with the remaining clinical and laboratory hours needed to meet the clinical hour requirement of their courses. The required number of hours exceeded the number of hours the available virtual simulation platforms provided. Finding suitable online clinical replacement hours became the priority,

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especially for senior nursing students slated to graduate. The undergraduate department chair identified 3 faculty simulation experts to help transition all clinical, simulation, and skills laboratories to online. The university was using a simulation platform in the face-to-face simulation laboratory setting for pediatrics, fundamentals, medical-surgical, high acuity, and maternal health courses before the pandemic. Therefore, this simulation platform was the best option for students to complete their remaining clinical and simulation laboratory hours throughout the undergraduate curriculum.

The simulation experts created a method to transition this previously used face-to-face platform to virtual using the simulation electronic health record (EHR) combined with online simulation exercises and synchronous debriefing between faculty and student clinical groups. Challenges involved in the transition included training inexperienced faculty on methods of conducting simulation and debriefing online, educating faculty on the use of the virtual simulation assignments and technical aspects of the virtual simulation platform, organizing assignments within the virtual simulation platform, and incorporating the virtual simulation platform into the university's learning management system (LMS).

Creating a Game Plan

The simulation experts collaborated with the nurse educators to create student and faculty guidelines for using the simulation platform in a virtual setting to meet the 2:1 ratio of replacing 2 hours of face-to-face clinical learning with 1 hour of online simulation.¹ The nurse educators helped develop a lesson plan to ensure each scenario's virtual assignment equated to a 12-hour clinical shift. Both faculty and students were oriented to the virtual simulation platform by the simulation experts who provided online live demonstrations during class time or clinical orientation. An asynchronous, prerecorded "walkthrough" online demonstration was provided, followed by a synchronous, live online session. The experts were available to answer questions and assist with any technical problems encountered by students and other faculty members.

During an online clinical day, students first completed the presimulation readings, quizzes, and short-answer exercises on their assigned simulation scenarios. In the simulated

patient's EHR assignment, students completed the presimulation phase that prepared them to care for their simulated patient. Before moving to the simulation phase of the EHR assignment, students met with their clinical instructors online to discuss their assigned virtual patient's nursing care. Student objectives for the patient scenario and expected student performance were provided during the presimulation briefing. Using the virtual simulation platform's faculty implementation packet as a guide, faculty facilitated the simulation. Faculty shared their screens to show Google slides created for the patient scenarios. Through clinical discussion, each student functioned as a primary nurse to verbalize priority assessments and nursing interventions. On completion of the virtual simulation, the faculty conducted a postsimulation debriefing, during which the students completed the EHR assignment by answering questions on the priority assessment of their patient, developed 3 priority nursing diagnosis and care plans, documented patient education, and summarized an evidence-based nursing monograph and journal article related to their patient's care. In addition, students completed postsimulation quizzes and an interdisciplinary report.

Online skills laboratories were conducted similar to clinical shifts. However, students were required to submit a separate nursing care plan in the LMS. Online skills laboratories retained the university's 1:1 hour ratio, with EHR assignments focusing on nursing skills documentation and watching various skills videos. The students had weekly synchronous online meetings with faculty for skills demonstration and practiced these skills at home with faculty guidance.

Evaluating Our Strategy

Faculty feedback on the use of the virtual simulation platform was both positive and negative. Faculty appreciated that the pre- and postsimulation quiz grades autopopulated in the online simulation platform's gradebook. The EHR grades did not autopopulate; therefore, faculty had to create rubrics to grade their students' EHR assignments objectively. To assist faculty with this new way of grading, the simulation experts created a prerecorded guide for faculty to use as a reference. The faculty appreciated having a comprehensive guide for each phase in the scenario and having the pre- and postsimulation assignments built into the scenarios. On the other hand, most of the faculty believed that grading assignments in the virtual simulation platform were

cumbersome and time-consuming. Students provided verbal and written feedback on the virtual simulation platform to their lead faculty or clinical instructors. Students felt the assignments were time-consuming and repetitive across courses. The simulation experts considered the students' feedback to improve online clinical experiences for the following semester.

Implications for Nursing Education

As most nursing programs shifted to online learning because of the pandemic, there were lessons learned. Our experience shows that traditional face-to-face nursing courses can be delivered remotely and online if necessary. Moreover, as teachers and learners transition from didactic-laden curricula to programs that emphasize experiential learning, stakeholders should recognize the potential benefits of using virtual simulation.² Virtual simulation platforms have proven to be effective during the pandemic.³ If using virtual simulation to replace clinical hours, faculty simulation experts and experienced online faculty need to be available to inexperienced faculty, not only as a resource person but also as a mentor.

Conclusion

In conclusion, our plan for continued use of this teaching method will be a "backup" plan for any future crises. The COVID-19 pandemic presented unprecedented challenges for both faculty and students but also created opportunities to explore new ways of teaching and learning. These challenges and opportunities empowered our institution to rise to the occasion and enabled nursing students to meet clinical objectives, graduate, and enter the increasingly vital nursing profession.

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