Canadian Physician Mothers' Experiences of Labor and Childbirth, Their Perceptions of the Relationship Between Physician Status and Birth Outcome

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Abstract

Background: There is a belief in the medical community that physicians are more likely to experience birth complications relative to women in the general population. Research affirming this belief is mixed. Little is known about physicians' birth experiences and the perceived relationship between physician status and birth outcomes, particularly in non-surgical specialties.

Objective: To explore the birth experiences of Canadian physicians, and to determine their perception of the relationship between their profession, and their birth experiences and obstetrical outcomes.

Study Design: Qualitative study of 14 in-depth interviews with practicing physician mothers, half of whom work in primary care specialties. Physicians are members of the Canadian Physician Mothers Group (online Facebook community) who gave birth within the last five years.

Results:. From participants' narratives we developed four themes pertaining to physicians' birth experiences: 1) [negative impact of] professional culture of medicine whereby professional responsibility trumped personal needs; 2) [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; 3) difficulty stepping out of physician role; 4) privileged access to care. Some participants suggested possible reasons that physicians may have worse birth outcomes than the general public.

Conclusion: A sample of Canadian physician mothers believe that their professional status shaped their birth experience and may negatively impact of physicians' birth outcomes. The "double vision" of physician mothers as both clinicians and patients can inform medical education and perinatal care of patients in general.

KEYWORDS: physician mothers; birth experiences; perceptions of birth outcomes, physician status

BACKGROUND

There is a belief in the medical community that physicians are more likely to experience birth complications relative to women in the general population – a phenomena labelled "personnelitis."[1] Some studies suggest that this perception is accurate,[2-13] and others find no difference between physicians and other birthing people [14-16.] This literature is limited in quantity, and in scope, as most existing research focuses specifically on surgical specialties.[2-7,] Little is known about the birth outcomes of physicians in non-surgical fields such as Family Medicine. Furthermore, most studies of physicians' birth outcomes are decades old[4, 6-13] offering limited contemporary insights given changes in the gendered makeup of medical practice[17,18] and the move towards patient-centered care.[19]

Furthermore, only one study,[16] from Australia, explores physician's birth experiences. This study found that having experienced childbirth greatly increased clinicians' interest in perinatal care and their empathy for pregnant patients. Practicing physicians' perceptions of the relationship between their professional status, their birth experience, and their birth outcomes thus remains unexplored. Capturing this information would allow health systems to provide better care to physicians and to public. To address these knowledge gaps, we explored the experience of physicians as patients, and their perceptions of the relationship between their professional status, their birth experiences, and their birth outcomes.

METHODS

Methods of data collection were 1) a retrospective study using a web-based questionnaire that was developed by our team; 2) in-depth qualitative interviews. Analysis of the survey (approximately 500 respondents) is ongoing and is reported elsewhere. We report here on the interview component, which was guided by a descriptive qualitative methodology.[20,21] 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 convenience sampling. An invitation and link to our survey was posted on the Facebook page of the Canadian Physician Mothers Group, a private community of over 8000 members that is only 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 practicing physician in Canada, provided they had given birth (vaginally or via cesarian) within the last five years. 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 so, they were invited to contact the research team via email.

Interview

Interviews (20-60 minutes) were conducted via telephone, were audio recorded, transcribed verbatim, and anonymized. They followed a semi-structured guide consisting

of questions which aimed to elicit narratives of pregnancy and birth experiences, scope of professional practice, and reflections on the impact of physician status on birth experience and outcome. Participants received no financial compensation.

Confidentiality

Prior to the interview participants were consented using a form that had been approved by the Institutional Review Board of [blinded] University.

No identifying information was collected from participants, and any mention of specific individuals or workplaces were anonymized. All hard copies are stored in a locked filing cabinet at [blinded] University's Department of Family Medicine, and in electronic form in an encrypted password-protected and secured computer program. Data will be stored for 7 years following the completion of the study, after which it will be destroyed.

Data Analysis

Interview data were analyzed using thematic analysis.[22] This approach is ideal for an exploratory study on a topic about which much is unknown, as it allows a balance between a focus on the research questions, and unanticipated topics that might arise in interviews. While thematic analysis is an iterative process that entails 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. In so doing, we brought together the expertise of two practicing family physicians who regularly follow patients through pregnancy, birth, and postpartum, a medical student, and

a PhD medical anthropologist whose research program focuses on childbirth and the professional culture of medicine. Over several meetings we then grouped together statements with high specificity (e.g., "I was more nervous because I know what can go wrong") to develop codes (e.g., "negative impacts of medical knowledge") which were then developed into themes that were common across many interviews (e.g., "[increased medical knowledge"). The themes discussed below were developed through this collaborative process.

RESULTS

Twenty-six women from across Canada expressed interest in being interviewed, twelve of whom were lost to follow-up. Fourteen interviews were conducted, more than half from non-surgical specialties (see Table 1). 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 relationship between physician status and birth outcome. From their narratives, we identified four themes that were consistent across nearly all interviews. These are: 1) professional culture of medicine; 2) impact of increased medical knowledge; 3) difficulty stepping out of physician role; 4) increased access to care (see also 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 feel always a bit worried when I see women physicians who are afraid of saying that they're pregnant because they're worried about their work or, 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, Cardiologist).

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, OB/GYN).

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

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:

I think that 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, Neonatologist).

On the other, 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, Family Doctor).

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

Ignorance is a bit of 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, Emergency Doctor)

For several participants, their healthcare 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 "I just feel its'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 (...) I saw a physician once who, out of professional courtesy, no one really screened for alcohol use. Who then, post-op, ended up with the most wicked alcohol-related delirium I've ever seen (Interview 12, Clinical Psychiatrist).

Theme 3: Difficulty Stepping out of Physician Role

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

Y*ou'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, OB/GYN)*

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, OB/GYN).

Theme 4: Privileged access to care:

Most interviews showed that physician mothers 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 healthcare services. My family doctor is a friend, and she lives a few doors down from me, and I can text her with questions and things like that. She was the one who looked after my pregnancy (Interview 3, Family Doctor).

Others were able to mobilize their professional knowledge and networks to access preferred healthcare 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, OB/GYN).

In the case of 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. The other thing is I had done my clerkship in Obstetrics at [name of hospital], and the doctor on call recognised me from six years prior. And she rushed me in the OR. ...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, Family Doctor).

Belief in Personnel-itis

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, OB/GYN)

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

I don't know if it's true, but it wouldn't surprise me 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, Public Health Doctor).

Participants offered the following speculations on why clinicians might have worse outcomes: 1) advanced maternal age 2) working long, demanding hours, including night shifts 3) increased monitoring and intervention (possibly due to nervousness on the part of colleagues, who might fear being caught out for making errors) 4) low tolerance for risk.

INTERPRETATION

Most of the themes we identified had both positive and negative implications for the birth experience of physician mothers. 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. Additionally, participants endorsed the belief that being physicians may have had an impact in making their deliveries more complicated or dangerous, and the professional culture of medicine was raised repeatedly as a potential explanatory factor.

The expectation of physician self-sacrifice for the benefit of patients and colleagues has been much questioned recently by the younger generation of physicians.[23,24] This paper reveals that these expectations and the guilt that they engender are persistent and impact on the birth experience of physicians. Participants' belief that being physicians may have made their deliveries more complicated or dangerous, alongside their speculation that the professional culture of medicine may be a potential factor to explain this is supported with respect to surgical specialties.[3-6, 12] Our study extends this to encompass the perspectives of clinicians in non-surgical specialties.

Participants' perception that their healthcare providers assumed 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.

Interviewees' high level of medical knowledge was a two-edged sword for them. They were able to understand and anticipate some complications. In one case this knowledge may have been lifesaving. However, some participants, particularly those in specialties which deal with obstetrical complications, were plagued by fears of worst-case scenarios.

Physicians' evidently increased access to medical care combined with their apparently 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.[25] This may be a factor in potential differences in birth outcome between physicians and others. More research is needed to determine whether physician mothers are indeed at higher risk of birth complications and poor outcomes.

Finally, 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 often how it upheld or failed to fulfill their understanding of optimal care. Some physicians experienced, first-hand, care that was not patient-centered, 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.

This study addresses a gap in knowledge about physicians' birth experiences. Consistency across interviews confirms that the developed themes are representative of the data, however study results are not generalizable. Further limitations include the fact that the interviewees are a self-selected group drawn from an online community about physician

motherhood. The survey respondents who contacted us for a follow-up interview are likely motivated to discuss their birth experiences and reflections on the relationship between their professional status and outcomes, perhaps due to negative experiences which may not be representative.

The "double vision" of physician mothers as both clinicians and patients, as well as their personal and collective experiences of birth, can inform medical education and perinatal care in general. The negative impacts of professional status of participants' birth experiences suggest that the professional culture of medicine should become more accommodating of family building. It remains to be explored whether practicing physicians across all specialities have worse birth outcomes than the general population – if so, the experiences and perceptions of physicians who have given birth can inform healthcare provision for a higher risk population.

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Table 1: Professional roles of physician mothers

Professional roles	Number of participants
Family doctors	7
Obstetricians and gynecologists	2
Cardiologist	1
Emergency doctor	1
Neonatologist	1
Child and adolescent psychiatrist	1
Pediatric endocrinologist	1

Table 2: Supplementary Quotes

Theme	Quote
Professional Culture of Medicine	*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, OB/GYN) *I think all of my [physician] friends had compilations from birth. One thing or another. It's always a premature baby, a haemorrhage. Everybody has something. I don't know it's the stress of the job (Interview 4, Family Doctor).*
Impact of Increased Medical Knowledge	*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, Cardiologist).* *I would say "definitely more nervous"(I was) because more about being aware of different complications that could go on (Interview 8, Emergency Doctor)* *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, Neonatologist).*
Difficulty Stepping Out of Physician Role	*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, OB/GYN) *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, Family Doctor)* *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, Public Health Doctor).*
Privileged Access to Care	*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 (…). Its definitely increased access to health services (Interview 3, Family Doctor).* *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, Neonatologist). *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, Public Health Doctor).*