



Faculty perspectives on transitioning public health nursing clinical to virtual in response to COVID-19

Mallory Bejster DNP, RN, Assistant Professor  | Heide Cygan DNP, RN, PHNA-BC, Associate Professor and BMO Harris Bank Health Disparities Research Fellow  | Glenda Morris Burnett PhD, MUPP, RN, Assistant Professor | Diane Y. Smith MSN, APN, FNP-BC, Instructor | Mary Brown Walker DHA, MSN, APN-CNP, Adjunct Instructor | Tanya Friese DNP, RN, CNL USN (ret), Assistant Professor

Community, Systems and Mental Health Nursing, Rush University College of Nursing, Chicago, IL, USA

Correspondence

Mallory Bejster, Rush University College of Nursing, 600 S. Paulina Street, Suite 1080, Chicago, IL 60612, USA.
Email: mallory_bejster@rush.edu

Abstract

The COVID-19 pandemic has highlighted the need for public health nursing as an integral part of a strong public health workforce. However, it has also created challenges in preparing future nurses as much of nursing instruction, including clinical experiences, needed to urgently transition learning to a virtual environment. This paper describes the process faculty experienced during spring 2020 to quickly transition public health nursing clinicals from in-person to virtual learning in response to COVID-19. Further, faculty lessons learned are shared and include the importance of creating a supportive team dynamic, embracing innovation, continuing to engage with community partners, and adapting to meet emerging student needs during the evolving pandemic. The process and lessons learned may act as a guide for other nursing programs as we continue to navigate nursing education during this and future pandemics.

KEYWORDS

clinical education, faculty, pandemic, public health nursing education

1 | INTRODUCTION

The importance of a strong public health infrastructure and workforce, including public health nurses, has been emphasized during the ongoing COVID-19 pandemic (Edmonds et al., 2020). Along with the need for adequate, long-term funding for public health (Edmonds et al., 2020; Kub et al., 2017), it is also essential that nursing education prepares future nurses to take a lead role in collaborating with community partners to promote health, reduce disparities, and address public health needs within communities (Murray, 2019). To meet this need, nursing faculty should look for opportunities to incorporate critical concepts such as epidemiology, communicable disease control strategies, population health, social determinants of health, and health promotion throughout the curriculum to prepare

graduates to promote health across a variety of settings (Carolan et al., 2020; Morin, 2020; Murray, 2019).

While the COVID-19 pandemic has highlighted the value of public health nursing, it has also created challenges across nursing education, including for public health nurse educators in clinical settings. In March 2020, academic programs across the country were faced with making decisions to best meet student needs as COVID-19 became a pandemic. For the first time in the history of higher education, entire student cohorts transitioned to virtual learning (Zimmerman, 2020). Although continuing to provide meaningful instruction was a challenge across all disciplines (Zimmerman, 2020), health care programs, particularly nursing programs, were under immense pressure to continue developing the health care workforce necessary to combat the pandemic, while also protecting students, susceptible patient

populations, and society against the spread of COVID-19 (Dewart et al., 2020). Along with student safety and the safety of the population at the clinical site, resources available at community-based clinical sites also had to be considered (Redden, 2020).

The American Association of Colleges of Nursing (AACN) disseminated an evolving document titled, "Considerations for COVID-19 Preparedness and Response in U.S. Schools of Nursing" (AACN, 2020). This document provided guidance for nursing schools on how to maintain quality nursing educational experiences while protecting the health and safety of students and faculty. Following guidance from local public health departments was also stressed. AACN (2020) acknowledged that nursing students were an important part of the health care team and could remain a part of the health care team at clinical sites as long as they were not asked to provide care for patients with suspected or confirmed COVID-19.

As the pandemic continued to spread many nursing educators, particularly clinical faculty, had to swiftly transition courses from in-person settings to the virtual environment to meet the learning needs of students during this uncertain time. Many innovative learning strategies were utilized to support student learning including virtual simulations, telehealth visits, virtual flipped classrooms, and virtual reality (Chick et al., 2020; Morin, 2020).

Even though the transition to virtual clinicals during the spring 2020 term occurred quickly, the importance of establishing a virtual clinical environment that supports student learning while recognizing student needs was apparent. Creating a caring, supportive environment can promote student learning and positive learning outcomes (Ingraham et al., 2018). Crafting an environment that is supportive and responsive to student needs takes deliberate thought and planning on the part of the faculty (Morin, 2020).

As an emerging issue, few articles exist in nursing literature addressing this transition, particularly in public health nursing education. The purpose of this paper is to (1) describe the transition of a face-to-face public health nursing clinical to virtual clinical in response to the COVID-19 pandemic, and (2) share lessons learned from the faculty perspective.

2 | SETTING

The public health nursing clinical discussed in this paper is part of the curriculum for a College of Nursing's generalist entry master's (GEM) program at a private university medical center in the Midwest. The 15-week public health nursing clinical occurs during the fourth term of the six-term program and requires 112 clinical hours. In this clinical, students provide nursing care in community-based settings for individuals, families, and groups. Along with completing a community health assessment, students collaboratively plan, implement, and evaluate a health promotion project based on clinical site-specific health priorities. Clinical course objectives are listed in Table 1.

During the Spring 2020 term, 75 GEM students were enrolled in the clinical course. Clinical sites included local schools, an organization serving individuals who are blind or visually impaired, an

TABLE 1 Public health nursing clinical objectives

Clinical objectives

1. Collaborate with clients, community partners, peers, and interprofessional team members to provide safe, culturally appropriate, evidence-based nursing care which includes health promotion and risk reduction strategies
2. Apply communicable disease control strategies in community
3. Collect and analyze data to diagnose, plan, implement and evaluate nursing interventions for individuals, families, and communities based on social determinants of health
4. Distinguish between process and outcome objectives; collect and evaluate appropriate data for each
5. Describe the government role and nursing advocacy in relation to public health regulation, public safety, policy making, and access to health care
6. Translates and integrates scholarship into practice
7. Demonstrate professional behavior

organization serving people with intellectual/developmental disabilities and their families, a free out-patient addiction treatment center, and a Federally Qualified Health Center focused on healthcare for people experiencing homelessness. The clinical course team consisted of two-course directors and seven clinical faculty.

3 | TRANSITIONING TO VIRTUAL PUBLIC HEALTH NURSING CLINICALS

3.1 | Decision-making

As cases of COVID-19 continued to spread across the globe at the beginning of March 2020, public health nursing clinicals were still being held in-person following guidance provided by the University and local public health department. During this time, the course directors stressed the importance of open communication and flexibility among clinical faculty. Course directors clearly communicated that they were available for additional support and consultation as needed. Course directors stressed the importance of joint decision making, ensuring that any change made to the public health nursing clinical course was made as a team and maintained fidelity across the clinical groups.

Initially, the biggest concerns were the availability of personal protective equipment (PPE) and evolving visitor policies at community sites, as many sites updated their policies limiting the number or type of visitors allowed on-site. To ensure the safety of students and community members, the public health nursing course directors coordinated with the University to ensure that all clinical faculty and students had the PPE necessary to safely provide care, in alignment with CDC guidelines. Course directors also worked with clinical faculty as needed to review changing visitor policies at each of the community-based clinical sites to determine if students could continue to provide clinical services based on new, more restrictive visitor policies. Adequate PPE was provided for all students and

faculty and new visitor policies did not interfere with student clinical experiences.

In mid-March 2020, the AACN (2020) released initial guidance for schools of nursing when making decisions related to student-client interactions and clinical placements, stating that while students are important members of the health care team in multiple settings, schools of nursing must consider student safety, community partner needs, and limited resources, including PPE, in their decision-making process. On the same day this document was released, a public health nursing clinical faculty member contacted the course directors to share concerns about student clinical interactions with a population at high risk for severe COVID-19 infection. This prompted the course directors to meet to review each community-based, public health nursing clinical site to determine (1) whether students were considered part of the essential health care team in their capacity as part of this clinical rotation, (2) if the clinical sites provide services/care to populations that are at high risk for severe COVID-19 infection, (3) and if continued student presence might be an undue stressor on time and resources as our community partners responded to COVID-19. The course directors identified that at all eight public health nursing clinical sites, students would not be considered an essential part of the health care team in their capacity at the site. At four clinical sites, students were serving populations at high risk for severe COVID-19 infection, with three of those populations explicitly stated in the AACN guidance as populations that outside personnel, including students, should not have contact with at the time. Further, at all eight clinical sites students could place an undue burden on limited resources. Based on these findings, course directors, with administrator support, made the decision to transition the public health nursing clinical to a virtual learning experience for all eight clinical groups.

Once the decision was made, the course directors held a virtual meeting with all clinical faculty to review student progress in meeting clinical objectives thus far and prioritize remaining clinical activities. The faculty determined that students were progressing on all seven course objectives but required further development to master each objective. Clinical faculty brainstormed a variety of virtual activities to ensure students would continue meeting course objectives and came to a consensus on the most important activities to include in the remaining four weeks of the clinical course. Table 2

shows which clinical activities were prioritized and their relationship to clinical objectives. Course directors and faculty agreed to focus on these activities to ensure fidelity across clinical groups and facilitate mastery of course objectives.

3.2 | Making the transition

The need to transition public health nursing clinicals to 100% virtual over a short period of time presented course directors and clinical faculty with several challenges and opportunities. While course directors and clinical faculty met virtually to discuss the initial plans for the transition, more information was rapidly becoming available as the pandemic response continued to evolve, which required frequent and clear communication between course directors and clinical faculty. Before clinicals became virtual, the course directors sent weekly emails to public health nursing clinical faculty detailing content covered in the didactic public health nursing course, and ideas for ways to build on course content during clinical hours. This recurrent communication between course directors and clinical faculty became even more important as clinicals transitioned to a virtual format. Course directors continued to provide ideas for how course concepts could be applied in clinicals but made adaptations to include best practices for virtual learning. When additional challenges arose, course directors assisted clinical faculty to troubleshoot and discussed ways to address those challenges. Course directors also met with clinical faculty to test different meeting platforms for virtual clinicals and provided example agendas for virtual clinical days.

As the public health nursing clinical is designed for students to be at a community-based clinical site, one challenge was that not all clinical activities could be shifted from in-person to virtual clinical. Clinical faculty took this opportunity to explore new, innovative activities in alignment with clinical objectives. For example, one clinical group that had been at an elementary school for in-person clinicals participated in a virtual activity tied to the clinical objective three. Students were assigned a community-based case study of a single parent with a 6-year-old child, currently unemployed, without housing, and with only \$1,000 in their bank account. Students had to make decisions about the next 30 days with the \$1,000, based on needs related to food, housing, transportation, health insurance, and

TABLE 2 Priority virtual clinical activities and alignment with clinical objectives

| Clinical activity | Clinical objectives met |
|--|-------------------------|
| Current event activities related to COVID-19 | 2 |
| Social determinant of health-focused activities | 3, 5 |
| Advocacy and policy activity | 5 |
| Connect with the clinical site by providing virtual support and final clinical reports | 1, 3, 6, 7 |
| Evaluate in-person health promotion activity | 3, 4 |
| Review and provide feedback on public health nursing poster presentations | 6, 7 |
| Prepare for and participate in synthesis presentations | 1, 3, 4 |



more. Students had one hour to complete this activity individually and then debriefed virtually as a group.

Another innovative activity involved nursing students creating a YouTube channel in collaboration with staff and parents at a school serving youth with special needs. Topics included reinforcing learning that would have taken place in the physical classroom such as guess what day of the week it is, share what you see when you look out the window, and dance parties to promote physical activity. Nursing students also facilitated tactile, colorful art projects through the YouTube channel. It is important to note that using the YouTube channel as a vehicle to deliver this content afforded participants the ability to learn through multiple senses. This platform provided a way for the children and their families to actively participate in remote learning while addressing accessibility needs in a proactive manner (McAlvage & Rice, 2018). This clinical activity aligned with course objectives one, three, six, and seven.

This example also highlights that during virtual clinicals, faculty and student partnerships became even more important when considering innovative ways to use technology to deliver health promotion messages and education. Students often had more experience than faculty related to the use of new technology. The expertise of students facilitated this new way of learning, communicating, and educating and was embraced by faculty as it was identified as a significant asset and a window to the future of clinical education.

Even though students were unable to complete all of the clinical activities in-person, after the transition to public health nursing virtual clinicals nursing students had the opportunity to support community partners at their clinical sites in different ways as the organizations responded to the pandemic. The students acted as educators and advocates, providing resources related to communicable disease control for agency staff and clients in relation to COVID-19. At some clinical sites, nursing students became involved in organizational COVID-19 pandemic response and planning. Students and faculty virtually met with key organizational leaders to brainstorm additional interventions that would not only address the current COVID-19 crisis but would solidify the ongoing partnership. At one site, this brainstorming session resulted in the development of a protocol supporting re-opening plans for the eventual return of preschool and K-12 students with special needs to the physical facility. These virtual clinical activities aligned with clinical objective two.

Typically, each clinical day included seven hours of on-site individual and group work. Initially, when the move to virtual clinical was made, clinical faculty envisioned a similar format simply conducted over a web-based application. However, sustained virtual engagement proved challenging, as students were managing a variety of competing demands at this time during the pandemic. Schools were closing and shelter-in-place orders were beginning, leaving many students to juggle clinical learning while caring for children or other family members in their homes. Clinical faculty determined very quickly that seven hours spent in front of the computer, as a group,

was not sustainable. To address this challenge, faculty took an innovative approach to clinical days. Faculty assigned one to two hours of work to be completed before the clinical day started, shortening the number of live clinical hours required and allowing students to complete clinical work when it was most convenient for them.

Faculty started the day with a group meeting. During this time, faculty created a space for discussions about current public health events and the impact of the pandemic. After that faculty described expectations and plans for the clinical day and discussed the results of the assigned pre-work. Students were then asked to take the next couple of hours to work either independently or in small groups on activities. Clinical faculty met with students virtually at the end of the clinical day to debrief the clinical day with students. Debriefing questions focused on what went well, what could have been even better, and what challenges arose. At the end of the clinical day, clinical faculty also set expectations with students for the following week. Breaking up the clinical day provided students with flexibility while affording greater engagement.

Faculty also noted a need for greater social and emotional support for students. Providing time for an open forum during the virtual clinical day for students to discuss their concerns and challenges related to the pandemic helped to meet this need. Time was set aside at the start of the clinical day to support students in speaking freely about their academic and personal concerns. During this time students often expressed anxiety and fear related to the pandemic, described increased stress related to rising responsibilities at work and home, and discomfort with the uncertainty of future events. Faculty listened, provided encouragement, and referred students to the University Wellness Center if further support was necessary.

4 | DISCUSSION

After completing the final four weeks of public health nursing clinical virtually, clinical faculty and course directors reflected on lessons learned from conducting public health nursing virtual clinicals for the first time. Lessons learned include the importance of creating a supportive team dynamic, embracing innovation, continuing to engage with community partners, and adapting to meet emerging student needs.

4.1 | Create a supportive team dynamic

Carolan et al. (2020) noted the need for collegial collaboration and participation during this shift in nursing education due to the pandemic. Throughout the transition process, the course directors and clinical faculty worked as a team to successfully transition public health nursing clinical to a virtual learning environment. Clinical faculty worked together to identify the priority clinical activities that each clinical group would work to complete during the four weeks of virtual clinicals. Clinical faculty also supported each other through the sharing of ideas and group brainstorming sessions.

4.2 | Embrace innovation

The virtual learning activities previously described demonstrates the innovation of clinical faculty in creating new ways for students to meet clinical objectives. Innovative learning activities can help engage students and enrich the clinical learning experience (Phillips et al., 2019). The single-parent case study that students completed is one example of an innovative activity implemented by clinical faculty. The case study provided students the opportunity to explore how social determinants of health influence health and to understand existing barriers for their assigned community, without direct contact with communities. According to Murray (2019), future nurses must be knowledgeable about how social determinants influence health for individuals and within communities. This activity was a good fit for virtual clinical learning as it was free, web-based, and did not require in-person teaching but still facilitated the mastery of course objectives.

4.3 | Continue engagement with community partners

Even though students were not physically present, they remained engaged in innovative ways with community partners. Students specifically used their growing public health expertise to educate organizations and community members about COVID-19. Communicable disease control strategies, signs and symptoms to monitor for, and COVID-19 testing procedures were all important health education topics (Chen et al., 2020). By applying these public health concepts in practice, students were able to meet public health nursing competencies while also engaging with community partners in response to the current public health crisis.

Even though students were unable to be on-site, many clinical sites expanded the use of remote and telehealth services to reach individuals and families (Center for Disease Control & Prevention, 2020; Iyengar et al., 2020). For example, the clinical group that helped to create the YouTube channel was able to harness technology and develop a remote, online platform that supported the work of the clinical site. Students may be able to participate in remote service activities as part of their clinical experience to remain engaged with and support community partners during the pandemic.

4.4 | Adapt to meet emerging student needs

Discussions among public health nursing clinical faculty and course directors revealed a common theme of the need to recognize students as individuals outside of the clinical setting, as people who were also dealing with challenges of living through a pandemic. Many students had multiple responsibilities including school, work, homeschooling children, and more. Several students worked as nursing assistants providing care for suspected or confirmed COVID-19 positive patients. These challenges, coupled with the uncertainty

and rapid changes to nursing learning environments, contributed to increasing levels of stress and affected students' well-being (Carolan et al., 2020; Christopher et al., 2020).

Christopher et al. (2020) discussed establishing a caring presence during the transition to virtual learning environments by creating a supportive learning space that fosters connection, facilitates discussion around shared experiences, and focuses on solutions to address challenges. Clinical faculty worked to adapt the virtual public health nursing clinical to meet emerging students' needs by altering the clinical day format and schedule and creating a space for discussions around current events and student concerns. In doing so, clinical faculty continued to adapt the virtual clinical experience to meet students' needs as the pandemic evolved.

5 | CONCLUSION

The purpose of this paper was to describe the process of transitioning an in-person public health nursing clinical to a virtual clinical in response to the COVID-19 pandemic, and share faculty lessons learned. In doing so, the authors identified a variety of shared experiences and lessons learned that may serve as guidance for other nursing programs. The unprecedented shift from in-person to virtual public health nursing clinicals was a new experience for the course directors and clinical faculty involved in the transition. It is important to reflect on the lessons learned from the faculty perspective during this transition since the COVID-19 pandemic is ongoing, and virtual clinical activities will continue being an important opportunity for student learning now and in the future. A limitation of this paper is that it only includes the faculty perspective. Since the transition has significantly affected the student learning experience, understanding the effects of the transition to virtual public health nursing clinicals from the student perspective is also important to consider. Additionally, while the transition was necessary to ensure safety, learning outcomes are still unknown (Govindarajan & Srivastava, 2020). It is imperative moving forward to evaluate student perspectives and learning outcomes in the context of virtual clinical experiences.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analyzed for this project.

ORCID

Mallory Bejster  <https://orcid.org/0000-0002-6313-495X>

Heide Cygan  <https://orcid.org/0000-0003-2811-2170>

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