

Students' and Pharmacists' Approaches to Virtual Experiential Patient Care Practicum's

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Abstract

Background: Students enrolled in the University of British Columbia's (UBC) Pharmacy program have the opportunity to get practical experience in a primary care practice setting at the University of British Columbia's (the Clinic), which is run by pharmacists. In light of the extraordinary circumstances surrounding the COVID-19 pandemic, certain pharmacy practice sites have made the irreversible decision to move some experiential education activities online. Teaching methods that help pupils succeed in a digital setting are not well-documented at the present time. Our goal is to gather insights from student pharmacists and practice instructors on what makes a virtual patient care practicum experience work well in a university clinic.

Methods: In order to understand the viewpoints of practice educators and student pharmacists, the former of whom had no prior experience with virtual practicums and the latter of whom had some, a qualitative research approach was used. We used a semi-structured technique to conduct separate focus groups with participants, asking them questions designed to elicit their thoughts and feelings about virtual practicums. With the participants' permission, we audio recorded and transcribed the focus group meetings. The data was analyzed using a thematic analysis.

Findings: Each focus group included three participants: one practice educator for pharmacists and one student pharmacist. Based on the data, six main themes emerged: (1) optimizing technology, (2) activities connected to patient care, (3) the interaction between student and practice instructor, (4) the development of student skills, (5) student support, and (6) preferences for in-person versus virtual practicum. Setting communication norms, organizing interesting learning opportunities, and having a dependable internet connection are some of the techniques that have been suggested to address the constraints of virtual practicums. Participants' insights on what makes a virtual patient care practicum work were the basis for the study's conclusion. This study's findings may inform how other branches of medicine handled virtual clinical rotations during and after the COVID-19 outbreak.

Topics covered include preceptorship, education, practicum, and pharmacy.

BACKGROUND

The World Health Organization (WHO) proclaimed the COVID-19 pandemic in March 2020.¹ As a result, healthcare and education delivery systems underwent changes. There was less literature on virtual site visits or telehealth training for student nurse practitioners or pharmacy learners before to the pandemic, and much less on virtual experiential education or precepting.^{2, 3, 4} During the pandemic, there were changes in pharmacy experiential education as both students and teachers of pharmacy practice adapted to online learning.^{5, 6, and 7} There is a dearth of resources for educators looking to improve their methods of instruction for use in online classrooms. One place where students may get real-world experience in primary care teams is at the University of British Columbia (UBC) Pharmacists Clinic, also known as the Clinic. Final year The Clinic is where Pharm.D. students who are entering the practice do their four- to eight-week clinical education practicums in direct patient care. Pharmacists on staff at the Clinic serve as practice instructors. Comprehensive medication management services are available at the clinic by appointment only. These services include education for patients, treatment of chronic diseases, and communication of pharmaceutical care plans with primary care physicians. Practice educators oversee clinical rotations at the Clinic, where students get experience in areas like as patient care appointment management, journal club facilitation, medication information requests, and case presentation skills. Although most consultations was place in person before the epidemic, patients and providers alike might choose to meet

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by phone or video call if they preferred. The COVID-19 worldwide pandemic began in March 2020, and the Clinic promptly moved to a virtual model for all patient treatment and experiential teaching.

THE AIM

This study aims to synthesize the views of practice instructors and student pharmacists on what makes a virtual patient care practicum experience workable in a university clinic.

The steps:

The research invitations were distributed via email to the Clinic's part-time, university-subsidized student pharmacist work learn workers in July 2020 and pharmacist practice instructors in August 2020, using a convenience sampling technique. Both sets of people were already familiar with the Clinic's conventional, in-person patient care procedures. For the participants who agreed to take part, we set up and hosted separate Zoom focus groups. In order to better understand the perspectives of pharmacy students and practice educators who were going through the process of moving to a virtual patient care practice, interview guides were created using pre-existing experiential education papers and Clinic procedures (Table 1). No previous connection existed between RL and the study participants before the research was conducted. In-depth interviews with students and practice educators were carried out by RL. Audio recordings and transcriptions of the focus group meetings were made. The data was securely saved on a server and all information was kept anonymous. Under the number H20-01813, the UBC Behavioural Research Ethics Board gave its stamp of approval to this research.

For this research, content analysis served as the guiding methodology. Regardless of the interview questions, the transcripts of both the student and practice instructor were evaluated together thematically. Thematic identification at the semantic level was accomplished using an inductive technique. The goal of this strategy was to shed light on data-driven themes by reducing the impact of researcher bias on analysis.⁸ To assist organize the data and classify the investigators' results, qualitative theme analysis was carried out using NVivo 12.6 (QSR International, Burlington, MA). Data coding was carried out methodically by one researcher using line-by-line coding and frequent comparison. Two researchers rearranged the data to better find themes and subthemes after the first coding system was created. To eliminate repetition and better understand the overarching concepts, recoding was carried out. Once again, the research team deliberated and reached a consensus on the topics.

RESULTS

Each focus group consisted of three Clinic employees: one practice educator and one pharmacy student. Students in their third year of pharmacy school who had worked at the Clinic for at least a year made comprised the focus group. A group of clinical pharmacists with 0.5–10 years of precepting experience and 2–10 years of practice experience made up the practice educator group. While practice educators have some experience with virtual patient care practicums as of March 2020, student pharmacists participating in the research did not have any such experience. Six themes were discovered from the interview data analysis (Tables 2 and 3). The following six themes were identified: choice for in-person or virtual practicum, interaction between students and practice educators, improvement of students' skills, optimization of technology, and activities pertaining to patient care.

Improvement of Technology

Optimal work setting and a dependable internet connection are examples of how both groups highlighted the need of maximizing technology. Both the practice educators and the students were in agreement that the format of virtual meetings would be comparable to in-person visits when questioned about them. The preceptor would observe the visit remotely via phone or video call and provide comments or assistance while the student took the lead. The students pointed out details unique to the precepting methodology used by the Clinic that would be overlooked. As an example, the preceptor may sit in a different room and watch the student-led session over video chat. Halfway through the visit, they could have a private meeting to go over the student's plan and suggestions before they gave them to the patient. Unfortunately, the mid-appointment check-in feature was missing from the virtual consultations that employed this

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manner for in-person consultations. The student experience might be enhanced if a chance to do a comparable check-in could be found.

Care-Related Tasks for Patients

Due to the constraints of virtual communication, both groups acknowledged that it would be tough to establish a therapeutic trustworthy connection with patients. Some of these constraints were a lack of understanding of virtual etiquette, cultural differences in views on virtual care, and the difficulty to adequately express empathy. A further obstacle to delivering complete treatment, according to students and practice instructors, is the inability to conduct physical examinations, including assessing vital signs. Many practice educators have highlighted the potential benefits of virtual care, including the ease it provides in connecting with patients and their loved ones, who may be able to participate in more regular follow-up consultations.

Mentor-Student Bond in the Field

Both groups felt that the professional working relationship between students and practice educators should not change, even though they acknowledged that the student-practice educator relationship would be missing a personal connection component because of the lack of casual and face-to-face interactions. Although teachers were aware that nonverbal abilities and students' reactions to criticism might be difficult to evaluate, they still did not believe this would impact their evaluations of students.

Improvement of Student Abilities

While students might improve their virtual care and communication abilities, practice educators worried that they could not get enough practice in other areas. Opportunities to work with other student pharmacists or health care professionals, participate in flu clinics, or host health promotion activities were passed up. Practice educators still felt confident that the majority of students would reach the target level of proficiency, albeit they acknowledged that this may vary from student to student. When questioned about their level of professionalism, students generally said they were prepared to perform professionally, but some said that external influences, such as a loud home, may affect their perception of themselves in a negative light. Participant Ideas on How to Help Students Succeed in Their Practicums Make Up This Overarching Theme. Students placed an emphasis on identifying potential problems and developing strategies to mitigate them before beginning their practicum. Anxieties about a new rotation may be alleviated, according to one student's suggestion, if practice sites were to provide clear expectations. On the other side, practice educators valued strong relationships with students because it allowed for more personalized assistance via open communication.

Personal Preferences: In-Person or Virtual

Virtual practicums were deemed less desirable by both students and practice instructors compared to in-person ones. On the other hand, when it comes to virtual precepting, both groups agree that a hybrid approach would work best. In general, students felt that virtual practicums were unnecessary and did not correspond with their professional view, therefore they did not want them to continue if they were not required. Feeling exhausted from working from home and not seeing any extra value in experience learning were two more reasons. Practice educators, on the other hand, thought that students may benefit from virtual practicums as they wouldn't have to worry about transportation or lodging, and they could work from the comfort of their own homes.

DISCUSSION

Students' and teachers' views on creating a virtual practicum were the focus of this research. The findings back with what is already known about how telemedicine affects relationship development and how technology is crucial for providing virtual healthcare encounters.^{2,4,9,10, and 11} Among the new things found in this research is the need to provide extra help and the absence of varied learning experiences.

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Many people believe that students or patients in rural or distant areas do not have access to suitable technology that would allow them to participate in virtual clinical encounters.³ Nevertheless, there are steps that can be taken to make the most of virtual appointments and make the changeover easier, even if there aren't many ways to increase one's technical competence. After reviewing virtual site visits, researchers concluded that both students and teachers should check that their devices' internet, cameras, and microphones are working properly before each scheduled meeting.⁴ For the convenience of the pharmacy students, it is advised that preceptors who are watching turn off their camera and silence themselves during video visits. In addition, practice locations should have a specialized technical support staff member on hand to fix any issues that come up.²

Before, researchers looked at how telemedicine affected the dynamic between doctors and their patients.^{9,10, 11.} Based on our findings, students can have trouble with patient-care tasks including showing empathy during tough interactions. If preceptors want their students to communicate better with patients, they should tell them to stare into the camera, figure out how to position it so it takes the best picture, and spend extra time giving the patient a rundown of the session. Carrying out "webside manners" may help in connecting with patients, which is in line with earlier suggestions given by experts.^{9, 10} In addition, although virtual physical examinations have their limitations, students may still utilize video calls to check patients' point-of-care devices or watch them use them correctly, providing them with a chance to coach them on their usage. A student's professional and academic growth depends on the quality of the connections they form with their practice educators.^{12, 13} Nonetheless, our findings showed that virtual practicums can affect the informal part of the relationship because of the absence of chances for casual talks. The use of several channels of communication (email, phone, text, video call) in one's precepting model has been shown in earlier studies to aid in the development of tighter relationships.^{7,14} Also, be sure you intentionally coordinate your communication by checking in regularly and scheduling debriefs.^{6, 7, 14,} It is the responsibility of the practice educators to identify which in-person activities may be done remotely and to find the best way to help the students. To keep assisting kids in developing their abilities, it should be regarded to create alternate exercises in cases when it would not be feasible. It is possible to combine health promotion activities like health webinars and online group consultations. Also, some have found that online journal clubs are a great way to hone their presenting and evidence evaluation abilities. the number of Online collaborative journal clubs allow students to work together to evaluate and present journal articles, which is great for practice sites with several students. Although practicing educators found interprofessional education (IPE) to be severely insufficient in a virtual context, new experiences have shown otherwise.¹⁷ Educators in practice should assess the practicality of integrating IPE because of the time and effort needed for implementation.¹⁸

To help students get the most out of their virtual practicums, it would be helpful to include some guidelines, resources (such as a way to get in touch with technical support), and expectations from the practice site (such as standards of professionalism and learning objectives) in their orientation materials. Providing students with first shadowing chances to watch the conduct of virtual appointments might also be advantageous.²

Findings from this study provide directions for further investigation into online clinical rotations. Without any background knowledge, most students assumed that virtual practicums couldn't compare to their in-person counterparts and would be lacking in key areas. After completing the virtual clinical experience, some students changed their minds about it, saying they preferred it or thought it was just as good as in-person. This is according to research that looked at how students felt about virtual clinicals.^{2, 3, and 9} Clinical practicums and other learning activities can go forward in a virtual format after the COVID-19 pandemic ends, as long as they are designed with the goals of helping students achieve telehealth competencies and the practicum's learning objectives in mind.¹⁹

Several caveats should be noted about this investigation. It is possible that our findings may not be applicable to other pharmacy practice locations (such as inpatient settings) due to the study's location, a university-based primary care clinic run by pharmacists. It is worth noting that our research group may not include a representative sample of practicing educators or students outside of our school due to the limited sample size.

CONCLUSION

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The primary care practice setting's virtual patient care practicum might benefit from the insights offered by the study's participants. This study's findings may inform how other branches of medicine handled virtual clinical rotations during and after the COVID-19 outbreak.

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