Cancer surgery in Canada during the COVID-19 pandemic: qualitative analysis of cancer surgeons’ perspectives

Julie Lee1, Harminder Singh2,3,4, Kathleen Decker2,4,5, Ramzi Helewa6, Marylise Boutros7 and Jason Park8,*

1Max Rady College of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada
2Department of Community Health Sciences, University of Manitoba, Winnipeg, Manitoba, Canada
3Department of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada
4CancerCare Manitoba Research Institute, CancerCare Manitoba, Winnipeg, Manitoba, Canada
5Department of Epidemiology and Cancer Registry, CancerCare Manitoba, Winnipeg, Manitoba, Canada
6Department of Surgery, University of Manitoba, Winnipeg, Manitoba, Canada
7Department of Surgery, McGill University, Montreal, Quebec, Canada
8Department of Surgery, University of British Columbia, Vancouver, British Columbia, Canada

Correspondence to: Jason Park, 5199-2775 Laurel Street, Vancouver, British Columbia, Canada V5Z 1M9 (e-mail: jason.park1@vch.ca)

Dear Editor

The coronavirus disease 2019 (COVID-19) pandemic has presented unprecedented challenges to healthcare systems worldwide. In Canada, provinces and jurisdictions implemented directives to preserve and redirect resources, including reducing or cancelling non-emergency surgical procedures, which affected cancer treatments1–3. How these changes were enacted at the practitioner level by cancer surgeons directly engaged with patients has received little attention. The authors undertook a qualitative study to assess cancer surgeons’ perspectives on cancer treatment and the challenges they faced during the COVID-19 pandemic.

Semistructured telephone interviews were conducted with 11 colorectal and gastric cancer surgeons from across Canada during the first wave of the pandemic (June 2020) (Fig. S1 and Table S1). Two researchers analysed the data for emergent themes using a grounded theory approach4,5. The data were organized using NVivo™ 12 software (QSR International, Melbourne, Victoria, Australia).

Four major themes emerged from this analysis of surgeons’ perspectives on cancer surgery during the pandemic: surgical processes, surgeon stress, infection control, and cancer outcomes. The surgical processes and surgeon stress themes are discussed below (Table 1). The infection control and cancer outcomes themes are outlined in Tables S2 and S3.

The surgical processes theme described the factors involved in performing cancer surgery during the pandemic. It was organized into the following subthemes: referral volumes, prioritization process, operative cases, treatment alterations, communication with leadership, unpredictable schedules, and surgical backlog.

Participants reported receiving fewer cancer referrals, which they attributed to patients’ reluctance to seek healthcare services, difficulties in accessing care from primary or specialty physicians owing to reduced office capacity or pandemic-related office closures, and reductions in screening activities and diagnostic services (such as CT and endoscopy). They further described decreased operating room (OR) access because of institutionally or regionally mandated OR slate reductions or closures, although the degree of reductions varied by region and course of the pandemic. Many institutions set up prioritization processes to prioritize operative cases for the limited number of OR slates available, but the organization and transparency of these processes were variable. Most participants perceived delays in cancer operations because of OR reductions, especially for less urgent or earlier-stage cancers. Finally, participants were concerned about a potential surgical backlog of patients awaiting diagnosis and treatment of cancer, and their institutions’ preparedness to manage patient volumes once the pandemic had slowed down.

Participants expressed heightened stress levels during the pandemic related to their role as surgeons and in their personal lives. The two major professional stressors were increased workloads and dealing with the uncertainty of whether OR requests would be approved. The process of seeking approval for surgery required increased administrative work. Surgeons were also unable to plan their schedules ahead of time and instead were constantly on standby, waiting to find out whether cases were approved and then needing to clear their schedules when OR time became available. Uncertainty in participants’ ability to provide timely care for their patients also caused stress.

Participants also experienced pandemic-related stress in their personal lives, including concerns about their own health, managing childcare with schools closed, and financial concerns in the event of a prolonged OR shutdown.

This study has highlighted areas requiring urgent attention to minimize negative and ongoing effects on patients with cancer, including diagnostic delays, developing reasonable and manageable prioritization processes a priori, dealing with backlogs of patients needing cancer treatments, and ongoing physician stress and burnout. Such studies need to be performed on an ongoing basis to mitigate negative unintended consequences of the pandemic.
Table 1 Summary of surgical processes and surgeon stress themes and subthemes with exemplar quotations

| Theme and subtheme | Description | Quote |
|--------------------|-------------|-------|
| **Surgical processes** | | |
| Referral volumes | Reduction in referral volumes due to decreased access to diagnostic testing, screening programmes and primary care clinics, and patients’ hesitancy to access care | ‘All the screening programs shut down. The colon cancer screening program, mammogram program, a lot of the outpatient clinics for family doctors and other specialists closed, and so the referrals went way down’ |
| Prioritization process | Processes to prioritize operative cases for available OR slates, which were reduced at most institutions | ‘There was a big step down in our ability to get people through the operating room other than the very urgent cases so a lot of the benign issues or even the non-urgent cancers had to wait’ |
| Operative cases | Descriptions of operative procedures that were being performed and their waiting times. Most participants perceived delays in cancer operations | ‘We talked about moving more towards a total neoadjuvant approach (for rectal cancer)...But in my practice, the way things worked out, patients that needed a surgery got a surgery. Some patients we operated at the upper (time) limit of what we usually do’ |
| Treatment alterations | Treatment plan alterations if operations needed to be delayed, including novel neoadjuvant approaches and extending duration of neoadjuvant therapy | ‘We weren’t getting our operative slates until the Friday before the next week so we’d tell patients that your surgery is probably going to be on this day but just be aware that it may not be and things may change. That was tough’ |
| Communication with leadership | Pandemic updates and protocol changes from leadership, usually via virtual meetings or e-mail | ‘I feel like there should have been or could have been more input from frontline practitioners but most of the decisions weren’t at our level. They were made at the higher level’ |
| Unpredictable schedules | OR schedules were unpredictable. Participants often received OR schedules with less than a week’s notice, causing uncertainty and stress | ‘We weren’t getting our operative slates until the Friday before the next week so we’d tell patients that your surgery is probably going to be on this day but just be aware that it may not be and things may change. That was tough’ |
| Surgical backlog | Concerns over a potential backlog of patients with cancer awaiting diagnosis and treatment | ‘That’s going to be the biggest impact, the second wave of patients that are eventually going to show up and are we going to be able to manage the volume? Because they’re definitely not coming in now’ |
| **Surgeon stress** | | |
| Stress related to role as surgeons | Professional stressors, including increased workloads, unpredictable OR scheduling, uncertainty whether surgical procedures would be approved, and providing timely care | ‘You have to discuss (with administration) every single case. It’s exhausting. Why do you need to operate? You had to give a rationale...you have to send in these excel sheets every week. It’s just a lot of administrative work that we’re not in the mood to do’ |
| Stress related to personal lives | Personal stressors including personal health, childcare, and finances | ‘It extraordinarily stressful. I was quite worried about my own health. I was worried about how I was going to pay the bills if things totally shut down. In the background, I have a school aged child, our kid was out of school...how we were going to manage all of that?’ |

OR, operating room.

impacts on non-pandemic-related care and plan for future waves/pandemics.

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**Supplementary material**

Supplementary material is available at BJS online.

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