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THE UNIVERSITY OF BRITISH COLUMBIA
Pharmacists Clinic
Faculty of Pharmaceutical Sciences

Our Practice

By pharmacists for pharmacists.

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CORONAVIRUS (COVID-19) and UBC's response: Information and FAQs here.

FEATURE ARTICLE

Service Design in Healthcare

BY: BARBARA GOBIS BSC(PHARM), RPH, ACPR, MSCPHM, PCC, ALLISON NOURSE, BSC(PHARM), RPH

Service design is the study and shaping of service experiences so that they work well for people. Healthcare is a service industry, so the principles of service design can help us put patients first while also considering the needs of the people delivering the services.

Do We Have a Problem?

The UBC Pharmacists Clinic team provides about 2500 patient care appointments per year and, as of June, 2022, has surpassed 21,000 appointments in total.

A common metric we track at the Clinic is patient non-attendance at appointments. Like any healthcare clinic, patient no-shows or late cancellations waste clinician time and impede other patients from receiving care. In 2019 and 2020 (prior to the COVID-19 pandemic) our non-attendance rate was 17.6% and 11.8% respectively.

When the pandemic hit, we pivoted to a fully virtual service. While our patient non-attendance improved to about 10% as people remained at home, we quickly saw how our workflows and operational systems did not meet the standards and expectations of the day. Staff members began to share the awkward processes they used, work-arounds they created and surprising ways they were trying to make old processes work better. Although we marveled at our team's creativity and their ability to endure, it became evident that we needed to adopt a service design approach.

Yes, We Have a Problem

We started by hiring a student from UBC's cognitive systems program to review our services, identify our bottlenecks and reveal the inefficiencies in our processes. A patient experience survey was deployed to gain feedback on current services and process. The results were both encouraging and disheartening.

While our patients reported highly valuing their relationship with their pharmacist, and the care they receive from us, they found our logistic processes problematic - before, during and after their care. In other words, patients put up with our poor service design to get the clinical care we provide.

Patients shared that our processes were complicated, our messages were hard to follow and they wanted standard conveniences like email reminders. They disliked the video call platform we were using and found our website hard to use, especially on handheld devices.

We realized that some of the UBC tools and processes that worked for academic activities weren't optimized for patients, particularly our complex clientele who tend to use a lot of healthcare services. We needed help to make our workflows and services better for patients and our team.

What Now?

The answers to our problems came from the people most connected to our services – our own staff and patients. Our student prepared a list of key issues to be addressed, prioritized them and helped us figure out how to work through them one-by-one to bring the Clinic up to current operational best-practices. Some of these issues include:

- Reviewing and updating our website (in progress)
- Setting up email appointment reminders (instead of phone calls) to minimize no-shows (done)
- Switching to a more patient-friendly video call platform (done)
- Improving and simplifying communication before, during and after appointments (in progress)
- Removing extra steps and inefficiencies for staff (on-going)
- Using health technology for remote patient monitoring (in progress)

As Clinic team members, we had fallen into the trap of doing what we've always done without reflecting on areas for improvement. We knew what needed to change for our services to work better, we just needed someone to ask the right questions, capture the answers and translate the results into better service design.

Healthcare Designer

From this humbling process, we recognize our need to continuously review, revise and reinvent how we work. We hired another student from the cognitive systems program to keep the momentum going and successfully made the case to create a healthcare designer position on the Clinic team.

Our healthcare design team has become a critical success factor for our clinic. We will survey patients this summer to hear how our changes are working for them, however early indications are positive. In our most recent check, patient non-attendance rates had dropped from >10% to 2%.

Our ongoing commitment is to provide the best possible clinical care while giving our patients and staff the most pleasant experiences possible.

CASE STUDY

Much needed rest – investigating the use of psilocybin and prazosin for PTSD-associated insomnia

BY: TIMOTHY LIM, BSC(PHARM), ACPR, RPH

A.A. (he/him) is a 35-year-old male who self-referred to the Pharmacists Clinic to explore the use of psilocybin to help treat his post-traumatic stress disorder (PTSD). He does not have any past medical history aside from a motor vehicle accident in October 2020, which was the trigger for his PTSD. He uses a CBD/THC tincture to help with sleep and denies any caffeine, alcohol, tobacco, or illicit substance use. He is not on any prescription or non-prescription medications.

A.A.'s main manifestations pertaining to PTSD include generalized anxiety, intrusive memories, and ongoing distressing vivid nightmares leading to poor sleep quality. He has trialed sertraline, escitalopram, nortriptyline, duloxetine, bupropion, and melatonin to help manage these symptoms. However, he has found that all anti-depressants cause sporadic jerks or dystonic limb movements, particularly during his sleep. Each anti-depressant was started at a standard initial dose, and they all led to the same adverse reaction. Melatonin was ineffective.

A.A.'s chief concern was his vivid nightmares. He described abrupt awakenings throughout the night with tachycardia, labored breathing, and sweating. Due to his intolerance to anti-depressants, A.A. began using a CBD/THC tincture under the supervision of a physician to help manage his anxiety and sleep. He also sees a psychologist periodically. He has found that the CBD/THC minimizes the vividness of his dreams, but he still wakes throughout the night. He denied any side effects. Recently, he read about the use of psilocybin for PTSD and wanted to inquire about this as a therapeutic option.

We discussed psilocybin in the context of the current evidence, possible benefits and risks. Psilocybin is theorized to work on 5-HT receptors and stimulate neuroplastic changes to help reprocess traumatic content and decrease negative affect.[1] Although clinical data is sparse at this time, there is evidence emerging for its use in the treatment of mental health conditions, particularly depression, from phase 2 trials.[2,3] Interestingly, there are no published clinical trials for PTSD, but a phase 2 study is currently in progress.[4,5,6]

Off label, prazosin is often prescribed to minimize sleep disturbances. While the largest randomized control trial for prazosin use in PTSD was not able to show improvement in distressing dreams or sleep quality, pooled effect estimates from a systematic review had statistically significant benefit.[7] Further, from anecdotal and clinical experience, patients with PTSD and nightmares seem to respond well with prazosin.

Ultimately, A.A. decided to try prazosin and was started on 1 mg at bedtime. At his follow-up, he was tolerating prazosin well and reported fewer distressing dreams (approximately 50% reduction) and nighttime awakenings. He also stopped his CBD/THC tincture in this timeframe. The dose was subsequently increased to 2 mg at bedtime in hopes of further reducing his nighttime symptoms with a follow-up in three months.

This case spotlights educating patients on the very limited literature available on psilocybin as medicine and the use of medications for off-label indications. Every patient encounter should be approached with an open mind and a harm reduction lens. Especially in situations when the evidence is sparse or the risks outweigh the benefits, pharmacists can not only provide education but also utilize our expertise to come up with appropriate alternatives.

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Note

Each case study has been peer reviewed and qualifies as a non-accredited learning activity (CE-Plus) within the annual professional development requirement for licensure by the College of Pharmacists of British Columbia.

Your Responsibility

The recommendations in this case are based on the views of our clinicians after careful consideration of the best available evidence and needs of a specific patient. As a health care professional, you will assess each of your cases based on the patient's unique circumstances and in consultation with the patient and their care team.

If you would like to discuss one of your patients with us please contact the Clinic team.