

RESEARCH REFLECTION

Moving research forward during COVID-19

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The COVID-19 pandemic has led to major shifts in the healthcare environment, including the conduct of health research. Oncology practice has been significantly affected by abrupt measures to minimize COVID-19 exposure to cancer patients, family caregivers, and healthcare providers, such as social distancing, shifts to telehealth, redeployment and staffing changes, implementation of visitor restrictions, and round-the-clock use of personal protective equipment (Duncan et al., 2021). Efforts to minimize the risk of COVID-19 transmission also resulted in significant reductions in enrolling cancer patients in clinical trials in the early stages of the pandemic, especially for non-interventional studies (Tolaney et al., 2020; Waterhouse et al., 2020).

For nurse researchers, the COVID-19 pandemic has presented numerous challenges in conducting and sustaining the momentum of nursing research and

graduate student training. This paper reflects on the challenges experienced and the resiliency shown by Canadian oncology nurse researchers during the COVID-19 pandemic. We begin with a description of research experiences during the pandemic and activities taken to address these challenges. We conclude with a discussion of how these experiences may continue to inform oncology nursing research approaches beyond the pandemic. Our reflection is based on our experiences as oncology nurse researchers and those of CANO/ACIO members' responses to a short survey conducted in the summer of 2020.

The survey focused on how the COVID-19 pandemic impacted CANO/ACIO members' clinical and/or research and what adaptations were used to manage the impact. The survey was administered using the Qualtrics platform, and an invitation link was sent to all CANO/ACIO members. Open-ended questions asked respondents to describe how their clinical and/or research projects were affected by the pandemic and what adaptations were used to manage the impact. Demographic data for the respondents was not collected. Responses were received from members engaged in research as clinical nurse researchers, graduate work, or quality improvement projects. Responses were analyzed using word cloud (Sellars et al., 2018) to facilitate an examination of word frequencies, identification of tags, and provision of a display of words where their frequency was associated with font size (e.g., the bigger font was used for words used most often). The visual representation was used to identify the most prominent words used in survey responses so that the full survey text could be retrieved and analyzed to identify relationships and meanings (Sellars et al., 2018). The survey was available from June to August 2020, during which time 13 responses were received, analyzed, and integrated into our reflection.

RESEARCH CHALLENGES DURING THE PANDEMIC



The abrupt disruption to data collection was a significant challenge for oncology nurses' research programs. Survey respondents described challenges related to the restriction of activities that required in-person exchange with study participants, such as reviewing patient charts, administering on-site interviews or questionnaires, and conducting physical assessments for research purposes. These data collection activities were either halted or modified to a virtual format when feasible. Another example of delay to data collection occurred when research teams required the assistance of clinical staff to recruit study participants and collect data. As many clinical staff were re-assigned to new COVID-related tasks, they were no longer available to assist nurse researchers with their studies. These changes had to be shared with patients who participated in these studies, along with any additional delays.

Other significant challenges were related to disruptions in team collaboration, such as the complete stop to in-person team meetings and delays in project

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timelines due to added administrative tasks. The need for social distancing and restrictions on physical presence in research laboratories and healthcare settings challenged team members to be innovative to continue their research activities. Members who opted to continue recruitment using non-direct contact from their homes highlighted that, while long-distance recruitment was more manageable in some ways, it was also accompanied by extra workload; “working in overdrive” because of all the other added work and personal demands brought on by the pandemic. Added work included submitting requests to research ethics boards for amendments to collect participant data virtually, requesting reassignment of research funds from funding agencies, and reprioritizing phases of research. Subsequently, survey respondents noted that all submitted amendments to the research ethics board took time to be reviewed due to backlog and because priority was given to new COVID-19 related projects. Research teams were left to cope with the delays and restrictions of their regular activities and to find ways to create new tasks for the research staff to fill the void left from the halt to some of the research activities. Some research teams shared that they shifted their time from lack of data collection to writing scholarly papers. Others, on the contrary, commented how their shared work and peer review manuscripts were delayed as members of their teams were re-assigned to COVID-related tasks. Similarly, the development of new funding applications has been delayed due to a lack of progress in current research activities over the last 16 months. Overall, the need to constantly adapt to the changes occurring in the healthcare and research contexts significantly impacted research productivity.

RESPONDING TO THE CHALLENGES

Survey respondents acknowledged that the COVID-19 pandemic impacted their ability to pursue research activities as planned and that changes were required to progress. Yet, some of the changes were seen as positive, and

some research teams have planned to keep these changes post-pandemic. Specifically, the inability to conduct in-person data collection provided an opportunity to integrate remote data collection practices into programs of research where they were not previously used. Members explained that the new adoption of online participant interviews and the shift to remote methods was also an opportunity to train research staff on the ethical considerations of online research. Greater integration of remote methods was also positively embraced, as it increased access for participation and reduced time and travel barriers for research participants.

The abrupt changes to our working environments, while challenging, were often handled with resilience and creativity by oncology nurse researchers. For instance, survey respondents identified that pandemic-imposed delays to their research activities required regular check-in with their research team and discussions to propose new actions to keep progressing in their research. Other activities included setting up home offices, writing short research communications, working on amendments to submit to research ethics boards, and obtaining research training. Furthermore, survey respondents identified that the restrictions imposed because of COVID-19 provided opportunities for new collaborations (e.g., with generalist nurses to work with rural facilities) and convenience of scheduling data collection via telephone or online conferencing software that did not require extra travel time for both the research participant and researcher.

LESSONS LEARNED

Oncology nursing research is essential for understanding and managing patient and caregiver experiences throughout the cancer journey. In the face of the unexpected and unprecedented changes to the healthcare context brought on by the COVID-19 pandemic, oncology nurse researchers demonstrated creativity, innovation, determination, and resilience in finding ways to sustain the vital work of their research and their teams. Some

of the newly adopted research practices may persist to facilitate the continued expansion of oncology nursing research beyond the pandemic by increasing access and reducing the burden for study participants. Additionally, these newly applied research practices may enhance research efficiency, collaboration, and promotion of resilience in the case of future research disruptions.

Ultimately, these new research approaches may well accelerate the integration of research into clinical practice. The new team practices are consistent with the current dialogue regarding potential ongoing alterations to strengthen the accessibility of oncology research, including greater integration of remote or virtual methods of study participation and pragmatic trial designs, where possible and appropriate (Tolaney et al., 2020; Waterhouse et al., 2020). For example, the time and travel required to attend in-person study visits at the cancer centre may pose challenges for study participation and serve as a source of attrition in longitudinal studies, particularly among participants with high symptom burden, fragility, limited mobility, or financial toxicity (Avis et al., 2006; Borno et al., 2018). Offering options for remote data collection or reducing the number of required study visits may not only enhance the representativeness of research studies, but may also contribute to a positive experience for research participants. As we continue to learn more about the barriers to research participation including those related to age (Sedrak et al., 2021), race, and ethnicity (Hamel et al., 2016), there is an opportunity to leverage our growing comfort with new research and data collection approaches to address long-standing barriers to research participation.

In addition to driving major changes in the conduct of research, the COVID-19 pandemic has amplified the evolving physical, psychological, and self-management needs of cancer patients, survivors, caregivers, and healthcare providers within the ever-changing healthcare context, all of which will continue to be priorities for oncology nursing researchers (Zanville et al., 2021). From a leadership perspective, we have

also learned about the need to support and bolster the mental health of our nursing colleagues, trainees, and research staff through challenging

personal and professional times. Armed with the lessons learned throughout the COVID-19 pandemic, Canadian oncology nursing researchers are optimally

positioned to extend their contributions to cancer care throughout this country and beyond.

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