

Experiences of labour and childbirth among physicians in Canada: a qualitative study

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Abstract

Background: Little is known about physicians' birth experiences and the perceived relation between physicians' professional status and their birth outcomes, particularly in nonsurgical specialties. This study aimed to explore the birth experiences of physicians in Canada and to determine their perception of the relation between their profession, and their birth experiences and obstetric outcomes.

Methods: We undertook a qualitative descriptive study consisting of in-depth interviews with practising physician birthing parents, all members of the Canadian Physician Mothers Group (online Facebook community) who had deliveries between 2016 and 2021. Data were analyzed using conventional content analysis.

Results: Fourteen interviews were conducted. Half of the participants worked in primary care specialties. From participants' narratives, we developed 5 themes pertaining to physicians' birth experiences: (negative impact of) professional culture of medicine whereby professional responsibility trumped personal needs; (mixed) impact of medical knowledge whereby participants felt empowered to make decisions and ask questions, but also experienced augmented stress due to knowing what could go wrong; difficulty stepping out of physician role; privileged access to care; and belief in negative impact of physician role on birth outcome. Some participants suggested possible reasons that physicians may have worse birth outcomes than the general public.

Interpretation: The professional culture of medicine was largely perceived as a negative, in particular, the pressure to deny one's own needs for the good of patients and colleagues. Physicians' increased access to medical care combined with their higher levels of anticipatory anxiety around childbirth could be exposing them to increased monitoring and surveillance, thus augmenting the likelihood of medical and surgical interventions.

There is growing interest in physicians' reproductive patterns,¹⁻⁴ and it has long been speculated that physicians may have both different reproductive patterns and different birth outcomes compared with childbearing people in the general population.⁵⁻¹¹ For example, there is a persistent perception in the medical community in the literature, and which we have seen in our own clinical milieu, that health professionals are more likely to experience birth complications as compared with the general public — a perception known as “personnel-itis.”⁵ A modest body of older research⁵⁻¹¹ on the relation between health professional status and birth outcome has recently been updated by the large Dr. Mom Cohort Study¹⁻⁴ in Ontario, which looked at the reproductive outcomes, reproductive patterns, career earnings and leave-taking practices of physician mothers. This study has found that, on average, physicians have children later than women in the general population. In keeping with older research, with respect to birth outcomes, the Dr. Mom Study findings are mixed and generally inconclusive; they found that physician mothers may have a slightly higher likelihood of birth complications relative to the general population, which they attribute to advanced maternal age.

Large-scale quantitative analyses like those undertaken for the Dr. Mom Study are crucial for understanding the landscape of physician childbearing in Canada in broad strokes. The Dr. Mom Study uses retrospective administrative cohort databases and quantitative methodology that may not be able to explore the role of birthing parents' beliefs, expectations or perceptions in relation to birth outcomes. The experiences that underscore physicians' childbearing remain largely unexplored.

Only one study,¹² from Australia, explores physicians' birth experiences. This study found that having experienced childbirth greatly increased clinicians' interest in perinatal care and their empathy for pregnant patients. Complementing existing cohort studies with qualitative investigations of physicians' experiences

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could allow health systems and medical educators to provide better care to physicians and to the public. To address these knowledge gaps, we explored the experience of physicians as patients, and their perceptions of the relation between their professional status, their birth experiences and their birth outcomes.

Methods

The project, from conceptualization through analysis and write-up, brings together the expertise of 2 practising family physicians who regularly follow patients through pregnancy, birth and postpartum, and who have had experience following physician patients (F.H.-E. and P.F.), a medical student (J.M.) and a medical anthropologist and Canada Research Chair in the Medical Anthropology of Primary Care (K.R.). Our team includes members who have personal and professional experiences of complications in labour and birth. Building on a long-standing interest in “personnel-itis” and curiosity about the experiences of physicians as patients during pregnancy and childbirth, we undertook a qualitative descriptive study of clinicians’ birth experiences and the connections that they draw between their professional status and knowledge on the one hand, and their birth experience on the other. Although we did not approach the project from a predetermined theoretical standpoint, from the outset, our project was informed by research and theory on doctors as patients which positions clinician patients as struggling to navigate competing — and at times conflicting — discourses (e.g., of patienthood, of professional competency and professionalism).^{13–15} Occupying this dual role has, in previous research, been found to cause problems such as anxiety, shame and delayed treatment-seeking.^{14,15}

Data collection

Methods of data collection were a retrospective study using a Web-based survey questionnaire that was developed by our team and in-depth qualitative interviews. These 2 components of the study were developed concurrently. Analysis of the survey (approximately 500 respondents) is ongoing and will be reported elsewhere. We report here on the interview component, which was guided by a qualitative descriptive methodology.^{16,17} This research approach aims to elicit rich descriptive insights of subjective experience in participants’ own language and is useful for research areas where much is unknown but where recommendations for policy and practice are needed, as findings are usually clear and straightforward.

Recruitment

Participants were recruited via purposive sampling¹⁸ between June 1 and Aug. 31, 2021. An invitation and link to our survey was posted on the Facebook page of the Canadian Physician Mothers Group, a private community of more than 8000 members that is open to physician mothers based in Canada. The short survey probed delivery outcomes and participants’ perceptions of the role of their profession in these outcomes. Participation was open to any practising physician in Canada provided they had given birth (vaginally or via cesarian) between June 2016 and August 2021. These temporal parameters were chosen

to ensure that findings would be relevant to contemporary clinical practice; knowing that perinatal care practices have changed over time, we felt that older birth experiences might not be as suitable to inform policy and practice recommendations going forward. Following survey completion, an optional seventh question asked respondents if they wished to share additional details about their birth(s) and/or to elaborate further on their answers through a confidential qualitative interview. If interested, participants were invited to contact the research team via email.

Interviews and setting

Interviews were conducted via telephone by K.R., F.H.-E. or P.F., audio recorded by J.M., transcribed verbatim by a transcription agency that specializes in confidential health-related qualitative transcription, and anonymized at the point of transcription. Transcripts were read by K.R. and checked alongside audio recordings to confirm accuracy. They followed a semistructured guide that was developed collaboratively by our team. The guide (Appendix 1, available at www.cmajopen.ca/content/11/6/E1059/suppl/DC1) consisted of questions aimed at eliciting narratives of pregnancy and birth experiences, scope of professional practice, and reflections on the impact of physician status on birth experience and outcome. The guide was not pilot tested. Participants received no financial compensation. Member checking was not done.

Confidentiality

A consent form, approved by our institutional review board, was emailed to participants before interviews, and participants were asked to send a signed copy back. Before interviews, the interviewers went through the consent documents again with the participants.

No identifying information was collected from participants. All hard copies are stored in a locked filing cabinet at McGill University’s Department of Family Medicine, and in electronic form in an encrypted password-protected and secured computer program. NVivo 12 qualitative data management software was used for data management. Data will be stored for 7 years after the completion of the study, after which it will be destroyed.

Data analysis

Interview data were analyzed using conventional content analysis.¹⁹ This approach, which entails the subjective coding of data, is ideal for an exploratory study on a topic about which much is unknown, as it is flexible, and allows a balance between a focus on the research questions and unanticipated topics that might arise in interviews. Whereas this kind of content analysis is iterative, involving back and forth between the data and our interpretations of it, our approach is described in a stepwise manner for ease of explanation. Firstly, interview transcripts were read by all members of the team, who then met to discuss initial impressions and topics that featured repeatedly across interviews. Over several meetings, we then grouped together statements with similar meaning (e.g., “I was more nervous because I know what can go wrong”) to develop codes (e.g., “negative impacts of medical knowledge”). Through a process of discussion and consensus building, codes were then grouped into

themes that reflect broad concepts or topics that featured across many interviews (e.g., “[increased] medical knowledge”). K.R. then organized and coded data using NVivo 12 software, with regular meetings during which the team discussed our developing understanding of the study findings.

Ethics approval

The research study was approved by the McGill Faculty of Medicine Institutional Review Board. K.R. is a member of the board and excused herself during discussion of this study.

Results

Twenty-six women from across Canada expressed interest in being interviewed, 12 of whom did not respond to 2 follow-up recruitment emails. Fourteen interviews were conducted, and more than half of participants were from nonsurgical specialties (Table 1). Interviews lasted between 20 and 60 minutes, depending on how much information the interviewee chose to share. All participants answered all our interview questions, all felt their experiences of pregnancy and childbirth were shaped by their professional status, and all had opinions on the relation between physician status and birth outcome. Given the open-ended nature of the topic of birth experience, it would be impossible to reach a point where no new information could be generated through further interviews. However, we reached a point where commonalities across interviews were such that we felt confident developing the following 5 themes: professional culture of medicine, impact of increased medical knowledge, difficulty stepping out of physician role, privileged access to care, and belief in negative impact of physician role on birth outcome (Table 2).

Theme 1: Professional culture of medicine

Participants felt that their experiences of pregnancy and childbirth were shaped by the professional culture of medicine. This entailed a sense of professional responsibility that trumped personal needs, even where mental and physical health were at stake. It also included a disinclination to ask for help or show vulnerability and impetus to avoid increasing colleagues' workloads. For example,

I worry when I see women physicians who are afraid of saying that they're pregnant because they're worried about ... the impact on their workplace or, their colleagues knowing. They go through difficult times or hesitate to access care early and that to me is something that we need to work on as a group of physicians, as a society. (Interview 5)

Some felt guilty for taking attention away from other patients, and for the burden that their births and maternity leaves would place on their colleagues:

Guilt is worked into society as a whole and conditioning from birth, especially for women, to put others' needs first, and obviously in a caring profession like medicine, that's reinforced. And just the culture in medical training, you can't take a day off if you're sick, and you can't miss this, that, or the next because then your partner or whoever you're leaving behind is going to be screwed over. I know some programs and stuff are getting better, but I think it's a very deep problem. (Interview 2)

Participants speculated that the long hours, workaholic culture and heavy demands of clinical work had a negative impact on clinicians' pregnancies.

Table 1: Participant demographic information

Participant no.	Specialty	Gender	Year of childbirth(s)	Province of residence	No. of childbirths
1	Family medicine (public health specialization)	Woman	2020	Ontario	1
2	Obstetrics and gynecology	Woman	2021	Ontario	1
3	Family medicine (emergency medicine specialization)	Woman	2021	Ontario	1
4	Family medicine	Woman	2021 and 2015	Quebec	2
5	Cardiology	Woman	2015, 2011, 2008	Quebec	3
6	Family medicine	Woman	2020	Ontario	1
7	Family medicine (chronic pain specialization)	Woman	2021, 2018, 2016	Ontario	3
8	Family medicine	Woman	2020, 2017	Nova Scotia	2
9	Emergency medicine	Woman	2019, 2017	Ontario	2
10	Family medicine	Woman	2015	Quebec	1
11	Neonatologist	Woman	2021, 2016	Ontario	2
12	Child psychiatry	Woman	2021	Ontario	1
13	Obstetrics and gynecology	Woman	Not reported	New Brunswick	1
14	Pediatric endocrinology	Woman	2018, 2014	Newfoundland and Labrador	2

Table 2: Supplementary quotations

Theme	Quotation
Professional culture of medicine	<p>“I ended up going into my own hospital and my office partner was the one that was on call. We have a community baby practice and I knew there was a full antenatal clinic lined up across the street, and I wasn’t going to be there [seeing patients, because I was in labour], and she wasn’t going to be there because she was seeing me, so there was a lot of weird guilt into that. I’m like, ‘No, if I can just go over there, get some pain meds, I can walk across the street and see all the patients.’ But once [my colleague] got there, she’s like, ‘No, you’re crazy! You’re not doing that.’” (Interview 2)</p> <p>“I think all of my [physician] friends had complications from birth. One thing or another. It’s always a premature baby, a hemorrhage. Everybody has something. I don’t know, it’s the stress of the job.” (Interview 4)</p>
Impact of increased medical knowledge	<p>“I think probably because I ask ... a lot of questions that I probably would not have asked if I did not have the background that I have.” (Interview 5)</p> <p>“I would say ‘definitely more nervous’ [I was] because more about being aware of different complications that could go on.” (Interview 8)</p> <p>“I think I would have been more happily ignorant about those types of complications [that I had] if I wasn’t a physician or maybe not even that, a neonatologist specifically ... I think that specifically being a neonatologist, I have a lot of worst-case scenario fears.” (Interview 11)</p> <p>“I, unfortunately, felt several times that I received substandard care, which no one should get, clinician or not, just lack of good care sometimes.” (Interview 10)</p>
Difficulty stepping out of physician role	<p>“Even in the throes of when I was on Mag [magnesium sulfate] in the delivery room, I have never felt worse in my whole life, like, emotionally, physically, mentally, like, literally at the lowest point ever and I was still having that [clinician] hat on. And whenever anyone came in, like a doctor, or nurses, whoever, I would pull myself together and try to talk at a professional level ... Yeah, I don’t know how you would let that other side go.” (Interview 2)</p> <p>“So, here I’m trying to navigate this complicated patient/physician relationship knowing that I’m the patient, and I’m trying to be a good patient knowing that physician patients aren’t always desirable for other physicians.” (Interview 10)</p> <p>“I’m thankful that no one was around [when I went into the hospital in active labour] because I know I would have seen people I know. I could have seen my friends and my colleagues! Oh, that would have been awful! I don’t want anyone seeing me like that. It’s not a very controlled situation. You think you can control how you respond to the contractions, but it’s very ... it’s a lot.” (Interview 1)</p>
Privileged access to care	<p>“I think it [being a physician] definitely does [impact on the care I receive], especially being in the small town. Everybody at the hospital knows me, all the doctors ... My husband is a family doctor, as well, and he works in our hospital, doing hospitalist, and he has a practice, (inaudible), so people know us, especially for that reason. I think we probably get some extra attention, or extra perks, sometimes. I know they let him come and go during my labour, even though there were COVID restrictions, which wouldn’t have otherwise been the case ... It’s definitely increased access to health services.” (Interview 3)</p> <p>“I did get an early anatomy ultrasound because of my concerns. I don’t believe I would have gotten that if I wasn’t a physician or a neonatologist. I also was offered ... an early fetal echo, which is a pretty niche imaging modality. I think if I didn’t have the background that I had, or the specific fears, or was able to present those fears with those confidence, I wouldn’t have been offered those tests, and I would have just had to wait ‘til 18 weeks like everybody else.” (Interview 11)</p> <p>“Because I knew how to advocate for what I needed. I was like, ‘Oh, I was getting reflux. I’ve tried (inaudible), so I need a prescription for PPI.’ So, I went to my doctor and said, ‘I think I need a PPI.’ And I knew that that was the next step, and I knew that I understood what was safe or not in pregnancy.” (Interview 1)</p>

Note: PPI = proton pump inhibitor.

Theme 2: Impact of increased medical knowledge

Participants' experiences were shaped by their high level of biomedical knowledge, but the effect of this on their pregnancy and birth experiences was complicated. On the one hand, their increased medical knowledge empowered them to make certain decisions and to ask questions of their perinatal care providers:

It has empowered me to ask more questions or to be more aggressive if I felt I need to be. I can't imagine someone without the type of experience that I have being able to navigate the system with such confidence. (Interview 11)

On the other hand, increased knowledge augmented stress for some participants. Armed with professional knowledge of what good care should look like, several participants felt unsatisfied with their care:

Not only was [my] being a clinician not taken into account, but unfortunately, several times I felt that I received substandard care, which no one should get, clinician or not. (Interview 10)

Others worried over what might go wrong, given their knowledge and understanding of potential worst-case scenarios:

Ignorance is bliss, and as a clinician you just don't have that, [especially] as an emergency doctor who always thinks of the worst case scenario. (Interview 9)

For several participants, their health care providers assumed a high level of knowledge and did not offer the level of counselling that they would have with other patients. One participant offered the following insight into this issue:

In my initial prenatal visit, the physician went through all the mental health questions, and at the end said, "It's weird to ask these questions to a psychiatrist." I said "No, you need to ask them." ... And I've seen things that happen where people assume things in terms of my knowledge base, and don't always explain them, or can be uncomfortable asking personal, potentially uncomfortable questions. (Interview 12)

Physicians described how they knew what patient-centred and respectful maternity care should be and how their own experiences fell short of their expectations.

I recall ... in triage, there is a curtain inside, but nobody pulled the curtain. Your legs/vagina are facing the hallway with the glass door in between, there wasn't actually privacy. (Interview 6)

Theme 3: Difficulty stepping out of physician role

Some participants explicitly commented that they struggled to step out of the physician role:

You're always trying to not be your own doctor, but it's hard when it's directly your field and you're like, "Well, what would I tell a patient to do in this situation?". (Interview 2)

This led some to feel self-conscious about their behaviour, fearing what other physicians and colleagues would think of them. For example, one participant second-guessed herself in

terms of when she should come into the hospital to give birth, out of concern for how she might be perceived by colleagues:

I didn't want to quote/unquote "embarrass myself" and come in thinking I was really dilated and ready to go and be like a fingertip or something like that. (Interview 13)

Theme 4: Privileged access to care

Most interviews showed that pregnant clinicians have privileged access to medical care. Due to their professional relationships and status within the health care system, pregnant physicians knew how to navigate the system and how to ask for the care they wanted, sometimes through avenues not available to the average patient:

[My professional status has] certainly increased accessed to health care services. My family doctor is a friend ... and I can text her with questions and things like that. She was the one who looked after my pregnancy. (Interview 3)

Others were able to mobilize their professional knowledge and networks to access preferred health care providers:

I asked who the nurses were that day and there were a lot of new nurses and one nurse that I really, really liked. She was labouring another patient and I just said, "Is it possible that she could be my nurse?" They said they would ask her, and she said yes. So, she came to be my nurse. (Interview 13)

In the case of a participant who had an abruptio placenta, this privileged access may have made a life-and-death difference:

[Being a physician] was a big advantage. Because when I got there [to emergency], the first thing I said was, "I'm a doctor, I'm 31 weeks, I'm bleeding." And they rushed me right away. And I'm not sure if I had been not as assertive, and they could not have trusted my evaluation of the situation, I'm not sure it would have gone that fast. ... I feel like if I had not been a doctor that day, and I had not taken the decision I had, I think that the outcome would have been quite different. [Because my baby's survival] was a question of seconds, actually. (Interview 4)

Theme 5: Belief in negative impact of physician role on birth outcome

Five participants felt strongly that physicians have worse birth outcomes relative to the public. For example:

I do [believe that physicians have worse outcomes]. I think there has to be some sort of biological mechanism, just like shift working and cancer predisposition, like there has to be some physiological thing. I think in the management of complications that come up sometimes, because of how people perceive and treat you, maybe there could be a delay or different decisions could be made. (Interview 2)

Only 1 participant felt that physicians do not have worse outcomes, and 8 participants were intrigued by the notion. Those who were undecided offered speculations like the following:

It wouldn't surprise me [if it's true] because I think there's a few reasons why we as a group would be more likely to have problems. I suspect physicians don't have much tolerance for risk. If my daughter's heart rate had started dropping, I would have been very, very nervous because I've seen what can happen ... I'd have to look at the data, but just offhand, any physician who chooses to have a pregnancy is likely older than average, which can increase complications. (Interview 4)

Participants offered the following speculations on why clinicians might have worse outcomes: advanced maternal age; working long, demanding hours, including night shifts; increased monitoring and intervention (possibly due to nervousness on the part of colleagues, who might fear being caught out for making errors); and low tolerance for risk.

Interpretation

Most of the themes we identified had both positive and negative implications for the birth experience of physician birthing parents. The professional culture of medicine was largely perceived as a negative, particularly the pressure to deny one's own needs for the good of patients and colleagues. Additionally, participants endorsed the belief that being physicians may have had the effect of making their deliveries more complicated or dangerous, and the professional culture of medicine was raised repeatedly as a potential explanatory factor.

Interviewees' high level of medical knowledge was a double-edged sword for them. They were able to understand and anticipate some complications. In one case, this knowledge may have been life-saving. However, some participants had fears of worst-case scenarios, sometimes due to remote medical school experiences and stories, and sometimes due to the exposure bias of belonging to specialties that are involved with complicated pregnancies and births. Physicians' increased access to medical care combined with their higher levels of anticipatory anxiety around childbirth could be exposing them to increased monitoring and surveillance, thus augmenting the likelihood of medical and surgical interventions.²⁰

An important aspect of this study is the "double vision" our participants were able to deploy, as both patients and members of health care teams. They experienced their births with a critical clinical eye. This allowed them to comment on their care and how it upheld or failed to fulfill their understanding of optimal patient-centred care. Some physicians experienced, first hand, care that was not patient-centred, evidence-based or compassionate. This suggests that perinatal care in general may not be optimal. Physicians' birth experiences may be a good source of data to inform better standards of perinatal care.

The expectation of physician self-sacrifice for the benefit of patients and colleagues has been much questioned recently by the younger generation of physicians.^{21,22} Our findings reveal that these expectations and the guilt that they engender are persistent and may affect the birth experience of physicians. Older studies have shown a difference in birth outcomes within the surgical specialties; however, recent studies (e.g., the Dr. Mom Cohort Study) question whether there is a difference between surgical and nonsurgical physician birth

outcomes.^{1-4,6,8,23-25} The belief among many physicians that being a physician may make births more complicated is longstanding and seemed to have been supported by the older literature. Our study shows that this belief persists among both surgical and nonsurgical physician birthing parents. Whereas quantitative research has found that age is a key factor in clinicians' marginally worse birth outcomes,^{2,3} high levels of anticipatory anxiety and heightened surveillance may be another potential factor in differences in birth outcome between physicians and others.

The assumption that physicians giving birth have increased medical knowledge and the reality of their privileged access to care may contribute as well as mitigate the birth outcomes. Participants' perception that their health care providers assumed that all physicians have high levels of knowledge about pregnancy and childbirth is concerning, as relevant knowledge may not be germane to many physicians' field of practice. Most will have received limited exposure to perinatal care during their training in undergraduate medicine. For those whose exposure was brief or was acquired long ago, their knowledge may work against them. Their knowledge may be coloured by recollection bias in favour of dramatic or traumatic births. We therefore suggest that clinicians should approach their physician patients as respected, capable individuals but should not assume specialized knowledge about childbirth. Providing such care could include probing for preconceived notions about pregnancy and childbirth obtained through medical training and offering more nuanced information when needed.

Consistency across interviews of this Canadian cohort confirms that the developed themes are representative of the data and are potentially transferable to other North American physician groups. Whereas research is needed to definitively determine whether and why physicians are indeed at higher risk of birth complications and poor outcomes than the general population, this study supports the perception among physicians that being a physician may negatively affect their birth experience and outcomes. Further quantitative and mixed-method research will need to confirm the reality of this perception. Future research could involve the creation of a physician's health database like the Nurses' Health Study, which could prospectively track the health of physicians throughout their training journey and beyond.

Limitations

This study addresses a gap in knowledge about physicians' birth experiences; however, the interviewees are a self-selected group drawn from an online community focused on physician motherhood. The survey respondents who contacted us for a follow-up interview were likely motivated to discuss their birth experiences and reflections on the relation between their professional status and outcomes, perhaps because of negative experiences that may not be representative. Also, although recruitment materials aimed to recruit people who had given birth (not exclusively those who identify with the "mother" label), participants were nevertheless recruited from a Facebook group called the Canadian Physician Mothers Group.

We know that there are nonbinary physician birth parents in this group, but none elected to participate in our study. Pilot testing the interview guide may have offered helpful insights for refining the guide. However, the semistructured nature of the guide allowed scope to modify interview questions throughout the data collection process.

Conclusion

This qualitative descriptive study of clinicians' birth experiences and the connections that they draw between their professional status and their birth experience provides several insights into the areas that should be addressed to provide excellent perinatal care for physicians and possibly the general public as well. The professional culture of medicine and the noted difficulty of stepping out of the physician role, even when the physician is a patient, both support the notion that there is something particular about being a physician that may affect the experience of birth. The profession of medicine needs to address the seemingly pervasive professional culture that often expects pregnant physicians to prioritize work responsibilities over personal safety and care. This study, which captures themes related to physicians' birth experience and the potential role of physician status, can inform medical education and perinatal care in general.

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Data sharing: In alignment with our protocol and to protect the confidentiality of participants, study data are not available to be shared with other researchers.

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