# The interprofessional and interorganizational collaboration in perinatal care settings after issuing the Quebec Perinatal Policy 2008-2018: A single case study

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# The interprofessional and interorganizational collaboration in perinatal care settings after issuing the Quebec Perinatal Policy 2008-2018: A single case study

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**Abstract**

**Introduction**: The main objective of this study was to explore how the Quebec Perinatal Policy influenced the collaborative experiences of maternity care providers in a birthing center and its affiliated hospital.

**Methods:** A single case study was used. Data collection included semi-structural interviews with multidisciplinary professional and administrator participants; direct observation and field notes; documents and archives. A qualitative thematic method and QDA Miner software were used for analysis.

**Results:** Our investigation reveals that midwives have complete access to the hospital with which a formal agreement was signed. The completion of the Quebec Perinatal Policy is still under question because of the lack of human and financial resources. Some of the barriers to fully execution of the Perinatal Policy in the province of Quebec include the absence of strategies or willingness to open more birthing centers, the scarcity of training sites for midwives, and the limited number of schools that provide midwifery education in Quebec. There was no obvious effect of Quebec Perinatal Policy on the collaborative professional activities among midwives in the birthing center and other professionals in the affiliated hospital. Tension among maternity care professionals was fuelled by prejudice, a poor understanding of the roles and lack of trust of other professionals, poor communication, and an unwillingness to collaborate. Factors that facilitated collaboration between maternity care professionals were close communication and exchange of information between personnel, participation in multidisciplinary workshops and meetings, and proper preparation of midwifery clients for possible transfer of care.

**Conclusion:** Collaboration is necessary among maternity care professionals in order to better implement the perinatal care policies in Quebec. Additional strategies include clearly defining the roles and responsibilities of the various maternity care providers, designing interdisciplinary programs and workshops to strengthen teamwork and to improve understanding of the scope of practice of other maternity care professionals, in order to encourage mutual respect and collaboration.

## Introduction

The purpose of this investigation was to understand the initial processes of collaboration between midwives and other maternity health providers triggered by the 2008-2018 Quebec Perinatal Policy. The profession of midwifery attained full legal status in Quebec in 1999. Now, there are approximately 280 midwives practicing in Quebec in 17 active birthing centers, namely "Maison de Naissance" in French, which are affiliated with hospitals, as well as 8 Centers for Health and Social Services or Centre de Santé et de Services Sociaux (CSSS) in French (1). Women have the choice of birthplace with a midwife either at home, at a birthing center, or in a hospital. The Université du Québec à Trois-Rivières (UQTR) is the only university in the province of Quebec that offers a university midwifery program.

Québec's Perinatal Policy 2008–2018 promotes physiological birth and the diminution of obstetrical interventions. The policy proposes that midwives will be accountable for 10% of the province's births and prenatal care by 2018 (2). The Quebec policy also emphasizes collaboration between the birthing center in which midwives operate, and acute care hospitals (2). This collaboration would guarantee that women not only receive continued care, but also have access to a variety of professional services in hospitals, which will improve both the access and the quality of care offered in public institutions.

Previous literature showed that some obstetricians and nurses were reluctant to the idea of integrating midwifery into the maternity care system (3-6). Midwives still face potential barriers when trying to access service agreements with hospitals. In some legislated areas in Canada, hospitals do not grant privileges to midwives, thus preventing midwives taking clients who choose hospital births(7). Divergent practices among physicians, nurses, and midwives were noted at the eve of starting the experimentation of midwifery practice in the pilot-projects, in Quebec (8, 9).

In 2007, six hospitals signed agreements with birthing centers in Quebec, however deliveries by midwifes rarely (3%) take place in hospitals. In a recent survey, 60% of Ontario hospitals reported midwives attend in their units, while 7% (4/58) of Quebec hospitals reported midwifery attended births. In order to integrate and expand midwifery practice in Quebec, it would be essential to improve and facilitate collaboration among midwives and other maternity health care providers. This represents a considerable challenge not only to clinicians but also to managers and other decision-

makers. A better understanding of the current state of midwifery practice and maternity care in Quebec will aid in identifying existing problems and in implementing strategies to solve these problems. Ultimately, the goal will be to improve collaboration between maternity care providers across institutions. The present investigation aims to uncover information that will assist with this goal by addressing the following research question: what are views and experiences of the various the maternity care providers regarding the existing collaboration between midwives working in a birthing center and perinatal healthcare providers in a hospital since the release of the Quebec 2008-2018 Perinatal Policy?

## Methodology

### *Study design and setting*

A single holistic case study of a descriptive nature was carried out by 2014 for 3 years. The question under study was concerning the collaborative process between a Montreal Birthing Center and a university-affiliated acute care hospital. Approval was obtained from the Research Ethics Committees of McGill University Faculty of Medicine Institutional Review Board (A02-E08-11B), as well as the Ethics Committee at CLSC de la Montagne (PE713).

Following a purposeful sampling strategy, the study recruited various perinatal care providers, including members of the multidisciplinary team of professionals in hospital (obstetricians, family physicians, nurses) and midwives from the Birthing Center, as well as managers of different hierarchical levels in the hospital. A total of 25 participants were included in the study: 5 managers, 4 midwives, 2 family physicians, 5 obstetricians, and 9 nurses. (Table 1)

### *Data collection*

Fieldwork were conducted by the principal author (RB). Several methods were used for collecting data, the most important being semi-structured individual interviews with participants. Participants were informed about the nature of the research project and written consent was obtained prior to the interview. The duration of the interviews ranged from 31 to 125 minutes. The interviews were digitally recorded and transcribed verbatim immediately after the interview ended. During the conversations, particular emphasis was placed on identifying the participants' definition of

collaborative work, as well as their professional experiences relating to collaboration, coordination and communication.

In addition to individual interviews, the principal author conducted field visits that comprised of observing activities, behaviors and interprofessional interactions in various sites such as the hospital birthing and postpartum units, during More-OB workshops, More-OB Core team meetings, and multidisciplinary maternity team meetings. Field visits were performed at least 3 days per week during the period of data collection. Finally, documents and archival materials were collected such as the minutes from eight meetings, formal agreements documents, organizational reports and documents from multidisciplinary meetings.

*Data Analysis*

To enable a better understanding of the context for the study, field notes and documentary analysis were carefully read. Transcribed verbatim from the 25 interviews was read and checked for accuracy before entering into the *QDAMiner* qualitative software*,* which supported the inductive thematic content analysis performed(10). Initial themes were discussed with the rest of the members of the research team before the report was written. Triangulation of data sources, referential adequacy, prolonged in situ observations, and member-checking are the principal strategies used to maximize the credibility of findings.

## Results

The thematic analysis performed allowed us to identify four predominant themes, namely: 1. The the Quebec 2008-2018 Perinatal Policy; 2.The health professionals' experiences of collaborative practice; 3.The existing barriers to collaboration, and 4. The facilitators to collaborative practices in perinatal health care. (Table 2)

### Theme #1 – The Quebec 2008-2018 Perinatal Policy

Most of the participants in this study stated that there were no definitive actions undertaken since issuing the Quebec Perinatal Policy. Both hospital and birthing center administrators complained about the delay in operation of this policy and the lack of support or delay by the government in opening birthing centers necessary to obtain this goal:

> They just opened a few [birthing center] since the policy released, so I do not know how it's going to work. We need more birthing centers. I am not sure that 10% of the population will deliver in the next years with a midwife in Quebec. (Mid2)

> There have been tons of advocacies from parents and families and midwives to open more birthing centers, the government has hardly accepted to open new center since this policy came out... We see the demand from families… my biggest fear is that the demand is increasing, the resources are not. (MAD)

Participants also noted that the feasibility of Quebec's perinatal policy would only be guaranteed if the government spends more money on the primary care system. The obstetricians were frustrated with the system and the fact that the Minister of Health has been offering solutions of having midwives, but have not gone ahead and made any actual changes to the maternity care system:

> They have not increased the budget for primary care; they haven't increased the beds… now, they're funding in-vitro fertilization, but they have not found any space for these people to deliver, they have not created more positions for more obstetricians, they have not created spaces for more paediatricians to take care of these babies, so the same for midwives. (OB5)

> There is no sign that the government will set up enough birthing centers and open midwifery positions to deliver 10% of 70,000 babies in this province –that is 7,000 babies – I am not sure how much we deliver at a birthing center! I think it is 300, and how many birthing centers are there in the province?! (OB4)

Lack of necessary resources from the government, and disagreement among obstetricians about the opening of more birthing centers were the biggest obstacles in implementing the Perinatal Policy. In contrast to the midwives' willingness to have more birthing centers, obstetricians were doubtful about the necessity and cost effectiveness of such an investment. They argued about government budget limitations due to the large deficit. Furthermore, the obstetricians believed that Quebec should integrate midwives into their hospitals as in other countries.

> As a society we have to make a decision as to what is the cost-effective way to manage obstetrics... the midwives do not want to deliver in the hospital, they would rather deliver in the birthing centers but with whose money are we going to build more birthing centers? …You know, we built our birthing center while France and other countries were closing theirs! (OB5)

Obstetricians agreed they should be doing more high-risk care, and therefore midwives should be doing a large part of the normal maternity care. The family physicians that were interviewed were supportive of the idea of integrating midwives into hospitals and working with them as part of a multidisciplinary team. They believed that building and maintaining birthing centers is expensive and "midwives are not doing a mass volume of deliveries" to justify the expense (PH2).

The midwives speculated that the source of this misperception concerning midwifery practice and the hesitation to invest in more birthing centers is because of lack of research on midwifery practice in Quebec and its cost effectiveness. All the interviewed midwives believed that pregnant women who are followed at birthing centers have fewer interventions; therefore, it is ultimately less costly to the government. "Midwives are paid much less than doctors, it really is less expensive". (Mid 3) None of the midwives that were interviewed agreed to integrate their practice into a hospital and work as a hospital employee, nor were they willing to work in a separate birth unit attached to or situated in the hospital.

> Having a unit in the hospital, what does it represent? A hospital! For most people, it is not what they want. They want to be outside of that sector! (Mid4)

Other perceived barriers in implementing the Quebec Perinatal Policy were the lack of an accredited midwifery training program, the lack of training sites for midwifery students, of qualified instructors and of full-time positions for midwifery graduates.

> We are already tight with the number of midwifes who can take a student in a stage ... I cannot learn midwifery with someone else than a midwife. I'm not learning obstetrics; I'm learning midwifery when I'm in this program. It has to be a midwife who teaches me. I have to follow a midwife… On the other hand, if we have more students graduating, we need more *Maison de Naissance* (birthing center) for them to practice. (Mid4)

> We are working with 10-15 years delay, because when the pilot project was finished and when we were legalized, the government did not really invest to develop new services. Now they want to invest, because the new policy came out, but the fact is that we are dealing with the reality that the university is not able to take in the students because there were not enough services to send them for training. (MAD)

**Theme #2 – Health care professionals' experiences of collaborative work**

The midwives in the birthing center and the hospital-based healthcare professionals that participated in the study describe both positive and negative interactions with each other.

The preliminary thematic analysis of data showed that about half of the healthcare professionals participating in this investigation described positive working relations with professionals from other disciplines in order to achieve the common goal of promoting mother and baby's health. Most interviewees agree that "*successful collaboration depends on the person"* and *"personality traits of the individual healthcare providers involved in the interaction"*.

> Personally, I have a good relationship with midwives. There are some midwives that I am happier to see than the others, but it has never caused a problem. (Nurse1)

The observations at the birthing unit and the analysis of field notes also demonstrated that the nurses were quite welcoming towards other healthcare providers in the birthing unit as well as with midwives when they were accompanying their clients to the hospital:

> Nurses were waiting for midwife and her client…. they have already made a room ready for midwife's client …Midwife arrived into hospital and nurse went to welcome them at the desk and said: 'we have room number 3, it's free for you, you can use it… if you need anything just let us know'.(Field notes of birth unit)

> They are professional like me, so we respect them, they respect us, and if they want something they come to us and we will help put them at ease. (Nurse 2)

The obstetricians perceived a mutually respectful relationship with midwives when there was a transfer of midwifery clients to them:

> They are respectful. By the time, their patients come here and they need help. I mean there is a reason they come here. Therefore, we are usually working well together; they are respectful, and open to our help and suggestions. (OB2)

The obstetricians also described working with other perinatal care providers "collaboratively and collegially" most of the time. The obstetricians believed their attitudes towards family physicians and midwives are actually the same. (OB3) Some obstetricians felt they had a "fairly happy labour and delivery unit"; and "a fun environment", where they all try their best (OB2).

One of the midwives stated that even in cases where they don't necessarily agree with the management decisions, the midwives are able to take a step back: "I often even encourage decisions that have been taken by doctors so that the client just does not feel wedged between doctors and nurses". (Mid3)

> A few times, it happened that a doctor told the patient: "well, you know, your midwife will help you to find a position to push". So that kind of collaboration happens too, and when it happens we are very happy and the global experience of transfer for the patient is therefore even better when they feel that there is really collaboration between us as professionals. (Mid4)

The nurses expressed that collaboration between midwives, nurses and physicians has improved over the last few years. This is partly due to an increased appreciation of the value of each member of the team. Most of the nurses "were being motivated to collaborate with midwives for the best

interest of their patients". (Nurse 2 and 3) Family physicians similarly reported that they collaboration well with midwives. One of the physicians reported: "I have respect for them and I would say they have respect for the work that I do". (PH2)

Despite an overall impression of improved relations, midwives still describe negative experiences in the hospital setting. For example, when midwives clients are transferred to the hospital under the care of an obstetrician, the midwives feel that their involvement in the care of the client is no longer needed. Although midwives have permission to accompany their clients in these situations, midwives sense that their role becomes primarily supportive. Midwives were not allowed to do vaginal exams or any interventions once their client has been transferred under the care of a physician.

Many hospital healthcare professionals complained about "*midwifery client's attitude and expectations"*. The obstetricians commented that the unpleasant experiences arise from dealing with the midwifery client's attitudes, and not the midwives themselves. The obstetricians pointed out that the midwifery clients do not want to be in the hospital, and do not want obstetricians looking after them. The obstetricians often referred to midwifery clients as "difficult patients".

> Most of my patients are happy to do what I tell them to do like "yes doctor, no doctor"; whereas midwives' clients will come with lists, dictates and plan of care, plan for the delivery! (OB5)

> They (midwifery clients) are often very upset… I mean, I have seen different reactions, but angry sometimes, even to the point where the patient expresses anger and resentment towards us. Their preconceived notions of natural childbirth are now potentially threatened and they are often, you know, angry, resentful, and cold. They are not receptive and warm like our patients towards us! (OB1)

The midwives and administrators that participated in the study revealed that midwifery clients are often more aware of their rights, and they therefore want to actively participate in decisions regarding their care. As such, they often have different expectations compared to women receiving prenatal care from a physician. Surprisingly, most physician clients do not question routine newborn interventions, whereas midwifery clients were more likely to be inquisitive and ask "what is that you're putting in my baby's eyes? Why is that? Tell me more about it". (Adm4)

> You know, they (midwifery clients) make decisions about things and many people do not agree with their decisions, but they have done research, they have read, they figured out what is good for them! (Adm4)

Some obstetricians believe that midwifery clients are made to feel empowered which may create a source of conflict. Additionally, the obstetricians and nurses complained that midwives are over protective and over-advocate for their clients:

> So that they behave in a way to sort of defend and protect their patients, as if they are protecting their patients from me, which is nonsense…midwife's role should be to make you an ally, not an enemy! (OB3)

> Midwife is not necessarily interfering, but the patient trusts the midwife more… because she has had a relationship with midwife and you're a nurse and you just came into the mix two minutes ago.(Nurse4)

**Theme # 3 – Barriers to collaboration among maternity care professionals**

Our analysis of data revealed many barriers to collaborative work between healthcare professionals in hospital and midwives in the birthing center. These barriers are categorized into four subthemes:

*Lack of knowledge about and trust of other professionals*

A lack of knowledge about the scope of practice of other professionals was considered a barrier to collaboration. One of the midwives mentioned that **"**I just feel like they do not know where we are coming from and they do not know what our scope of practice is and they do not know they can trust us" (Mid 4) One of the administrators who chose a midwife as her care provider mentioned that:

> I felt I was judged quite heavily to have selected a midwife to be my care provider by my colleagues and physician colleagues. I felt that they had generally a lack of understanding about the spectrum of competencies that midwifes were able to exercise. They did not realize that midwifes could start an intravenous, have access to oxytocin, and able perform some very basic interventions that can save lives. (Adm4)

Some of the obstetricians and midwives uncovered that several of them are suspicious often of what the other health care provider intends to do:

> They are suspicious that we want to do a quick caesarean section and disappear and we are suspicious sometimes of them that they are willing to do dangerous and ridiculous things all in the interest of a vaginal delivery, and that could include incredibly long labors, long second stages, stuff that we would consider dangerous. (OB3)

On the other hand, lack of trust to young family physician residents were reported by most of the participants. Almost all of the obstetricians believed in the fact that the "more experience you gain,

more competent you become". One of the obstetricians mentioned that having trust is "a matter of being exposed to others, more often, and get to know someone". (OB1)

> I may not be disrespectful but absolutely no respect in professional ability of somebody who has been there for six months or a year and still knows anything, or who has over many years showed herself not to be very professional, caring, or interested. (OB3)

> Sometimes you transfer your client to somebody, and it is very frustrating when you see a person is going taking care of your client who knows less than you. (MAD)

One of the administrators commented that they do not expect that residents know everything but it is better if they say, "I need a second opinion because I'm not so sure" or maybe say, "I'm not on the right track, or this is really going beyond my knowledge". (MAD) Lack of recognition of midwives by family physician or obstetric residents was also an issue for midwives. Some residents had misunderstandings about a midwife, or had their own beliefs about midwifery care:

> It happened a few times where I spoke to a resident, saying I am a midwife, and the resident not knowing what a midwife is, or the resident misinterpreting, thinking I was a doula! (Mid4)

*Blaming others and being judged*

The nurses and family physicians revealed that there are sometimes critics over midwifery practice such as when there is a late emergency transfer from birthing center to hospital. The family physicians felt that they are "still in the blaming culture".

> Some doctors have an approach where they are like: "it's always complicated!" Of course! If it was not complicated, they wouldn't be calling on to your expertise! (PH1)

Half of the midwives felt they were the subject of a prejudgment when they transferred their client as an emergency case to hospital. In such a case, it was common to hear, "why you waited such a long time before transferring your patient!"(Mid3)

> I heard that from nurses, not from the doctors: "Oh! ... She's been ruptured for 24 hours, why didn't you bring her before?"(Mid4)

One of family medicines believed that if a midwife perceives a specific doctor is on call and he is going to have another bad comment like "oh yeah! Your patients always go badly" or a comment like "why didn't you come before?" it might affect an urgent transfer! When we asked the obstetricians about their unpleasant experiences with collaborative work with the midwives in the

birthing center, they mostly criticized midwives for their last minute calls and lack of quick action to transfer their clients:

> If a patient has a problem, she is outside the hospital, and there is a delay to bring her in, I find that frustrating and unnecessary, you know? Most of the time everything goes well, and that is because most of the time in obstetrics everything goes well. However, when it does not go well, it really goes bad (OB4)

*Use to work independently*

The administrators described that midwives are structured in Quebec as "autonomous workers". The nurses felt that the "midwives do not need the nurses because they are used to working alone". The family physicians perceived that the "midwives want to maintain their independence from institutions". During the field visits, even when the midwives were in the birth unit, they rarely showed up to the nurses in the nursery station and were talking a few minutes with nurses, but most of them did not communicate with other staff during the time they had responsibility for their own patient. Nobody was talking about the presence of the midwives in the birth unit at hospital during the time the midwives had their client in a room. The nurse hesitated to communicate with midwives if there was no need:

> If a midwife is here to look after her patient, I have nothing to do with that patient; I don't even go into the room…no communication, I mean if we have to speak ,we speak, but we do not have exchange... we don't communicate or exchange much information. Once they have their patient, they look after their patient; we have nothing to do with it unless there's a problem. (Nurse 7)

The data also showed midwives felt themselves as "being outsider" professionals:

> No chat! If I ask them (nurses) a question like where can I find some …I do not know… tapes to monitor? They will tell me very friendly where it is, where to find the stuff, but just to chat? No? I feel like I'm out of the game. I am the outsider… I feel it is like we come from two different universes! (Mid4)

One of the nurses mentioned, **"**When midwives come with a patient, it is their patient, it is not ours, they bring them but we don't have collaboration!" (Nurse 3) Another nurse stated that:

> Once upon a time, I helped a midwife to settle patient and took her blood pressure. I was in her room for 15 minutes. When I came out of room, my nurse colleagues criticized me and I was told it is not my responsibility to do that"! (Field notes of informal conversations)

The obstetricians described that midwives are physically separated from the hospital and it affects collaborative work between them (OB2). One of the obstetricians mentioned that: "we don't go to

birth center and midwives don't come here (hospital) unless they have to transfer a patient here". (OB3) Other obstetricians (OB4, OB5) revealed that "midwives want to be independent; they don't want that doctors be their bosses":

> They (midwives) don't want that the chief of obstetrics is going to rule … I'm not the boss of the family physician, they have their own department of family medicine; but the rules of what you can do in the birthing center are set by the department of obstetrics, not by the department of family medicine. Therefore, they (midwives) do not want to do that. They want to do it with their rules and their way! (OB4)

*Communication difficulties*

Some midwives had difficulties in accessing hospital services and making appointments for an ultrasound when it was not an urgent case:

> Let's say, when I have to organize an appointment for a specific ultrasound, then oh my god! It is complicated to get through all the telephones, to get to the right person to make the appointment. (Mid4)

One of the obstetricians complained that midwives think "their patient is so special; she needs to be taken care right now!"

> For example, the midwife sees her patients today. She wants the ultrasound today, and I say: 'I'm sorry, but I can schedule her Friday' and she say: 'well she's here today, can she be done today?' and I say: 'no, she can be done Friday'… they do not see that I have to see 50 patients a day! (OB5)

Some obstetricians had difficulties when they were following a patient from the birthing center as sometimes, they had trouble getting information from the midwives or reaching a midwife. The midwives had difficulty gaining access to the results of counseling for their clients:

> We have an on-call system, so we are not always here… Sometimes I do not understand from the patient what exactly the request is but I have to say, most of the time, they are faxing us for example consultation with quite a bit of information and a detailed history. (OB1)

**Theme #4 – Factors facilitating collaborative work among maternity care professionals**

The thematic analysis of data discovered many factors that facilitate collaborative work between midwives in birthing centers and other health care professionals in hospital.

*Preparing clients for possible transfer and interventions*

The nurses and obstetricians commented that the midwives should let their clients know that there is always a possibility that they may have to transfer the client to hospital in case there are any complications, and then it is wise to talk to their client to let them know how it would work in hospital. (Nurse3)

> It is better that midwives prepare patients before they arrive in a hospital setting, in that case, the patient would be more receptive to our care. (OB1)

*Developing a close communication and exchange between work environments*

Almost all the participants emphasized the fact that midwives, nurses and doctors should communicate better. The administrators mentioned that knowing each other helps professionals to work through the problem together as a team rather than creating conflict. (Adm 3) The obstetricians put emphasis on having midwives in different friendly meetings instead of only seeing midwives when they transfer their clients to hospital.

> I think that some midwives do not know whom they are talking to, when they transfer their clients. I think there may be more meetings that should be attended by everybody. I think when we have a grand round, or multi-disciplinary rounds, more midwives should be involved… so they would be known to us and they would know us (OB5)

The administrators and nurse participants revealed that family physicians and midwives usually do not exchange between the work environments, despite the fact they need to meet each other in the different environments, such as social events.

One of the nurses (Nurse6) did comment; “every nurse that is coming into birth unit in a hospital should also spend a day with the midwives at the birthing center to make it more a closer collaboration”. She revealed that some doctors really liked it when they went to visit the birthing center as it gave them a whole different idea. (Nurse6) According to the nurses, exchanging environment would not only help in collaboration, but can help them to better understand the midwives’ world and where the midwives are coming from and what the profession is and how things are handled in the birth center:

> I have never been at a midwife delivery, so I don't really have a total concept. So I think that if the nurses could go and observe one or two midwife deliveries, they maybe have a better concept of

> what the kinds of things they use in terms of pain control, what they let their patients do or not do, how they monitor the baby, what happens when the baby comes out… (Nurse5)

The administrators believed that having other health care professionals visiting at birthing center could help to "demystify the myths" regarding midwifery practice:

> I think that for a lot of them (hospital care providers), they don't really know what it looks like, what's being done … we had some nurses telling us I want to go to visit birthing center and a few came, a few doctors came too, and most of them were really impressed to see how we are organized and what the setting is in our birthing rooms. (MAD)

The administrators commented that such as midwifery students that spend a few months of their training program in the hospital, each family physician and obstetricians should also go and training in a birthing center. One administrator mentioned that by having midwives train physicians and physicians train midwives there will be a much better understanding of each team's perspective. (Adm2) Our analysis of documents showed that some of the medical students went to the birthing center when they requested it but it was not an official part of their training:

> You know, a lot of physicians have never seen a completely natural labor. ..I think most physicians have never seen a labor from beginning to end. They come in and out of the room; they haven't experienced the full continuum and I think that's a very important experience to have in their profession. (Adm4)

*Multidisciplinary MORE$^{OB}$ workshops and obstetrics meetings*

The Managing Obstetrical Risk Efficiently (MORE$^{OB}$) Multidisciplinary Program was considered as the most important facilitating factor in collaboration among professional participants. There were monthly meetings and 3-4 multidiciplinary workshops a year. According to the participants, the MORE$^{OB}$ program brought together professionals from different disciplines to share their knowledge, manage the obstetric risk efficiently, and discuss high risk patients.

> The professionals were practicing a drill. There was an example of emergency transfer from birthing center to hospital. The process of debriefing after that emergency was so important because they could talk about those things that went wrong and then, they developed the issues they needed to fix in their next transfers. (Field notes on MORE$^{OB}$ workshops)

Almost all the participants agreed that the MORE$^{OB}$ helped in more communication between them, provided an open atmosphere of collaboration, enhanced team work spirit, and at the same time helped in better understanding about each other's practice and knowledge.

> Focus on improving communication is one of the things that More$^{OB}$ helps with. It has had a big emphasis on communication and changing the culture on our birth unit. (ADM4)

The participants also mentioned the importance of multidisciplinary obstetrics meetings and the grand rounds, in which the midwives as well as other maternity care providers could meet and interact with each other.

> We have difficult pregnancies and difficult deliveries where we discuss about them in our rounds and whenever there is a midwife involved, we invite her… we could either improve communication or improve the relationship so that type of event does not occur again. (OB1)

**Discussion**

Our aim in this investigation was to better understand how the Quebec 2008-2018 Perinatal Policy has had an influence in collaboration between midwifes and other perinatal health providers.

Our results show the new policy seems to have had no impact on the collaboration and the experiences of maternity care providers in the studied birthing center and its affiliated hospital in Quebec so far. The complex nature of health care systems makes any change very complex and impossible to accomplish on a short-term basis. Implementing Quebec perinatal policy regarding midwifery practice will not be fully successful and midwives will not find a real place in the health care system if the policy is not supported by top managers and health care professional decision makers. The Quebec perinatal policy will not be put into place unless the health policies reflect greater trust in midwives' ability to assist healthy childbearing women without the need for obstetrics technology.

More importantly, the findings of our study show that the Quebec perinatal policy has not been well implemented and no particular action has been taken in this regard. What is more, the feasibility of the policy is under question because of the lack of financial resources and the lack of willingness among stakeholders and decision makers to open more birthing centers. The obstetricians were opposed to the idea of opening new birthing centers. Moreover, the lack of places for training midwives in Quebec, were considered as further barriers to implementation of the perinatal policy in Quebec province.

Our investigation shows that although midwives may have complete access to the hospital with which a formal agreement has been signed, they have not been integrated into the hospital in

Quebec. It is partly because of lack of interest of midwives to work in the hospitals as employees. The midwives wanted to maintain their integrity as a separate group, who could offer very special care to women and their family.

In our study, we found that the obstetricians, the family physicians and nurses worked together collaboratively and collegially, coped well with midwives and were collaborative in the urgent transfers and consultation. Both collaboration and conflicts between midwives and obstetricians are reported in other studies held in Canada (7, 11) and other countries. For instance, Skinner's study (2010) in New Zealand showed seventy-two percent of midwives felt that they were well supported by obstetricians. Interestingly, when well supported, midwives could provide continuity of care for women who had high obstetric pregnancy and/or birth. (12) By contrast, Gau's study (2002) showed no obstetricians were willing to practice collaboratively with midwives in Taiwan. The reasons included: unwillingness to share risks, worry about the incapability of midwives, worry that it would impair the professional image of physicians, and unwillingness to share interests. (13)

The multidisciplinary MORE$^{OB}$ program and its workshop was one of the most important facilitating factors in improving collaboration between health care professionals. (14) The MORE$^{OB}$ program was developed by an obstetrician-gynecologist at first, at the request of the Ministry of Health, and has already been implemented all over Canada and other countries that look at safety and quality of best practice. The idea behind MORE$^{OB}$ was to improve teamwork, collaborative care and non-hierarchical environments. In our case study, participants considered the MORE$^{OB}$ program as a discovery adventure, through which the physicians and nurses found out what a midwife was able to do. Unfortunately, the separate root of education and different training environments for physician, nursing, and midwifery students make it impossible for these professionals to better understand the scope of each other's practice(12). Having equal power and voice through MORE$^{OB}$ workshops, talking in the same language, and practicing the same skill drills in a friendly environment, can improve the communication and process of collaboration among professionals.

The findings of our study showed that in spite of much improvement in interprofessional and interorganizational collaboration between midwives in the birthing center and the health care

professionals in the hospital, barriers still exist. The most important barriers to collaboration among participants were in relation to blaming and judging each other, lack of knowledge about the other professionals' scope of practice, and lack of trust in other professionals. Even though most of our participants expressed their sense of trust to others, still many of them perceived a lack of respect to others' practice, which put up significant barriers to interprofessional collaboration. It is important to establish more programs such as the MORE$^{OB}$ to provide opportunities to exchange knowledge among maternity care professionals, change the culture of blame and pointing fingers at each other and replace it with the culture of solving problems together.

Another important barrier to collaborative work in this study was the midwifery clients attitude towards obstetricians and medical interventions. The obstetricians and nurses complained that they are not treated kindly by the midwives' clients. Schottle's study discovered the same barrier to collaboration between obstetrics nurses and midwives in Ontario. In Schottle's study, one of the obstetrics nurses commented: "I consider the midwives to be part of the 'team' but many of their clients who plan a home birth, and for one of many reasons are admitted to hospital for hand over of care, it is the client, I find, the most difficult to build a relationship with".(15) In our study, the obstetricians called midwifery clients as "difficult patients". Klein (1983) in his paper referred to the "difficult patients" as "demanding women" who present with lists of inflexible requirements for labour and delivery and stated it as a « problem faced by family physicians who practice obstetrics ».(16) In fact, midwife client receives the full information about transfer and the possible care and interventions which can be given in the hospital setting by professionals. However, it is understandable that the client may not switch over and accept or cope to the new situation easily. It is worth to mention that many clients are progressing well with the change in their birth plan, but not everybody undergoes transformation and growing from experiences on an easy way. Some of the "difficult patients" may have other deeper psychological issues and any change of their birth plan makes them very upset. Those clients can give a hard time even to their midwives.

Lack of a clear understanding of the scope of practice of midwives, and their roles and responsibilities were considered a barrier to collaborative work as it explained in other studies(17). Our midwife participants viewed themselves as outsiders and less welcomed into maternity care teams, however, they were satisfied with working as independent maternity care professionals.

The findings are similar to Wiles and Robinson's study in which midwives felt less integrated to the team, but they were still satisfied to work independently. (18)

Our case study has some limitations and strengths. We perceived that some participants, especially family physicians, felt uncomfortable expressing the barriers they encountered through the collaborative work with other maternity care professionals. Because of some difficulties in performing a multiple case study, we had to choose a single case study approach, which encompasses only one birthing center and its affiliated hospital. However, the chosen case study was the best sample in point of the archaism and experience of its professionals. Moreover, the principal investigator of this research accomplished an internship in midwifery in different birthing centers in Quebec province a few months after finishing this research, where she did not find any difference on the concept of collaboration among the midwives in those birthing centers and other maternity care professionals in their affiliated hospitals. Finally, the diversity of study participants such as family physicians, midwives, nurses, obstetricians, and administrators, as well as different methods of data collection, it is supposed that the study reflects a true perspective on the collaboration between maternity care professionals in Quebec.

**The implications of the study**

The results of this study will help to improve maternity care and childbirth with emphasis on interprofessional and interorganizational collaboration between midwives at birthing centers and other professionals in the hospitals. The results should be useful to clinicians, obstetricians and gynecologists, midwives, nurses, and all health providers in general. With this newfound information, the Ministry of Health of Quebec and the managers and decision-makers involved in the integration of policies will be able to point out the factors that need to be discussed further, in order to achieve a better maternity care service for the women of Quebec.

**Conclusion**

To achieve better patient safety, health care providers need to establish a real integrated and collaborative environment that integerates professionals' roles and responsibilities while respecting the concept of autonomy. Prospects for better implementing perinatal care policy in the

maternity care system in Quebec seem more favorable if managers develop strategies to create team spirit and strengthen team working. Interdisciplinary programs and workshops are essential to better understanding of other maternity care professionals' scope of practice and to promote mutual respect and collaborative work among them.

## List of abbreviations

CSSS: Centre de Santé et de Services Sociaux
CLSC: Local Community Services Centre

## Declarations

The authors of this manuscript confirm that all methods were performed in accordance with the relevant guidelines and regulations.

## Ethics Approval and Consent to Participate

Ethical approvals were taken from the Ethics Committees at McGill University (A02-E08-11B), as well as, the CLSC De La Montagne, allied to the birth center (PE713). Participants were informed about the nature of the research project and written consent was obtained prior to the interview.

## Consent for Publication

Not Applicable

## Availability of Data and Material

The full transcript of the interviews as well as all the analysis in QDA Miner have been saved in the computer of the first author. The archive and documents and filed notes are saved as a word document and all are available from the corresponding author on reasonable request.

## Competing Interests

The authors declare that they have no competing interests.

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## Authors' Contributions

Five persons have fulfilled the conditions required for authorship. RB has coordinated the paper from writing its protocol, taking approvals, designing the semi-structured questionnaires, collecting the data, transcriptions, analysis, and redaction of the manuscript. MH checked the accuracy of analysis, interpretation of data, and revised the manuscript critically. SK helped in implementation of research and data collection in the hospital and edited the paper and provided comments on the manuscript. VJ helped in implementation and provided her comments on the manuscript. All authors have read and approved the final version of this manuscript. CR supervised the research, checked the accuracy of analysis and interpretation of data.

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- Table1Charactristicsofparticipants.pdf
- Table2.pdf