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A qualitative study exploring the perinatal experiences of social stress among first- and second-generation immigrant parents in Quebec, Canada

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Abstract

Background Perinatal psychological distress adversely impacts the well-being and social adjustment of parents and their children. Expectant parents who have migrated may be at higher risk for perinatal psychological distress due to various migration-specific stressors and healthcare service barriers. Limited studies have examined the perceived determinants of perinatal distress in immigrant parents, particularly men. This study explored first and second-generation immigrant parents' lived experiences of social stressors and facilitators of perinatal psychological well-being.

Methods Participants were recruited by convenience and purposive sampling as part of a larger study. Semi-structured interviews were conducted virtually with first and second-generation immigrant women and men in Quebec, Canada. An inductive thematic analysis was performed.

Results Sixteen women (age = 34.8 ± 3.7 years) and ten men (age = 35.1 ± 4.9 years) from various ethnic backgrounds participated in the study at 7.4 ± 0.73 and 7.5 ± 0.72 months postpartum, respectively. Three themes were identified: (1) cultural pressures (cultural differences in parenting, gender-related cultural pressures, health and baby-related practices), (2) health and social service access (social benefits and resources, and systemic barriers in health care), and (3) discrimination (physical appearance or parental-related discrimination, gender-related discrimination, ethnic-related discrimination). First-generation immigrant parents reported greater acculturative stress (i.e. mental health stigma, health care access) and ethnic discrimination concerns related to their distress. Among men, barriers include feeling as though the paternal role was devalued by society and not receiving consideration by health care.

Conclusions Our results highlight different social factors of perinatal well-being perceived by men and women from various ethnic and immigration backgrounds during the perinatal period. Perceived factors include macro-level factors, such as a country's social climate, health and social policies and services, and social aspects of acculturative stress. Our findings suggest the need for continued efforts to challenge and eliminate discriminatory practices.

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Interventions and resources directed at first-generation immigrant parents should be bolstered. Understanding what parents perceive to facilitate or hinder their psychological well-being can help inform the development of tailored evidence-based programs and policies to better meet the mental health needs of Canadians and reduce gender disparities in the treatment of perinatal distress.

Keywords Perinatal, Mental health, Immigrant, Social stress

Background

Becoming a parent is an exciting but also challenging life transition that is multidimensional as it involves significant psychological and social adjustment [1]. Migration status is being increasingly recognized as a social determinant of health [2]. Almost 25% Canadians are foreign-born and 17.6% are second generation immigrants (i.e. born in Canada with at least one foreign-born parent) [3]. While many who immigrate to North America are of reproductive age, little is known about the impact of migratory stress on perinatal well-being in men and beyond perinatal depression in women.

While mental health has frequently been defined in terms of the absence of mental health disorders, it also encompasses broader dimensions of psychological well-being (i.e. psychological and behavioural adjustment, coping with demands and stressors, relative freedom of disabling symptoms of anxiety and depression, capacity to maintain relationships, and thriving in social roles) [4, 5]. Expectant parents who have migrated may be at higher risk for perinatal psychological distress (i.e. symptoms of anxiety and depression, and stress exposure and perception) due to various migration-specific stressors and healthcare service barriers [6]. Migration can impact the health of immigrants as well as their offspring that are born and raised in the host country, as they negotiate a dual cultural background by combining their heritage values and practices with the values and social norms of the host country [7].

Previous research examining determinants of perinatal mental health in the general population have reported several factors contributing to transition challenges, including unplanned pregnancy, obstetric complications, child-related difficulties (e.g. child care issues, health or behavioral difficulties), financial stress, and work-family conflict [8–14]. In addition to the common stressors experienced by many expecting families, there are several potential contributors to perinatal psychological distress that are particularly relevant and distinct to first-generation immigrant parents, such as social support [6, 13, 15–19], gender role stress [14, 20], acculturative stress (i.e. stress from challenges or conflicts due to the adjustment to a host society's culture) [6, 21–26], and discrimination [6, 27, 28]. First-generation immigrant parent's experience of perinatal psychological distress may be exacerbated because of their lower use of maternity-care services and mental health services due to various barriers, including their unfamiliarity with the health system, cultural beliefs or preferences, language barriers, lack of culturally tailored therapies, culturally significant stigma and shame towards mental illness, and the fear of being perceived as an unfit parent [6, 29–32].

While the findings to date suggest high prevalence rates for antenatal and postnatal depression among first-generation immigrant women, more research examining its risk factors is needed. Previous Canadian studies examining perinatal mental health have primarily compared first-generation immigrants to samples of Canadian-born groups who belong to the dominant culture. There is a need for studies to increase our understanding of migration factors on perinatal well-being by including various ethnic groups, and second-generation parents because they may share similar heritage cultural influences with first-generation immigrant parents but not the stress of immigration [33]. Moreover, little is known about the experiences of ethnic discrimination among first-generation immigrant men in Canada, as this has primarily been examined in women [34]. Fathers' well-being and involvement has a significant impact on better physical and psychological outcomes for their partners (e.g. postpartum depression, pregnancy and birth complications) and their child's well-being and development (e.g. child's attachment security, psychosocial adjustment, school performance) [35, 36]. However, research among immigrants during the perinatal period has been conducted almost exclusively among mothers, which has created a tremendous gap in knowledge for immigrant fathers' well-being (for systematic review, 38).

More qualitative studies are needed to examine potential factors influencing perinatal psychological distress in vulnerable populations to provide a more profound and rich account of parental experiences and insights that may not be captured by quantitative measures that have been primarily developed and tested among samples of individuals belonging to the dominant culture [37]. Given the growing size of the immigrant population in Canada and this group's vulnerability to certain adverse mental health outcomes, research into the risk factors associated with perinatal psychological distress in this population is important and warrants further study. This is particularly important given that even mild to moderate psychological distress during the perinatal period has consistently been shown to adversely impact the physical well-being, psychological well-being and social adjustment of parents

and their children [38–42]. Research with a greater focus on social determinants of perinatal well-being is key for preventative strategies aimed at improving antenatal screening and treatment.

This study was guided by the key tenets of the Eco-social Theory which considers how social experiences and the multilevel exposure of the family (microsystem) within the community (exosystem) can directly impact individual mental health outcomes [43]. Moreover, the life course perspective recognizes that experiences, such as discrimination, remain relevant for health outcomes years later [44–46]. Rather than using a framework that justifies group differences in health outcomes, this approach permits to question the impact of social factors such as discrimination and social inequality on health [47].

The current investigation sought to explore first and second-generation immigrant parents' lived experiences of social stressors and facilitators of perinatal psychological well-being. Although certain factors such as social support, gender role stress, and discrimination may be relevant to both first and second-generation immigrant parents, we seek to explore if these factors, as well as acculturation, play a distinct role in the mental health of first-generation immigrant new parents. We expected to uncover potential insights into the ways in which support to first- and second-generation immigrant parents could be enhanced. The exploration of parents lived experiences and perceptions are invaluable to guide the ongoing development and improvement of perinatal programs and policies.

Methods

Study design

The current study is part of a larger research project investigating work-family conflict and parental leave on fathers' adjustment. Two hundred and forty-three heterosexual couples were recruited in their third trimester of pregnancy (28–36 weeks) primarily through social media (i.e. Instagram and Facebook advertising) due to the COVID-19 pandemic (December 2021- October 2022). Participants were eligible to participate if they (a) were at least 18 years of age; (b) were cohabiting (c) were able to communicate in French or English; (d) had access to the internet, and (e) father was employed (due to main objective of the larger study). Eligible participants that indicated an interest in participating were e-mailed a link to a secured on-line data capturing (Research Electronic Data Capture (REDCap)) system to provide informed consent for access and completion of the quantitative questionnaires and the qualitative interview. Through the REDCap system, participants completed the standardized self-report questionnaires measuring sociodemographic and psychosocial variables during the third trimester of pregnancy and at 2, 6 and 12 months postpartum.

A sub-group of individuals identifying as men or women with and without an immigrant background were selected for the qualitative interview after completing the questionnaire at six months postpartum. Men and women were contacted, and those that agreed selected a time for the interview. Interviewing was conducted until redundancy and saturation was achieved (i.e. no new information, themes, or explanations were being generated) [48]. This allowed us to obtain a balance between rich experiential description from participants, and as much as possible, a representation of variety in experiences across the immigrant population in Quebec. We anticipated approximately seven parents per group (first-generation immigrant men, first-generation immigrant women, second-generation immigrant men, and second-generation immigrant women) to include a representation of parents from different ethnic backgrounds. This was possible for all groups except for second-generation immigrant men. This was part of a larger study and data collected among Canadian-born participants without an immigrant background were not examined in this study and have not yet been published.

Given the objective of the study to examine stressors and facilitators of perinatal psychological well-being among an ethnically diverse sample, purposeful sampling was used to select (1) a majority of participants that reported elevated psychological distress during the third trimester or postpartum according to questionnaires (Depression Anxiety Stress Scale—21 (DASS-21 [49]); score of ≥10 on the depression subscale and a score of ≥8 on the anxiety subscale) and (2) belonging to several ethnic groups, including men and women from dominant and non-dominant cultural groups or visible minority groups. Participants who identified with White/Caucasian/European ethnicity group or countries with major English ancestry (United States, Australia, or New Zealand) were considered the dominant culture. The Canadian and Quebec government defines visible minority status as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour" [50].

Data collection

Socio-demographic and health information were obtained with online standardized questionnaires. During the development of the semi-structured interview guide, a male and female colleague that were unfamiliar with the project examined the guide and flagged unclear questions. Two members of the research team with prior qualitative research experience, including first author "MV" (female PhD student in psychology) and coauthor "JB" (male research assistant with a PhD in sociology), were involved in the data collection process. We

matched the interviewer's gender to the participant. This has been recommended, particularly for some traditional cultures where it is inappropriate for a male stranger to interview women [51]. Semi-structured individual interviews were conducted and recorded remotely via Zoom. Interviews involved posing open-ended questions and follow-up probes designed to obtain an understanding of participants' lived experiences (see Supplementary material 1 for question guide). The interviews began with general rapport-building and contextual questions, such as asking about their experience as a parent. Then questions focused on the experiences, views, and feelings of the parents regarding mental distress during pregnancy and the postpartum. Field notes were made by the interviewer after every interview and were used to assist in the analysis of the transcribed audio recordings. All recordings were transcribed verbatim and were double-checked against the recordings to ensure accuracy. The transcripts were anonymised and entered into Dedoose qualitative software programme (www.dedoose.com) to facilitate data management.

Thematic analysis

As we aimed to explore insights into parents lived experiences and perceptions, data were analysed using an inductive thematic analysis approach following the guidelines stipulated by Braun and Clarke, which includes data familiarisation, generating initial codes, generating initial themes, developing and reviewing themes, defining and naming themes and writing up [52]. This method allows for the use of a constructionist epistemology (i.e. meaning and experience are deemed to be socially produced). Therefore, the analysis did not focus on individual psychologies, rather it sought to theorize the sociocultural contexts and structural conditions related to psychological distress.

Two members of the research team (MV and JB) were involved in the data analysis process to allow for triangulation. All transcripts were independently read through several times by MV to familiarize herself with the data and obtain a sense of the entirety of the data. Both MV and JB coded all transcripts. Firstly, a subgroup of transcripts from mother and father interviews were coded by identifying keywords to generate initial codes (MV and JB). This process was repeated for each transcript with previous transcripts reconsidered iteratively as codes and themes emerged with the analysis of subsequent transcripts. Next, the codes were discussed between MV and JB to arrive at a consensus regarding the initial codes and a codebook was agreed upon. All the transcripts were individually reread, and codes were updated, and the remaining transcripts were coded (MV and JB). MV categorized codes into themes and subthemes. Next, MV and JB met to discuss themes. Throughout this process, themes and subthemes were compared, modified, combined, and developed in line with new and alternative data. To ensure credibility of results, we took the themes back to the original transcripts to verify that they made sense within the actual data (i.e. the coded extracts and the entire data set). The final step involved a meeting with the first author and the senior/corresponding author to discuss emerging ideas, themes, and subthemes and to decide on the final themes that best represent the collective thoughts and experiences of the participants regarding the social factors influencing perinatal distress (MV, DD). Interpretations were negotiated among all authors.

All study materials, including the protocol and interview questions were approved by the research ethics board of the McGill University Health Centre.

Results

Semi-structured interviews were conducted among first-generation immigrant and second-generation women (N=16, age=34.8±3.7 years, 7.4±0.73 months postpartum) and men (N=10, age=35.1±4.9 years, 7.5±0.72 months postpartum) in Quebec, Canada, and lasted approximately 45 min (see Table 1).

Thematic analysis

The thematic analysis of social (macro-level) stressors and facilitators resulted in the identification of the following three main themes (see supplementary material for Table S1 containing quotes):

- Theme 1— Cultural pressures with three subthemes: cultural differences in parenting, gender-related cultural pressures, health and baby-related practices.
- Theme 2— Health and social service access with two sub-themes: social benefits and resources, and systemic barriers in health care.
- Theme 3— Discrimination with three subthemes: physical appearance or parental-related discrimination, gender-related discrimination, ethnic-related discrimination.

Table 2 contains a summary of the subthemes reported by group.

1. **Cultural pressures**.

1.a.i. *Cultural differences in parenting*.

First-generation immigrant men and women and second-generation immigrant women described clashes of cultural differences between the Canadian and heritage cultures concerning parenting approaches that affected their psychological well-being during the perinatal

Table 1 Characteristics of participants

	First generation immigrant men (*N* = 8)	Second generation immigrant men (*N* = 2)	First generation immigrant women (*N* = 10)	Second generation immigrant women (*N* = 6)
Demographic variables				
Age (mean years)	35.36	31.99	34.45	34.06
Education – post secondary education N (%)	8 (100%)	1 (50%)	10 (100%)	5 (83.3%)
Employment Status - Employed N (%)	8 (100%)	2 (100%)	10 (100%)	6 (100%)
Parity (Primiparous)	6 (75%)	2 (100%)	4 (40.0%)	3 (50.0%)
Planned Pregnancy N (%) (yes)	8 (100%)	2 (100%)	8 (80.0%)	6 (100.0%)
Ethnicity N (%)				
Eastern or Western European	2 (25%)	1 (50%)	3 (30%)	2 (33.3%)
Latin American	1 (12.5%)	1 (50%)	3 (30%)	1 (16.7%)
Middle Eastern	3 (37.5%)	0 (0%)	1 (10.0%)	1 (16.7%)
East or Southeast Asian	1 (12.5%)	0 (0%)	1 (10%)	2 (33.3%)
Northern African	1 (12.5%)	0 (0%)	0 (0%)	0 (0%)
Western African	0 (0%)	0 (0%)	2 (20%)	0 (0%)
First spoken language N (%)				
English	2 (25%)	1 (50%)	3 (30%)	4 (66.7%)
French	3 (37.5%)	1 (50%)	4 (40%)	2 (33.3%)
Other	3 (37.5%)	0 (0%)	3 (30%)	0 (0%)
Migration admission staus (%)				
Permanent resident: Economic class immigrant (Worker programs, Business programs, Provincial and territorial nominee)	5 (62.5%)		2 (20%)	
Permanent resident: Family class immigrant (family reunification)	0 (0%)		3 (30%)	
Temporary Resident (foreign temporary worker)	1 (10%)		1 (10%)	
Temporary Resident (foreign student)	1 (10%)		3 (30%)	
Canadian born abroad	1 (10%)		1 (10%)	
Years in Canada (mean years)	11		15	
Time with partner (mean years)	7.25	7	9.20	8.50
Household Income				
< $79,000	3 (37.5%)	0 (0%)	3 (30%)	0 (0%)
80,000–$149,000	5 (62.5%)	2 (100%)	3 (30%)	6 (100%)
> $150,000	0 (0%)	0 (0%)	4 (40%)	0 (0.0%)

Table 2 Summary of subthemes reported by group

	First generation immigrant men	Second generation immigrant men	First generation immigrant women	Second generation immigrant women
Themes				
1. Cultural pressures				
1.a.i. Cultural pressures regarding parenting	✓	✓	✓	✓
1.a.ii. Gender-related cultural pressures	✓	✓	✓	✓
1.a.iii. Health and baby-related practices	✓		✓	
2. Health and social service access				
2.a.i. Social benefits and resources	✓		✓	✓
2.a.ii. Systemic barriers in health care	✓		✓	
3. Discrimination				
3.a.i. Physical appearance or maternity-related		✓	✓	✓
3.a.ii. Gender-related	✓	✓		
3.a.iii. Ethnic discrimination	✓		✓	

period. Women reported these clashes occurring with family, while men reported these challenges to occur at work.

First- and second-generation immigrant women identified Canadian culture as a facilitator of a more favorable parenting style. For example, a first- and second-generation immigrant woman explained that in Quebec parenting is less focused on the hierarchy between the child and the parent, while their heritage culture promotes authoritarian parenting, to which they are opposed.

On the other hand, first-generation immigrant men and women and second-generation immigrant women identified their heritage cultures to be more family-oriented in comparison to non-immigrant Canadian families, which facilitated their psychological well-being during the perinatal period. A second-generation immigrant mother noted greater expectations for family engagement (i.e. her parents and siblings) with her family compared to Canadian mothers that do not have immigrant parents. "*I'll be frank in saying, I'm happy to be in a Middle Eastern family where like, people invite themselves over and my parents take care of my kids like they're their own and like, take them, and my brothers will do the same. And that was really helpful post birth. And it was really helpful for my son to transition to having a sister because he felt super valued and like, he didn't feel you know, replaced at all, he was still in the big family*."

However, first-generation women, as well as both second-generation immigrant men and women reported feeling pressured to follow in heritage culture traditions for parenting, which contributed to distress in some. For example, a first-generation immigrant mother described how she was criticized and did not feel supported by her family in her choice to teach her infant one of Canada's official languages, instead of exclusively focusing on their native language. Second-generation parents similarly experienced distress due to a discordance between their chosen parenting practices and those advocated by their parents or in-laws. A second-generation immigrant woman expressed how she felt after her mother was upset at decisions that she made regarding a cultural event that was for her baby; "*I get down, I get sad, and sometimes just start crying. […] So, there's moments where I take it bad. I tend to come out of it pretty fast, but it'll hit me for few hours, and I'm just in a mood. It's not a constant thing. Like it's just whenever my mom happens to share something that's happening on her side, and it has something to do with my daughter. Like every time I have an event for my daughter it's like a big story in my family*".

First-generation immigrant women identified the respect of personal boundaries as another facilitator of Canadian culture, and conversely, the disregard of these boundaries as a barrier due to their heritage culture. For example, participants from countries like Brazil and China explained how others within their heritage culture are intrusive and give unsolicited parenting opinions and advice, while Canadian culture is more cautious in doing so, which allows them to "*lead their motherhood*".

1.a.ii. *Gender-related cultural pressures.*

First and second-generation immigrant men and women reported heritage culture influences on gender role division of labour and parental leave expectations as barriers to their well-being. A first-generation immigrant mother from China described how her heritage culture influenced her to feel anxious when her partner took paternity leave to be more involved. She found herself questioning whether he felt he had to take the leave because she was not supporting him enough and diminishing his ability for professional development. A second-generation immigrant father described the pressure from his family to take a shorter paternity leave because of his gender; *"My mother is of Latin origin, so for her, the father must do nothing. He must go to work and then the mother stays home with the baby, so she doesn't really understand why I took such a long paternity leave. She wanted me to get back to work as soon as possible*". However, this participant felt supported to take a longer paternity leave by Canadian society given the additional weeks of parental leave provided when a father takes the full amount of paternity leave available. A facilitator of Canadian culture described by a second-generation immigrant woman included a more equitable division of labor by gender. This participant explained: "*I think it had an impact* [on perinatal mental well-being] *because during my pregnancy I was not feeling well, so maybe my husband felt more comfortable doing more house-related tasks* [*cleaning, cooking, groceries*]*"*. She attributed her partner's comfort to take up traditionally female tasks to Canadian family gender roles; *"in Canadian culture it's more accepted that a man does it"*.

Negative systemic expectations of mothers in Canadian culture were signaled by first and second-generation immigrant men and women. Women reported a greater difficulty balancing new maternal expectations in addition to everyday demands (i.e. being independent while keeping up a façade that all is well, the negative impact of maternity on their careers, and difficulty asking for help). A second-generation immigrant mother described how Canadian mothers are expected to retain all the past aspects of themselves (e.g., intellectual, sexual, and physically active selves) and concurrently develop a maternal self. To make these demands possible, women are recommended to make the time to engage in self-care activities. Thus, society imposes an "*additional pressure on mothers to like, do this one more thing that they just don't have the energy to do*". First and second-generation immigrant fathers also echoed these

systemic expectations on women to go above and beyond in parental-related tasks; *"I feel like for men, just by being there, and by taking a little longer parental leave, and by trying to be involved, society feels like we're already doing a lot. And we don't have a hard time valuing that, while for women it's the opposite. It's like they always have to be perfect in everything, and then they should do like in advertisements: use washable diapers, do positive education, do child-led dietary diversification, do breastfeeding and everything. In the end, it is extremely difficult to do all of this. So, they have a kind of pressure that is immense*" (second-generation immigrant father).

1.a.iii. *Health and baby-related practices.*

First-generation immigrant parents expressed how Canadian health, e.g., mental health support, and baby-related, e.g., allowing the baby to be by the parents' side after birth, practices positively affected their mental well-being. The openness to speak about mental health and receiving care was identified as positive within the Canadian culture compared to the heritage cultures of some of the first and second-generation immigrant women. An immigrant mother captured this lived reality: *"I guess maybe it was my cultural heritage that maybe stopped me from going to get those help because you don't have that usually and so the pregnancy was harder the postpartum was harder, the breastfeeding was harder, whereas this time around, I'm like, whatever help is available and it's free, I'm taking it. And it just made my journey easier. And that's, I think it's a plus from the Canadian culture there."* Similarly, a first-generation immigrant father reported how his family discouraged him from sharing about perinatal difficulties because they attach stigma towards any negativity during this period. The perception of parenthood as "a blessing" creates a pressure on parents leading to exacerbation of mental health difficulties.

However, imposing Canadian pregnancy- or baby-related practices was a barrier for well-being among some first-generation immigrant parents. For example, a first-generation immigrant father explained how they were not able to follow a cultural tradition after birth because of Canadian health guidelines. Despite understanding, the parents felt it was odd as it is common practice in their country of origin. Moreover, a first-generation immigrant woman from Senegal attributed the constant physical tests, e.g., blood tests, during maternity care to Canadian culture and claimed it contributed to perinatal distress.

2. **Health and social service access**.

2.a.i. *Social benefits and resources.*

First-generation immigrant men and women reported that access to good social benefits promoted positive psychological well-being during the perinatal period. First-generation immigrant fathers explained how "*the approach of Quebec's society*" and the governmental practical support was the most beneficial facilitator of parental perinatal well-being. For example, a first-generation immigrant father expressed: "*I feel support in a way because you don't have to pay for the appointments. You can have a good doctor without paying them.[…] And then you have like the child benefit*". Similarly, a first-generation immigrant woman felt fortunate to give birth in Canada given the more supportive parental leave policies (i.e. longer maternity leave). This participant explains that she chose not to include her heritage culture within her maternity practices because she believes it does not promote women's rights to fully experience their motherhood (e.g. women must make the difficult decision to stop breastfeeding after three months to go back to work given their maternity leave policies). Moreover, a greater access to online and in-person resources (e.g. prenatal classes, lactation consultant, etc.) in Quebec was identified as a facilitator of well-being among first and second-generation immigrant women.

2.a.ii. *Systemic barriers in health care.*

First-generation immigrant men and women identified systemic barriers in navigating the health care system given the difficulty in obtaining access in Quebec. "*So, you need to beg for everything, right? You need to know everyone in order to get the service that you need, right? So, and then for an immigrant it's even harder, right? Because you don't have a tie here, you do not have history*" (first-generation immigrant father). Since many immigrants' families were not able to visit because of the pandemic, some sought professional support and perinatal services to substitute the family's support. However, access to perinatal services was limited during the pandemic. A first-generation immigrant mother explained how she had prepared to have a doula that speaks her first language as well as French to have someone to support and advocate for her in case of an emergency during childbirth; "*I was afraid that I wouldn't be able to a certain point to speak any other language other than my mother tongue. Just because of, for example, if I had to take any medications, strong medication*". However, due to COVID-19 restrictions she was not able to have her doula with her in person during delivery, which exacerbated her distress.

3. **Discrimination**.

3.a.i. *Physical appearance or parental-related discrimination.*

Both first- and second-generation women reported encountering judgments and negative assumptions related to their physical appearance and/or their maternity, and for some, these encounters increased their levels of distress. Some women noticed others giving them strange looks in public and speculating about their physical situation (e.g. whether they were overweight or pregnant, or their age). Some women expressed social difficulties at work due to their pregnancy. A first-generation immigrant mother explained that her superior at her employment posed harmful assumptions about her competency, posed acts of harassment, and tried to fire her without cause, which caused stress and made it difficult to complete routine tasks without scrutiny. She noticed that this harassment began when she did not want to reveal her family planning to her superior and got worse during her pregnancy.

First and second-generation immigrant women reported maternity-related discrimination in the form of dismissive encounters with health care professionals during maternity care. Participants reported that these encounters contributed to self-doubt, stress, and anxiety. An immigrant mother describes it well: "*I was really doubting a lot of what I was seeing in the child and it [comments from health care professionals] contributed to that. Even if there is such a little thing, I will start to stress out. (…) It was really to the point where I would say it attacked all my sensations…not my feelings of my…my perception of how I saw myself as a person, how I function, to be able to rely on my knowledge and on my judgment.*" Conversely, a 36-year-old second-generation immigrant mother described receiving constant concerns from health care providers regarding her pregnancy due to her age and weight. Constantly feeling judged by health care providers based on physical features was a source of stress for this participant.

Male participants also reported experiences of parental discrimination based on their physical appearance. A second-generation immigrant father explains how generally he does not notice negative expressions from people in public when he is walking with the stroller, however, *"it seems that the more affluent neighborhoods I go to, the more I will get a "secondary look". And I'm not sure if that's because of being a father in the situation or if that's because of, yeah, being somebody who's heavily tattooed and the way that I generally dress seems to look a little bit more aggressive to some people. So, that may be a barrier* [to perinatal mental well-being] *as well".*

3.a.ii. *Gender-related discrimination.*

A common sentiment expressed among first and second-generation immigrant men was that their paternal role was devalued by society. Participants highlighted not enough gender equality in father's rights and parenting issues in Quebec. A first-generation immigrant man described feeling as though from one day to the next the significance of the parental role was exclusively for the mother, and that fathers have difficulty establishing their role within the family and society. This participant pointed out that the inequality between mothers and fathers in Quebec is reflected in the scarce number of resources available for fathers compared to mothers. Similarly, other participants expressed not receiving support as fathers during maternity care. A first-generation immigrant father described his experience during prenatal courses: "*I found that there was five hours on motherhood and one slide about fathers concerning what they can do to help the mother*". A second-generation father described how any requests from the father during childbirth were dismissed by the medical staff, whether it was as mundane as emptying the trash in their room, or important, such as, advocating on behalf of his partner that asked him to communicate on her behalf. "*The mom let me know when the nursing staff were not there that she had reached a point where she was no longer capable. However, when I transmitted the message to the nurses, because it was me and not the mom…but the mom was unable to say it, it wasn't taken into account, so it was things like that, that gave me the impression that because I'm a dad and not a mom, we don't take it into account".*

A first-generation immigrant father explained how his partner emphasizes that the mother is the most important parent for their child and devalues his paternal role within the family. This participant attributes his partner's attitude towards fatherhood to maternity pages she frequently engages with on social media. These comments were difficult to experience because it created a hierarchy between them regarding their child. Lastly, a first-generation immigrant father explained how he experienced discrimination by work colleagues regarding his choice of paternity leave duration, as they deemed it to be too long, despite it following the governments regulations of permitted parental leave; *"the only bit of discrimination I felt was when they knew: "he's now taking two and a half months off, he's taking eight weeks plus five weeks". That got people talking; "how come the father is taking that many weeks off?". It was a little more than two, three people, who criticized me. And I said it did not affect me. But it was difficult".*

3.a.iii. *Ethnic discrimination.*

First-generation immigrant participants experienced ethnic discrimination in society and during health care, which influenced their access to and quality of services and contributed to stress. After delivery, a first-generation immigrant mother noticed that the medical staff

would check up on a Caucasian mother in the same room yet neglected to check on her and forgot to give her a transfusion after she had experienced a difficult labor. "*They just kind of forgot about me after I gave birth. Like, I just, and I felt it was, I don't like the word racial, but like ethnic. Like, anyways, because like the lady next to me, she was Russian and they were in there, like, ever so often. Yeah. So, I felt very neglected during that time*". A first-generation immigrant father suspected that his partner's severe pain during labour was dismissed by health care professionals because she is not Caucasian. This participant described how health care professionals in Quebec may perceive individuals from Latin America or Africa to have a higher threshold of pain, so they consider their comments about pain as an exaggeration and dismiss them. "*So, they're like, "okay, no, they're just exaggerating, they're just exaggerating. They're, not that, that bad. They can withstand more, let's give attention to other people and she can come afterwards". I have no proof to say that was the case, but it did end up feeling like that*".

An immigrant father described an upsetting encounter with colleagues after his baby was born. He felt uncomfortable after the birth because his colleagues "*would refer to her (his baby) as a brown baby. And, for me, it was just a baby. For them to like say a brown baby was like okay…And it is just one of those moments that makes you really realize, "oh yeah, these people are basically different than me*".

Discussion

Our study explored first- and second-generation immigrant parents' lived experiences of social stressors and facilitators of perinatal psychological well-being. Although immigrants are a heterogenous group with varying experiences, our findings highlight the perceived impact of macro-level factors, such as a country's social climate, health and social policies and services, and social aspects of acculturative stress on the perinatal well-being of first and second-generation immigrant parents. First-generation immigrant parents reported greater adaptation stressors (i.e. mental health stigma, health care access), and ethnic discrimination concerns related to their distress.

Participants experienced cultural pressures in a multitude of contexts concerning parenting decisions during the perinatal period, a distinct form of social stress with potentially significant implications for the parents and their offspring. First and second-generation immigrant parents reported greater family-oriented values in their heritage culture as a strength given increased familial support. However, participants felt pressured to follow heritage cultural traditions concerning parenting practices, which contributed to distress in some. Similarly, first- and second-generation immigrant women in North America experienced postnatal stress due to conflict with their parents or in-laws regarding a discordance between their chosen parenting practices and heritage cultural practices recommended to them [53, 54]. A recent Swedish study found first-generation immigrant women reported parenting challenges related to balancing the Swedish system and their heritage cultural practices [55]. We found that second-generation immigrants may experience certain perinatal stressors including navigating host and heritage cultural practices and demands, which has been found in previous research outside of the perinatal period [56, 57]. Some cultures place a strong value on familial relationships, and therefore obtaining familial approval and social support [54, 58]. Future research should go beyond examining social support and examine whether there are some moderating variables (e.g. identification with heritage culture) that could explain when heritage culture can reduce or increase the risk of perinatal mental health distress. More specifically, in our study, women reported cultural clashes and pressures occurring primarily with family, while men reported these challenges to occur at work. Similarly, a qualitative study found that while both men and women reported feelings of inadequacy during the perinatal period, men's feelings were expressed as stress related to work expectations, while women's were expressed as depressive symptoms related to parenthood expectations [59].

Culture can prescribe acceptable norms for parental behaviors associated with gender role and are another cause for intergenerational conflict within the family [60, 61]. First and second-generation immigrant parents reported Canadian expectations for mothers, and heritage culture influences on gender role division of labour and parental leave expectations as barriers to their well-being. Immigrant women experience a greater burden of family and household responsibilities due to heritage cultural norms [55]. According to first-generation immigrant mothers in our study and another Canadian study [62], immigrant fathers have chosen to maintain traditional gender roles (i.e. less engagement in emotional and family-related practical support) despite the increasing shift towards greater father engagement in the host culture [63]. These expectations negatively impacted women's psychological well-being due to feelings of loneliness in the host country and the lack of social support women would normally obtain by extended family in their country of origin [55, 62], which are both risk factors for perinatal depression. While we did not find gender-role conflict among first-generation immigrant fathers in this study, other research has found that changes in gender roles for fathers after immigration can cause symptoms of stress and depression due to experiences of changing family roles, limited work opportunities, and discrimination [60, 64]. Conversely, second-generation parents

reported greater gender role division of household labour and accompanying psychological well-being benefits, which could be explained by greater exposure to host culture.

First-generation immigrant parents explained how Canadian health and baby-related practices positively affected their mental well-being, notably regarding mental health care. While we found that first-generation immigrant parents reported cultural context for mental health stigma, this was not found among second-generation parents as they reported being positively influenced by the host country's openness towards mental health. In a Canadian study, first and second-generation women described how their parents and in-laws did not understand the concept of postnatal mental health problems, and consequently were unsupportive when participants communicated their concerns [53]. In the latter study, first- and second-generation immigrant mothers found stigma to be experienced similarly regardless of their immigration status [53]. However, this difference in findings compared to our study may be due to their purposeful selection of second-generation Canadians who self-identified as having a strong connection to their home culture. The literature among immigrant mothers' perinatal mental health suggests that mental health stigma may be embedded within cultural identity, thus women conceal their distress because they experience shame and fear the stigma attached to mental illness within their family and ethnic community [54, 61, 62, 65]. Another perinatal study reported that first-generation immigrant women expressed a mistrust of social services, which may have affected their psychological well-being and their willingness to seek support, however trust was found to increase with the time spent in host country [55]. The participants in our study have been in Canada for a longer amount of time, which may explain why they did not report mistrust. For more recent immigrants, it may be important for immigrant-specific resources to include information on social services.

Evidence suggests that immigrants report higher levels of happiness when there is a qualitatively good government, e.g., policies and services that create a healthy and safe environment [56]. Although first-generation immigrant men and women expressed that access to supportive health and social benefits and resources promoted positive psychological well-being during the perinatal period, participants identified systemic barriers in accessing and navigating the health care system. Our results mirror findings from other studies among immigrants highlighting the additional challenges in accessing health care generally [66] and during the perinatal period [55] given their unfamiliarity to the health care system, and further emphasizes the importance of having a social network that may provide helpful health system information or health care provider contacts. Similar to our findings, first-generation immigrant mothers in Sweden expressed that obtaining health care was significantly easier once they knew more about the Swedish system [55]. Moreover, our findings recognized how marginalized communities have been disproportionately impacted by COVID-19 policy responses. During the COVID-19 pandemic, changes occurred both socially and in maternity care, which have been found to be associated with poor mental health symptoms, e.g., posttraumatic stress, anxiety, depression and loneliness, in the general population [67, 68]. Second-generation immigrants have a greater knowledge of the host culture and may have more resources and social capital. During perinatal period, many cultural customs and expectations rely on the support from extended family [61], which was particularly challenging considering travel restrictions during the pandemic. While interventions and resources directed at parents should be bolstered during periods of crisis, such as a pandemic, it may be particularly important among first-generation immigrant parents who may experience greater difficulties navigating the healthcare system both practically and given cultural differences.

The perception of discrimination in everyday contexts were reported to impact parents' psychological well-being, mirroring findings of other studies in the general population [69, 70], among male and female first-generation immigrants [69, 71–73], and among women during the perinatal period [74–77]. A meta-analysis [71] found this relationship to be present across a wide range of well-being measures and for both personal and group discrimination. High levels of discrimination have also been reported among second generation immigrants [78, 79], and have a negative effect on life satisfaction levels [80]. Discrimination over the life course may contribute to the deterioration of mental health for first and second-generation immigrant parents. Research suggests that heightened stress responses and negative coping behaviours (e.g. substance use or detachment coping) mediate the relationship between discrimination and physical and mental health [81–83]. Some researchers have found differences in discrimination sensitivity among first- and second-generation immigrants related to cultural-based variations (e.g. having one native parent, majority language at home, religious affiliations, collectivist vs. individualistic cultures), ultimately impacting the level of emotional distress [84, 85]. More research is needed to examine the mechanisms and buffers through which environmental stressors like discrimination impacts immigrants' mental health, such as cultural differences.

Some forms of discrimination encountered by our participants add to other specific stressors faced by immigrants. Male and female participants reported encountering judgments and negative assumptions

related to their physical appearance (e.g. weight) and/or their maternity (e.g. parental or pregnancy discrimination at work), and for some, these encounters increased their levels of distress. Other studies have found that women report pregnancy-related discrimination at work [86, 87], and communication problems [88] and weight-related stigma/discrimination during prenatal care [89]. Despite policies in place to support the well-being of parents in Canada, the USA, and the UK, women continue to report pregnancy discrimination at the workplace (employment termination or demotion upon their employers learning of their pregnancy or when returning to work after maternity leave, negative stereotyping, and negative or rude interpersonal treatment because of pregnancy) [86, 87, 90, 91]. A Canadian report in 2021 found that a third of employees that had taken maternity leave experienced pregnancy discrimination [92]. Perceived pregnancy discrimination has been found to indirectly lead to adverse health outcomes for mothers (postpartum depressive symptoms) and their babies (increased medical appointments, lower birth weights and gestational ages) via the mechanism of maternal perceived stress [93]. It is possible that immigrant parents may not be aware of the legislation that prohibits workplace discrimination related to pregnancy, therefore, parents should be provided with this information and relevant resources. Providing training to managers that is family-supportive could help improve employee job satisfaction and better health among parents [94]. However, more research is needed to understand discrimination and paternal mental health.

Among men, barriers to perinatal mental health included society undervaluing the paternal role, not receiving consideration or support during maternity care, and first-generation immigrant men reported gender inequality in parenting issues. These identified subthemes resonate with findings from previous studies on fathers' prenatal experiences that reported men feeling excluded during the labour of their partners and that information and support from healthcare providers had a positive influence on paternal well-being (for systematic review, 38). While the importance of father involvement during the perinatal period has been determined, men's role within the family continues to be undervalued and they are underrepresented in perinatal research, interventions or parenting programs, particularly among minority men [60]. It has been found that men are reluctant to seek mental health treatment due to gendered stigma, with first-generation immigrant men less likely to access mental health or social services compared to their non-immigrant counterparts [60]. Therefore, first-generation immigrant men may experience structural and cultural barriers in accessing services. Research that disregards men's emotional experiences related to migration and their expressions of psychological distress reinforces the socially constructed misconception that men are invulnerable. This leads to gender disparities in the screening and treatment of distress during important transitional periods such as parenthood. The development of interventions and programs that are culturally safe by including men's coping styles and the particular needs of immigrant fathers are needed [60].

Intersecting with these social forces, ethnic and racial discrimination need to be considered because immigrants are discriminated against by both the dominant racial group and other minorities that are better situated [7]. Ethnic discrimination was reported as an important source of stress and a barrier for health care among first-generation immigrant participants in our study. More than half of first-generation immigrants in Canada have reported experiences of discrimination during health care [95], and the longer immigrants live in Canada, the more likely they are to experience racially based discrimination, harming their mental health [71, 96]. In North America, women from different minority ethnic backgrounds have reported experiences of ethnic or racial discrimination (e.g. harmful racist assumptions and discriminatory treatment) during maternity care [74, 88, 97, 98], which can lead to unsatisfactory health care interactions, a decreased access to quality care [74, 98] and poorer perinatal psychological health [74, 77]. Our study supports the importance of putting practices in place to assess ethnic discrimination in health care settings, requiring anti-bias training for health and social service providers and creating pregnancy support groups in community settings to decrease the impact on perinatal stress [74].

Strengths and limitations

A qualitative approach enhanced the extensiveness and depth of understanding of mental well-being and its perceived social determinants among immigrant parents [7, 37]. Methodological rigor was ensured by using measures for credibility (triangulation, participant right to withdraw at any time, verifying themes with original transcripts, debriefing sessions with research team), transferability (greater and more broad implications of this research in terms of the field of vulnerability during important transitional periods in life), dependability and confirmability (iterative questioning during data collection, double-checking transcriptions against recordings, in-depth description of study methods, and the maintenance of an audit trail). During the preparation of the interview guide, we had two colleagues that were unfamiliar with the project, examine the guide and flag unclear questions. Semi-structured interviews allowed the comparison across individual accounts and the flexibility to follow up particular points and perspectives. Moreover, individual interviews allowed parents

to express their views freely, avoiding the influence of social desirability biases found within groups contexts. We maximized the inclusion of several ethnic groups, which allows us to broaden the reach to a more culturally diverse sample. Few studies have considered generational differences in social factors that contribute to perinatal well-being. Another strength of our study derives from the involvement of fathers, which has been largely absent in immigrant perinatal mental health research. This study reported according to the "COREQ checklist for comprehensive reporting of qualitative studies" [99].

Our study has limitations. While we did not recruit participants that could not communicate in French or English, Canadian population data suggests that the proportion of first-generation immigrants with knowledge of at least one of Canada's official languages is very high (93.2%) [100]. We only interviewed participants living in Quebec, potentially limiting the scope to the Canadian setting. Moreover, our findings may not generalize to refugee or asylum seekers. Nonetheless, our results identify potentially modifiable barriers and facilitators to immigrant parent's well-being. We interviewed less second-generation immigrant men because we had difficulty recruiting men for the qualitative portion of the study, which may have affected saturation. This is consistent with other studies among fathers [59, 101]. However, second-generation fathers in the study described the phenomenon of parental distress and social factors influencing psychological well-being in the same way, and that may be the essence of the lived experience of parental stress in Quebec. Despite these limitations, our findings could potentially inform policies and interventions by elucidating social factors through which cultural diversity and migration may have an impact on parent's experiences of perinatal well-being, and reduce gender disparities in the screening and treatment of perinatal distress. Future perinatal mental health research should consider stressors associated with the immigration and cultural diversity among refugee or asylum seekers, unemployed, and/or sexual minority parents.

Conclusions

Our findings identified different macro-level factors influencing perinatal well-being perceived by men and women from various ethnic and immigration backgrounds during the perinatal period. Given the stressors identified due to cultural pressures and migration-related vulnerability, interventions and resources directed at first-generation immigrant parents should be bolstered during periods of crisis (e.g. pandemics) and include more family-related support for first-generation immigrant women and employment-related support for first-generation immigrant men (e.g. support negotiating family workload and work-life balance). Furthermore, our study highlighted the effects of perceived discrimination as a psychosocial stressor on mental health outcomes, which is important in our understanding of health vulnerabilities for first-generation immigrant populations that are at increased risk for experiencing cumulative and chronic stressors. These findings suggest the need for continued efforts to challenge and eliminate discriminatory practices. This can be done by requiring anti-bias and culturally sensitive training for health and social service providers, family-supportive management, developing interventions and programs promoting the inclusion of paternal well-being in maternity care, and creating culturally safe pregnancy support groups in community settings to decrease the impact on perinatal stress. Understanding what immigrant parents perceive to facilitate or hinder their psychological well-being can help inform the development of tailored evidence-based programs and policies to better meet the mental health needs of Canadians and reduce gender and cultural disparities in the treatment of perinatal distress.

Perinatal psychological distress is a serious public health concern as it involves long-lasting adverse effects on the well-being and social adjustment of parents and their children [38, 40, 42, 102]. This paper explored how social factors contribute to mental health through an ecosocial framework in which these factors operate at multiple levels across the life course. There is a need to obtain reproductive justice to address social inequities in health and this study contributes to the growing body of evidence on mental health in vulnerable populations.

Supplementary Information

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Supplementary Material 1

Supplementary Material 2

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Author contributions

MV, DDC, and BD conceived and designed the study. MV and JBDS conducted the interviews. MV and JBDS conducted the thematic analysis and interpreted the data with input from DDC. The manuscript was written by MV. MV, DDC, FD, DD, CG, SM, TP, and BD critically reviewed and revised the manuscript. All authors approved the final manuscript.

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Data availability

Owing to the confidentiality of the information, the datasets analyzed in this study are not publicly available. Upon reasonable request, they can be made accessible through the corresponding author.

Declarations

Ethics approval and consent to participate

All study materials, including the protocol and interview questions were approved by the research ethics board of the McGill University Health Centre. Informed consent was obtained from all individual participants included in the study.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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