

Researching at High-Speed: Recording the Story of the COVID-19 Experience

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Emergency situations such as an evolving pandemic require researchers to pivot in real time. When the norm is building research teams, steady increments of publications and repeated grant applications until an established team gets a foothold, it is an anomaly for a team of researchers, with diverse backgrounds, to create a synergistic and successful team, and evolve an idea to publication in four months. This, however, is exactly what our team did, recognizing that an extraordinary situation such as COVID-19 requires a novel approach to studying the lived experience and uncovering new knowledge. In this paper, we will discuss how as a group of diverse researchers we came together to perform research on the experiences of people during the Covid-19 pandemic, grew as individuals, and completed valuable research.

We are three researchers who competed for highly sought full time, two-year term, research positions in our organization, focused on patient-oriented research. We each lead separate teams and were engaged with community members and informal caregivers on topics related to enhancing accessibility to healthcare for newcomers to Canada, engaging children from low-income families in sport, and establishing interprofessional care teams to enable patients to remain at home. Although we were supporting each other with resources, ideas and deadlines to advance our separate projects, we never imagined the efficacy of combining our strengths to achieve a common goal. Shutdown of the province impeded the way patient-oriented research was operationalized, bringing our separate projects to a temporary halt. This sparked us to shift our research focus to the immediate concerns and needs of faculty and students in our programs and how they deliberated on managing risk in clinical settings. From there our research expanded to examine the experience of seniors throughout extended social isolation and capture real time experiences of frontline professionals including nurses, paramedics, nursing students, and police officers. This is an interesting time in research as these COVID-19 studies are unlike anything that has been done in the past for Western Canada.

Our team was willing to engage quickly and temporarily redirect our individual research foci to meet the immediate needs of the COVID-19 outbreak; namely, to capture the historical significance of an event not previously experienced by frontline personnel in Saskatchewan as a way to provide support for current and future planning. This project started with the simple question amongst our team of what are clinical educators experiencing during this time and it grew to include nurses, paramedics, police officers, and senior citizens (see table 1). We used a phenomenological approach to collect data through interviews and surveys and completed hundreds of interviews and surveys. Our experience has led us to question the academic research paradigm and the challenges that exist surrounding rote grant applying, as compared to the flexibility often required to answer significant research questions.

Table 1.
Project Summary Table

Project	Dates of data collection	Method	Number of participants
Nurses in Clinical Education during the Covid-19 Pandemic	March 18 – May 13	Interviews	26
The experience of nurses during the Covid-19 pandemic in Saskatchewan	March 28- June 29	Interviews	32
Paramedics Provincial National International	April 3- June 9	Surveys	40
	June 10- August 1	Surveys	404
	September 13	Surveys	Ongoing
The lived experience of seniors physically distancing and socially isolating during the Covid-19 Pandemic	April 20 – June 23	Interviews	40 participants 3 interviews each
Police	April 23- May 29	Surveys	120

COVID-19 inadvertently facilitated and fed our collaboration. The interprofessional nature of our team, nursing and paramedicine, meant expanding our focus from acute care or institutional initiatives to community based partners. While we began by competing for jobs and grants, now we collaborate to succeed in a shared goal.

We have a common purpose: to provide frontline health care providers, law enforcement, seniors, and faculty, the opportunity to share their experiences and contribute to pandemic planning. In a short time, we have built our relationship as team members to leverage the best of interprofessional collaboration. We brainstorm next steps, best methodology, and best use of resources together. We have become one brain in our writing process— we conceptualize as a team, Heather writes, Lindsey expounds, Natasha pulls it together, we all finesse. We build on our professional perspectives to seek out learning, engage in new partnerships, and accomplish more than we would have as individual team leaders. Our synergy was achieved by working through divergent communication styles and strengthened by the external challenges we have faced.

Our Research Story

In Canada, the first case of COVID-19 was reported on January 15, 2020. Meanwhile in our small prairie province, although we were aware of an outbreak it seemed unlikely to affect us. March 12 was the first case in Saskatchewan and by March 16 the two Universities in the province closed in-person classes, and elementary and secondary schools declared that they were closing. This is

when the high-speed research began. Five research projects emerged in a short time with each project building on the protocols of the first project. Within eight days of the shutdown, phenomenological research was proposed and received ethical approval on two projects with research examining nurses in clinical education and nurses in practice. The idea was taken up by the addition of our paramedic researcher, who, after beginning data collection with paramedics, also started a project with law enforcement completing two additional projects. These studies collected data on over 300 frontline professionals in the province early in the course of the pandemic. It was important to capture these early reactions because the feelings of fear and stress were high as frontline professionals tried to adapt to the unknown.

Our initial success and incredible participant interest in being interviewed for each study, led to more opportunities. Our next opportunity was examining the experience of seniors physically distancing and socially isolating. Next, the paramedic study gained national and international partners. The nursing research protocols have also been shared with graduate nurses in other provinces, colleagues in other settings supporting student research, and colleagues internationally.

Completing the vast amount of work with these projects required supplemental assistance. A diverse array of graduate, degree, and diploma students joined the teams as research assistants. Students in our professions often continue their education; thus, assisting with research provides program planning, writing, mentoring and scholarly work experience that helps their own leadership skills and makes further study more accessible. They perform transcription of existing audio recordings, assist with coding, and help to create knowledge translation activities. They have also participated in team meetings and joined discussions guiding the direction of the research. Hiring research assistants not only grew research capacity amongst students, but also provided financial support during an economically tough time for many. One student in particular was facing barriers due to COVID-19 in her attempt to complete her final field practicum in the psychiatric nursing program. In partnership with leadership, we were able to adapt to the current circumstances by having the student meet her clinical requirements by engaging in research with the nursing research team. Her psychiatric nursing experience has provided further interprofessional perspective, especially with analysis of interviews or discussions on mental health needs of frontline providers. Developing partnerships with students and faculty compelled us to reflect on our personal research philosophies.

We have always engaged with patients, students, and both novice and experienced faculty on our research teams. This research program provided opportunity to gain expertise and perspective as well as mentor in the research process. This developed into engaging with community organizations, industry, and professional associations as partners, further expanding our interprofessional reach.

Working Through the Ethical Quagmire

As data analyses commenced on each of the projects, our team recognized a common thread amongst the projects— the unequivocal expectation for frontline professionals to go above and beyond their usual duties in an effort to balance the needs of the public with the limitations

created by the ongoing pandemic. Although the original intent of the studies was to examine lived experiences of frontline personnel, commonalities embedded within the experiences of those being studied has presented insight into the ethical decisions and responses being made by frontline personnel throughout the COVID-19 pandemic. This realization has further deepened our understanding of the barriers faced and innovative approaches taken to overcome challenges. Our team is dedicated to disseminating this information in a timely manner, thereby allowing us to share stories, best practices, and existing resources across settings and contexts to support those impacted.

Beyond the ethical challenges participants are facing, we, as practitioners, educators, and researchers, have had to self-reflect on the purpose of our studies and the potential negative impact on participants by asking challenging questions during a time of tremendous stress. Data collected weighs heavily as we feel a responsibility to leverage it to create positive change and support those navigating uncharted domains. A couple of research participants have perceived our studies as a selfish means to advance our careers by 'cashing in' on hardships being faced while others have expressed gratitude, stating that we are the first people to ask them about their experiences.

Organizationally and systemically, we have also been confronted with questions we have never had to address. As polytechnic researchers, we received a compliment for being the first through ethics in the province ahead of university researchers. We were questioned on whether our organization and the health authority had approved our research because our questions addressed challenges with leadership, communication, and decision making. Our forward momentum has paved a path for future nursing and paramedic researchers.

We work through each of these concerns by having conversations with colleagues, keeping decision-makers updated, helping each other with reflective critique, and ensuring we are staying true to our research philosophy. We are emboldened by significant gaps in worldwide literature on how healthcare professionals engage, plan, recover and innovate during and following emerging infectious diseases. Our interprofessional education reminds us that healthcare professions are evidence-based, so we proceed with attention to rigor and with the view that these results contribute to much needed knowledge.

Research Challenges

Time, resources, and capacity have been significant challenges for the team. Following standard timelines, completing this volume of research would take several years. Research on COVID-19 treatments, prevention, immunization, and the economic and mental health impacts will be studied for years to come, but capturing the real time emotions and experiences of frontline workers during COVID-19 could only happen in a short window of time.

Research rarely allows for pivoting study focus. Researchers plan for years in advance, apply for grants that take months to write, and include step by step how to complete the proposed project. Granting agencies have done an excellent job changing their funding model to allow for rapid turn around grants for COVID related projects. Even with these grants, it would still take six weeks

to two months to get a project off the ground unless researchers have at least a small amount of flexible money that they can put towards an emerging project. Along with dwindling funding, human resources to complete projects of this combined scope were required. Providing a student with a preceptored placement opportunity ensured she could complete the final requirement for her degree. Unique problem solving in this time of COVID is needed to deal with the challenging issues of the day and viewing clinical experience in a different way is one way to solve two problems with one innovation.

Research is not a standard job and many weekend, evening, and early morning hours are spent getting the work done. This time demand required measuring our individual and team capacity to make decisions quickly and move forward in a timely fashion.

Making High Speed Research Happen

Following worldwide, Canadian, and provincial COVID-19 presumptive and confirmed case trends, our research team recognized the need to begin studying the lived experiences of people being impacted by the outbreak. The ability to expedite our studies and gain such cumulative momentum would not have been possible without the synergistic teamwork of our researchers. Quickly recognizing the need to redirect our individual research focuses, pool our resources and work together tirelessly enabled our team to facilitate succeeding in a common goal. Our team was able to develop five main research areas, gain ethical approval and collect substantial data for each project in a short timeframe. Being amongst the first researchers in Saskatchewan to request behavioural research ethics board approval and having an understanding of emergency ethics from the federal ethical guidelines, ensured an expedited process of our first two research requests within 48 hours. Our data provides valuable insight. Data outlines the impact COVID-19 has on mental health and well-being, culture, policies, and overall professional roles throughout each phase of the pandemic, from the initial unknown to the current exhaustion everyone is feeling on many levels. Study findings encompass risk concerns, and uncover improved preparedness strategies and training approaches from various professional and public viewpoints. Our team was fortunate to have flexible internal funding to meet the needs of this fast-paced endeavour. Our studies have been further supported by rapid response funding from external agencies, enabling us to advance our studies and knowledge mobilization to frontline professionals.

Synergistic Learnings

Researching at high speed has been a learning curve for the whole team. Completing ethics, grant proposals, data collection and analysis on five projects in four months has put our learning into high gear. Just as that amount of research would generally take several years, so would the learning and growing as researchers. We have experienced light bulb moments when we could see how all of the projects aligned. The synergy within our team is an asset. Each of us brings a different skill set to the table, and we all learn from each other. Frustration has occurred more frequently than highlights. Research is not for the faint of heart; there are roadblocks— many of which are out of our control.

This research program started with one project and one simple question “What is the experience of frontline professionals?” By working from a point of curiosity, we have turned one project into a program of research. We take pride in remaining true to our research philosophy. We believe in inclusion, welcoming others who are interested in learning and growing onto our team. Continuous learning is as central to our research philosophy as is teaching and mentoring. We believe in interprofessional collaboration to ensure diverse viewpoints. When we feel stuck in our research progress, we simply pause and reflect on our philosophy, often finding direction from the values rooted within us. All members of our team are emerging scholars and we look forward to expanding our capacity to build creative knowledge translation as well as publish our work. We are especially excited to work with our newfound external partners to expand available literature. Learning from the experience of COVID-19 will benefit frontline workers and pandemic planning long into the future.

Heather Nelson is a nurse researcher who specializes in qualitative research with vulnerable populations. She is the principle investigator on the nurse experience of COVID-19 research and a project examining the experience of seniors isolating at home. She provides leadership and mentorship to patient partners and a large cohort of students assisting with these projects. Contact email: heather.nelson@saskpolytech.ca.

Lindsey Boechler is a researcher with a background in paramedicine. She holds a Master of Arts in Leadership from Royal Roads University. Lindsey is the lead investigator on the paramedic and the law enforcement COVID-19 projects. She adds a valuable interprofessional lens to the team and engages a network of community partners. She can be reached at lindsey.boechler@saskpolytech.ca.

Dr. Hubbard Murdoch has been a nurse researcher for a decade and specializes in qualitative and mixed methods research. She is principle investigator on the experience of nurse educators in clinical COVID-19 project. She brings knowledge of interprofessional frameworks and qualitative methods to the team as well as experience guiding students as research assistants. She can be reached at hubbardmurdochn@saskpolytech.ca.