



Pregnant Canadians and Public Health Communication During the Early Pandemic

Les personnes enceintes canadiennes et la communication en santé publique au début de la pandémie de COVID-19

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ABSTRACT

Background: Pregnant Canadians have particular information needs during a public health crisis. During the COVID-19 pandemic, participants relied on their primary care providers in the absence of clear public health messages that focused on the context of pregnancy and the needs of pregnant people.

Methods: A qualitative study in which pregnant Canadians wrote journal entries about their care experiences in response to prompts during the early COVID-19 pandemic.

Findings: Participants were cared for by a range of primary care provider types. Those seeing midwives had the most positive experiences with seeking information related to how the pandemic would affect their lives and pregnancies. However, it was also clear that the absence of provincial and federal messaging directed towards pregnant people created the potential for inconsistency and harms.

This article has been peer reviewed.

Contexte : Au Canada, les personnes enceintes ont besoin de renseignements bien particuliers durant une crise de santé publique. Pendant la pandémie de COVID-19, les personnes participantes se sont fiées à leurs fournisseurs de soins primaires en l'absence de messages de santé publique clairs axés sur la grossesse et les besoins des personnes enceintes.

Méthodes : Une étude qualitative a été réalisée au cours de laquelle des personnes enceintes canadiennes ont écrit dans leur journal leurs expériences de soins en réponse à des invites au début de la pandémie de COVID-19.

Constatations : Les personnes participantes ont été soignées par une diversité de types de fournisseurs de soins primaires. Celles qui ont consulté des sages-femmes ont connu les expériences les plus positives lorsqu'il s'agissait d'obtenir des renseignements sur l'incidence possible de la pandémie sur leur vie et leur grossesse. Cependant, il était également évident que l'absence de messages des gouvernements fédéral et provinciaux destinés aux personnes enceintes a constitué une source possible d'incohérence et de préjudices.

Cet article a été évalué par un comité de lecture.

INTRODUCTION

This article explores how Canadians who were pregnant during the COVID-19 pandemic sought and received public health information on pregnancy and COVID-19. Public health information directly targeting pregnant women was largely absent during the early months of the pandemic, partly because the epidemiology in regard to COVID-19 and pregnancy was still emerging. While some uncertainty was inevitable, the lack of messaging targeting pregnant women in public health campaigns resulted in participants in this study feeling frustrated, worried, and mentally distressed. It led to a reliance on non-public health sources of information, including family and friends, social media, and primary care providers.

In Canada's decentralized universal health care system, the provision of health care, including maternity care, is the responsibility of the provinces and territories; this may have limited federal public health communications as they pertained to pregnancy. While public health and primary health care are "distinct sectors" in the Canadian context, there are many calls for increased integration between the two.^{1,2} In a commentary on the role of primary care in a pandemic, Kearon and Risdon note that patients tend to trust their physicians and turn to them for advice.³ Thus, the relationship between public health and primary care providers is important, but the authors state that the physician's role is to "emphasize" and "reinforce" existing messages, such as in regard to the need for isolation if a patient tests positive

for infection.³ This role depends on the primary care provider's having access to clear public health advice. However, rather than reiterating existing public health messages, care providers in the early pandemic had to communicate their advice on the basis of public health messages that did not address pregnancy and on the basis of their own interpretations of media and scholarly publications. Drawing on journal entries written by pregnant people across Canada over 10 weeks in April to July, 2020, I recount participants' experiences of information seeking and communication with their primary health care provider, focusing on communications pertaining to managing pregnancy during a pandemic [rather than routine conversations on patient care]. Topics included whether to limit contacts beyond provincial guidelines; whether to leave work earlier than planned, to avoid potential exposure; and how to balance the need for support during the birth and care of a newborn with public health restrictions and concern over viral transmission. Whereas some participants were satisfied with the communication efforts [midwifery patients particularly so], the inconsistencies inherent in the approach indicate a need for better targeted health communications from public health sources. Primary care practitioners can be expected to be one source of public health information; however, their role must be complemented by a larger public health strategy that includes the targeting of demographics such as pregnant people.

METHODOLOGY

By way of social media posts to pregnancy-related groups in each province and territory, I invited pregnant Canadians to participate in a study of their experiences of seeking maternity care during the pandemic. Participants completed a demographic survey, then wrote journal entries in response to prompts shared between April and July 2020. The prompts asked about experiences of care, changes to care, and sources of information.

I read each journal entry at the close of the study. I began by reading all entries by each participant to understand full narratives over time, then I read all participants' answers to each prompt in order to begin to identify shared experiences. I identified

and grouped themes. This article focuses on themes related to experiences with communication and information.

Fifty-six people completed the survey, 24 of whom went on to complete at least four responses, the threshold for inclusion in data analysis. Six participants lived in Nova Scotia; four in Ontario; three each in British Columbia and Manitoba; two each in New Brunswick and Prince Edward Island; and one each in Alberta, Newfoundland, Saskatchewan, and Yukon. Twenty-two participants self-identified as white, one as white and First Nations, and one as Hispanic and Métis. The percentage of Indigenous people in the study was 8%. [In Canada, 4.9% of people are Indigenous, and Latinx people make up 1.3% of the population.]⁴ One limitation of the study was the lack of representation of other ethnic groups, such as people of African, East Asian, and South Asian descent. Because Indigenous and other racialized people have different experiences and outcomes of care, an important consideration is racial and ethnic diversity in research on maternal health.^{5,6} Participants ranged from 21 to 40 years of age; the average age was 32 years. Twenty participants self-identified as straight, three as bisexual, and one as queer pansexual [referring to romantic or sexual attraction decoupled from gender]. Two participants were single; the others were in relationships. Thirteen participants had one or more children, ten were expecting their first child, and one was a second-time surrogate. I received ethics approval from Acadia University's Research Ethics Board. Pseudonyms selected by the participants are used.

DISCUSSION AND FINDINGS

Participants sought information about how COVID-19 might affect their lives and their pregnancies in the event of an infection. They also wanted to know how they should manage risk—for example, whether they should begin maternity leave early or restrict their contacts more than the general public was doing. They wondered how restrictions might affect their care in the prenatal, childbirth, and postpartum periods.

Participants were concerned over the lack of information targeting pregnant women and had to work to seek information. Many relied largely

on primary health providers for public health information.

The Paucity of Public Health Information Targeting Pregnant People

The lack of public health information addressing the concerns of pregnant people, amid a barrage of public health messaging on COVID-19 targeted to the general population, was a source of frustration and stress for participants. The absence of widely available communication guided their information seeking.

Anna, a participant in Newfoundland in her late thirties, felt that pregnant people were overlooked in public health advice. She wrote,

I definitely don't think that my questions, as someone who is pregnant, have been addressed....There has been very minimal public health messaging pertaining to pregnant women, and basically none that was not in response to a member of the public asking for it. I feel like we're a completely lost demographic in this.

Echoing Anna's perspective, Alice, in New Brunswick, described health messaging as "very broad for the entire public" and "not clear or accessible," adding, "I felt like my health authority really wasn't good with communicating changes for expecting parents."

The lack of information was perhaps particularly difficult for participants who were health workers or who otherwise risked exposure at work. Ava was a pregnant health care worker in her late twenties living on Prince Edward Island [PEI]. She shared the following:

I find the Canadian government, and especially [the] PEI government, has bypassed many concerns regarding pregnancy and not offered many...supports to frontline workers who are pregnant. My concerns went unheard...due to lack of evidence or information regarding pregnancy and COVID-19. I was incredibly upset due to this and still am battling high stress because of it. I find any questions just get pushed to "we don't have any information"... and then are left.

The stress Ava described was common among participants when writing about information seeking. Ava felt that in the absence of clear epidemiology in relation to pregnancy, government at all levels could nevertheless have communicated care and interest, and later wrote, "The government, federal and provincial, has not supported pregnant mom/new moms during this pandemic. They have not accounted for the higher stress, nor have they offered support financially or even addressed that it is a very difficult time for us. For this, I am deeply disappointed in our government."

In New Brunswick, Alice's reaction to public health communications she characterized as weak was to do her own research. She said, "I was really annoyed with how much I had to search information out."

In a post on *First Policy Response*, Heidi Tworek and Ian Beacock write, "Perhaps the most crucial principle for Canadian officials to keep in mind is that the public is not monolithic."⁷ The authors discuss reaching Canadians in their own languages and on multiple platforms, but pregnant Canadians also constitute a group with distinct information needs. During a public health crisis, pregnant people will have particular needs and questions that should be addressed.

Primary Care Providers as a Source of COVID-19-Related Information

In Canada, primary care during pregnancy is publicly funded and can be provided by obstetricians (OBs), other physicians, midwives, or a combination of providers. Among this study's participants, 11 received primary care from an obstetrician, 6 from a family doctor, 7 from a midwife, and one from an interdisciplinary team. As patients began to rely on their providers for information about the pandemic, they had a range of experiences with communication. Leaving aside communications about the individual pregnancy and focusing on communications related to the pandemic, some participants were entirely satisfied, many were frustrated, and a few had dramatically negative experiences with communications from their health care provider.

The following statements from participants about communications with their care providers are

organized by the type of provider. While this study was not a quantitative or comparative study, it revealed a pattern in which participants had mixed experiences of communication by obstetricians, were well-satisfied with communications by other physicians, and were very satisfied with communication with midwives. While the midwifery community can celebrate their members' success in meeting clients' information needs under trying circumstances, the reliance of participants on their primary care providers for information during the pandemic indicates a gap in public health communications from the federal and provincial governments and raises questions about who is responsible for public health messaging to pregnant people.

Communications with Obstetricians

Eleven participants were cared for by obstetricians. Ann, a mother in her late twenties, described reassuring communications about COVID-19 risks and related protocols. "Seeing my OB eased my mind, as she was able to provide me with a more in-depth explanation of the risks." By the end of the study, Ann had retained this positive view, describing her obstetrician as "supportive" and "always willing to discuss protocols that had changed and made sure that I had all of my questions answered."

Margaret, a first-time mother in her mid-thirties living in Yukon, valued the compassion and communication from her obstetrician and wrote the following:

My maternal health doctor's office has been clear about protocols about appointments... and that doctor has been calming and reassuring throughout the process. She made a special exception so that my partner could attend the appointment when we could hear the baby's heartbeat for the first time. I really appreciated the fact that they understood how important it would be.

This approach to communication values the psychosocial, as well as biomedical, needs of pregnant patients and their families.

Other participants were less positive about communication with their obstetricians. In Nova

Scotia, Gwen, who was in her late twenties and expecting her first child, had a complex and somewhat negative experience with maternity care providers; she began her care with an obstetrician but switched to midwifery care. She mentioned one aspect of her frustration about communication.

Since COVID-19 started, there have been weeks at a time where my OB's office is closed....They do not have a voicemail...so there is no way to get in touch with them. This was very stressful.

At the end of the study, she reported that the lack of communication was unacceptable and had led to clinical anxiety, writing the following:

While I understand my OB's clinic hours were reduced because of COVID, I found this poor communication unacceptable. I ended up having to take sick leave from my work because of anxiety. And I feel the poor/reduced communication of my OB's office with me due to COVID had a lot to do with this.

Gwen was eventually able to switch to a midwife in another health zone about an hour away from her home.

Like Gwen, Lilith, expecting her first child in Ontario, experienced stress related to a lack of communication. She wrote that she had not heard anything from her OB about a change in care plans and later added the following:

[What] I find difficult to navigate is the lack of communication from the hospital about what their rules are; what has changed and what hasn't so that I can be prepared. [As a first-time mom, I feel very unprepared.] I wish they could update that section of the website or provide information to OB offices.

Here, Lilith specifically calls for accessible information about public health and emphasizes that she was seeking information both face-to-face and online. Additional stress among people who are pregnant during a crisis can be consequential;⁸ therefore, additional stress from poor communication should be of concern.

One case of receiving inaccurate information from an obstetrician was recounted by Brin, a

participant in Alberta, who was advised that her family needed to self-isolate for three weeks before delivery, despite no public health protocols having advised such a practice. Brin initially wrote the following:

My OB has told me that three weeks prior to my due date, myself and my immediate family need to self-isolate completely to ensure that no one has COVID-19, and we are able to have a healthy and safe delivery with my husband. This is helpful because it's a clear guideline. It's not necessarily easy, but it's clear, which I appreciate.

However, in her final entry, Brin wrote that she was still receiving the same guideline and was increasingly worried about the costs, logistics, and stress of isolation.

I'm nervous about doing a full self-isolation at 36 weeks and having both of our young children at home while I try to finish out my last three weeks of work. I feel like this will really make the last portion of the pregnancy extra stressful, and I'm just not sure if I'll be able to work as long as I'd like to.

A troubling aspect of Brin's experience is that neither Canada nor Alberta were requiring self-isolation in preparation for childbirth (and in any case, three weeks was beyond the usual self-isolation period). There was no rationale offered for this protocol. It appears that the obstetrician's advice to self-isolate was idiosyncratic and a personal preference. However, Brin understood it to be a rule that complying with would require her to change her life, leading to stress, potential loss of income, and other negative outcomes. Absence of public health guidelines can lead to a situation in which this is possible.

Participants' Communications with Family Doctors

Six participants received their primary care during pregnancy from a family doctor. Anna was happy with the communications she received from her physician (although she would have preferred a midwife-attended home birth, not available in Newfoundland at the time of her pregnancy). She

wrote,

My physician has been very helpful with communication. She is available by phone and has been very open about the policies in place. She has been honest about the ones that surprised the medical community, which is very reassuring and makes me feel supported as she is not just "towing the line."

As well as helping with access, phone meetings meant her partner could also attend, which Anna appreciated. Her experience of her doctor's honesty about the medical community's mixed response to guidelines echoes a call for public health to talk to people about the existence of scientific uncertainty when necessary.^{9,10} In a discussion of the "shortcomings of modern epidemiology," Dimitris et al. point to the importance of identifying how to best "acknowledge and effectively communicate uncertainty during a pandemic," citing the public's need for guidance at all stages of a pandemic (including its early stages) and the benefit of having this information come from publicly trusted sources. Communicating guidance based on the best current evidence, while also acknowledging uncertainties related to the guidance, helps with trust in public health messaging.^{9,10}

Acknowledging uncertainty about the risks of COVID-19 during pregnancy did not mean that providers could not offer clear advice. Lynne, a parent in her early thirties, found that limiting her exposure by working at home on the advice of a family doctor helped alleviate stress, given the questions regarding risk.

We discussed that currently there is not a lot of information available to determine the impact that contracting COVID-19 would have on a pregnancy. Given such, as I did not want to chance it, my doctor had put me on strict restrictions to only work from home during this pandemic. This has allowed me to lessen the risk of possible exposure. This lowered my stress and allowed me to remain positive during this time.

Since parental benefits in Canada are linked to employment, a doctor's order to work from home can support future earnings and financial stability.

Overall, participants relying on family physicians for care during pregnancy felt positive about communication. This was underlined by Alice, who wrote,

I almost felt bad with how much I was relying on my family doctor to give me general information about pregnancy during this. She had to answer a lot more questions, and I felt like I was burdening her, but I didn't know where I could trust information coming from.

Alice's journal entry points to an important tension. While it was positive to be able to rely on her primary care provider, the absence of a public health message on the concerns of pregnant women was a problem, particularly as misinformation began to circulate.

Participants' Communications with Midwives

Eight participants were cared for by a midwife or a midwifery group. As were other health care practitioner groups, midwives were called on to meet changing demands during the pandemic. Throughout Canada there was an increased demand for home birth during the pandemic state of emergency, likely out of a desire to avoid hospital settings and despite attempts in some provinces to ban home birth.¹¹⁻¹⁴

Among participants, midwives' clients felt overwhelmingly positive about their communication, valuing the frequency of contact as well as the use of multiple platforms for communication. When journaling about provider types other than midwives or interdisciplinary teams that included midwives, participants did not mention means of communication such as Facebook posts and groups or newsletters. While these helpful communications must be viewed as positive from the perspective of clients' experiences and outcomes, it is nevertheless important to consider whether individual primary care providers are the best means of communicating public health information to a demographic such as pregnant persons.

Harper, living in British Columbia and in her late thirties, received information from her midwife via emails and on Facebook. She wrote about a reassuring message from her midwife: "My midwife told me that, anecdotally, she has noticed that

moms are doing much better postpartum with breastfeeding, which she attributes to fewer visitors, and a quieter postpartum life. I think there are benefits to this way of living." Not everything about public health measures during the pandemic was negative, and the observation of Harper's midwife was borne out by participants in this study who were positive when comparing the quieter postpartum period with their 2020 babies to previous postpartum periods.

Like Harper, Maria, in her early thirties in Ontario, found social media to be helpful for getting communications from her midwife. She wrote, "My midwife set up a 'pregnant during the pandemic' Facebook Live, where they shared how things were progressing for pregnant women." This connected her with other pregnant clients as well as with information. She relied on her midwife's advice about work decisions, stating, "I am not sure whether I will continue to work until full term, as I am really worried [about potential transmission]. I will be discussing this with my midwife on Monday." Similarly, Larah, a woman in her early thirties with two children, felt positive about communications with her midwifery team despite the longer gaps between appointments, as her midwife was able to advise her about risks.

Gwen, whose negative experiences with communications from her OB's office was discussed earlier in this article, was relieved to have better access to her midwife to guide her choices during pregnancy. She wrote the following:

My midwife was very easily accessible to me via phone or email. I wish I had made the switch from OB to midwife much earlier, as the experience was much better. Particularly, communication and allowing me to make informed choices was much better. The care I am receiving from my midwife empowers me, versus the care from my OB, which was anxiety provoking due to poor communication and lack of information.

Gwen's contrast between the "empowering" care offered by midwives and the "anxiety-provoking" care offered by OBs hinged, to a great degree, on communication and access. The midwifery model of care includes more frequent appointments than

would be typical with an obstetrician, prioritizes discussion, and recognizes the importance of how care is experienced. These aspects of midwifery's practice model, which pre-exist the pandemic, likely contributed to midwives' ability to provide meaningful information during the pandemic.

Another client who switched to midwifery care midpregnancy was Catrina, a first-time mother-to-be in her mid-twenties living in Nova Scotia. After a promising start to care, she became frustrated with the lack of communication and with how difficult it was to reach care providers at the hospital perinatal unit to which she had been shifted after her family doctor became too involved in hospital-based care to be available. She was having a hard time reaching anyone, and wrote the following:

All I am asking for, two-and-a-half weeks later, is a call back. In place of this small bit of validation, I have spoken to a number of receptionists who assured me my file "has been pulled and a nurse will contact you before the end of the day." What a lovely day that will be. In the meantime, I will continue to leave notes of desperation with the midwives in hopes that a space opens up for me.

Poor communication left her feeling "desperate" for a midwife, not only because of the different care model but also because of her need for better communication. Although she received an apology for the lack of contact, she nevertheless changed provider type.

Danielle was being followed by an interdisciplinary team including midwives; she welcomed their creative information sharing. She wrote,

[They] have a weekly newsletter and have gone so far as to link all/any studies done and articles that could be relevant....It's been helpful that their communications have been consistent and that they've repeated messages, because I'm pretty busy juggling work and my two other young kids at home and don't have a ton of time to read personal emails.

With midwifery teams [as opposed to obstetricians or family doctors], the dissemination of information went beyond individual provider-

patient conversations. Danielle's experience demonstrates that midwives were likely getting their understanding of how to communicate from reading academic and media publications rather than from public health communications.

In Nova Scotia, Eleanor was unsure of the regulations regarding home birth; home birth was briefly banned and then reinstated in the province in 2020.^{11,14} She wrote,

There is a possibility of getting my care transferred from midwife to OB due to blood pressure, and it's reassuring, now, to know that my midwife will be able to be present regardless. I was entertaining...having a home birth, but then it was banned. I think they lifted this, but given my history of some medical complications,...I have settled on having a hospital birth.

Because a midwife is considered part of the health team even if transfer to an OB is required due to risk, Eleanor was able to plan on the support she needed.

In Manitoba, Wendy was grateful to be planning for a home birth. Despite delays, Wendy was happy with the communications with her midwives. She wrote, "The midwifery clinic has been clear, mostly prompt [they're swamped—some delay is to be expected], and extremely sensitive/compassionate. I'm totally satisfied." Wendy's insights into the role of midwifery are supported by the increased demand for midwives during the pandemic, as well as by the reassurance midwifery clients felt with communication despite greater spaces between appointments and new appointment modalities such as phone or video calls.

Whether [and how many] support people would be permitted at a birth was a question for most participants. This differed according to provincial jurisdiction and was something participants sought information about and wrote about at length. Although their discussion of support people is beyond the scope of this article, their entries included many references to fears, what-ifs, and uncertainties, indicating that the regulation of support people at delivery was another topic on which clear public health guidance was necessary.

Experiences were most positive among those

seeing midwives. Their midwives tended to have additional communications in place via social media or email and saw their clients frequently. Participants who were seeing obstetricians had a mix of positive, negative, and—in one case—harmful experiences of communication. While the study described was not comparative, the differences that emerged in journal entries between experiences with various provider types are significant. These differences echo those found in other studies of interprofessional difference. The emphasis of midwives in Canada on relationships and connection has likely furthered their ability to have communication with their clients in need of it, even in a crisis. For example, the Canadian Association of Midwives' website explains that midwifery care includes "informed choice," facilitated in part through allowing time for "meaningful discussion" and that midwives practice partnership with clients and "provide support in a non-authoritarian way" that respects their needs and experiences.¹⁵ The values and framework of midwifery allows for appointments to discuss evidence and values regarding care in ways that may have facilitated the discussion of COVID-19-related public health measures. Demonstrating the importance of such spaces, a study in the United States focused on the communication and social support experiences of people who were pregnant during the COVID-19 pandemic. It found that "a lack of informational, emotional, and/or instrumental support from medical professionals also emerged as contributing to women's sense-making about their pandemic pregnancy" and concluded that "the attitudes and behaviors of medical professionals are essential for creating a supportive environment for patients during these unprecedented and stressful circumstances, and how salient it is when medical professionals do not, or cannot, contribute to this support."¹⁶ Communicating is part of supportive care, and midwives rose to the occasion. Less clear was whether and how public health messages supported primary care providers' communication about COVID-19 risks and protocols for pregnant Canadians.

CONCLUSION

In the perceived absence of public health messages directly targeting pregnant persons,

participants turned to their care teams for advice about how the pandemic might affect their pregnancy and what steps they should take to mitigate risk. For some, communications were at times insufficient, leading to stress. For others, compassionate and clear communication on various platforms was reassuring. Participants were seen by a range of provider types, making comparison possible and highlighting the achievements of midwives in offering clear and reassuring information under difficult circumstances. However, another question is whether primary maternity care providers should be the main source of public health information for patients during a public health crisis. As well as adding to the already burdened workload of health care providers during a crisis, such a strategy can lead to risks for patients, who have to trust that their providers are offering up-to-date, current, and unbiased information. Without better public health messaging there was little opportunity to corroborate advice. As one participant pointed out, even with the epidemiology still emerging, messages demonstrating care for and inclusion of pregnant people would have been welcomed. On principle, good public health messaging should discuss "facts that remain uncertain."¹⁷ Acknowledging uncertainty can signal transparency, as some participants found and as public health scholars have acknowledged. For example, Ferrazzoli and Maga argue that "scientists and institutions need to avoid presenting all statements as if they were certainties."¹⁰ Even as significant research on the effects of COVID-19 on pregnant people and neonates has been published since 2020, rapid changes continue to characterize the health care and public health, such that communications will need to continue to account for uncertainty.

Identifying how decisions on public health communications were made was beyond the scope of my study; however, the provincial jurisdiction over health and the lack of funding for public health messaging played some role. As well, a lack of capacity in public health may have contributed. Addressing the lack of funding, an analysis of Canadian communications during the pandemic indicated that "public health communications are barely a rounding error. They need to become a serious line item."¹⁷ From the experiences of

Canadians who were pregnant during the early pandemic, we can learn about pregnant clients' need for information; clarity, repetition, multiple platforms and modalities, and honest reassurance were valued. While this can help primary maternity care providers serve their patients, it will also help create targeted public health messaging at the federal and provincial levels.

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