Original Article

Exploring the complex context of Canadian Indigenous maternal child-health through maternity experiences: The role of social determinants of health

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Abstract

Background: The marginalization of Indigenous women in Canada has resulted in adverse pregnancy and infant health outcomes. While the epidemiological research focuses on statistical evidence, it fails to address the context and underlying causes, including social determinants of health. Despite clear evidence of how social determinants influence health, there is limited research on Indigenous women's perspectives and experiences. Indigenous women's narratives during pregnancy, birth and the early months of parenthood are critical to understand the underlying causes and proposed solutions. This research demonstrates how Indigenous women's maternity experiences are embedded within their historical, social and cultural experiences, thus explaining the importance of addressing contexts related to social determinants of health.

Methods: Through an Indigenous and decolonized lens, maternity narratives from ten indepth interviews were conducted with Indigenous birth mothers in British Columbia, Canada. Thematic content analysis findings contextualize Indigenous maternity experiences within proximal, intermediate and distal determinants of health.

Results: The proximal determinants include barriers to education, employment, income, food (in)security and a lack of safe and affordable housing and homelessness due to urban migration and violent relationships. Intermediate experiences included barriers to accessing maternity healthcare, including geographic barriers and experiences of racism. Distal determinants including traumatic narratives related to immediate and intergenerational impacts of colonialism, including the Indian residential school system and foster care, which has impacted mental health and addictions.

Conclusion: This research contributes to expanding research on culturally safe and improved maternal-child health, healthcare and maternity research, as well as highlighting the need to address and alleviate adverse social determinants.

Keywords: Child Health; Female; Mothers; Social Determinants of Health

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Introduction

lobally, there are an estimated 370 million Indigenous peoples living in more than 70 countries (1). In Canada, there are 1,400,685 Aboriginal people representing 4.3% of the total Canadian population (2). The Indigenous population is the youngest and fastest growing segment of the Canadian population (2).

Unfortunately, as is the case in Canada, Indigenous peoples' health is comparatively poorer than the health of their non-Indigenous counterparts in countries all over the world (3,4). The United Nations Human Development Index (UN HDI), which measures educational attainment, average annual income, and life expectancy, ranks Canada as 9th overall within the world (5). However, if Canada were judged on the economic and social well-being of its Indigenous peoples alone, Canada would place 63rd out of 174 countries (6).

The social and economic marginalization of Indigenous women in Canada has negative consequences on their health (7). Despite Canada being among the lowest Infantile Mortality Rate (IMR) in the world (5.1 infant deaths per 1,000 live births (8), disparities health are observed in Indigenous maternal-child health (9). The IMR research available for Indigenous women ranges from 1.7 to over 4 times higher than Canadian rates (10,11), with Sudden Infant Death Syndrome (SIDS) being the leading cause of death (12). Indigenous populations also have higher stillbirth rates, with an estimated stillbirth and perinatal mortality at 2.0 to 2.5 times more than the Canadian average (13). Canadian maternal-child health disparities are attributed to maternal risk factors such as previous preterm birth, low weight gain during pregnancy due to nutritional limitations, smoking while pregnant, inadequate prenatal care and high levels of perceived stress (14). The higher rates of stillbirth are attributed to poor fetal growth, disorders. and congenital placental anomalies, and were often the result of diabetic and hypertensive complications (15). Disparities are also the result of lower participation rates in health screening, inadequate access and structural barriers related to remote community access, lack of public information and awareness, and issues of comfort with healthcare providers (16).

While available epidemiological the research describes Indigenous maternalchild health disparities, causal factors and proposed solutions remain a challenge. Public health initiatives are critiqued for not reaching high-risk populations, and for lack of culturally appropriate approaches (17). Health research and public health interventions are critiqued for excluding Indigenous peoples' experiences and perceptions of health, including broader social determinants.

The primary factors shaping the health of Canadians are not medical treatments or lifestyle choices and behaviors alone, but rather social determinants of health (18,19) such as income, education, employment and social supports (19). These factors are often the result of government decisions, policy, laws and regulations including distribution of money, power and resources at global, national and local levels (20). Health inequities (21) and the social determinants of Indigenous peoples' health in Canada include underlying causes related to colonization, globalization, migration, loss of language, disruptions to cultural continuity, and disconnection from land (3,22).

For purposes of this paper, the findings are organized into proximal, intermediate and distal contexts. Proximal determinants are the first layer of immediate daily conditions that impact health and well-being. These include health behaviours, education, employment and income, food security, and physical environments, including safe and affordable housing. Intermediate determinants of health include health care systems, educational systems, community infrastructure, resources and capacities, environmental stewardship and cultural continuity. Distal determinants include colonialism, racism and social exclusion, and self-determination (7).

Despite clear evidence on how social determinants of health influence health, there is limited research that includes the perspectives and experiences of Indigenous

women throughout their pregnancy, birth and postpartum period. The aim of this research was to contextualize Indigenous women's maternity experiences by providing insights into health inequities through a detailed examination of contexts related to proximal, intermediate and distal determinants.

Methods

The purpose of the research was to ask women to describe or explain, "What is this [maternity] experience like?" to understand their perspectives and identify the issues and topics that were most important to them. Ten semi-structured interviews were conducted from 29 January to 8 April 2015 in British Columbia. Each interview varied between two and five hours and unfolded differently based on the unique experiences and circumstances, as well as the amount of information each participant shared. Each interview was held in an environment where she felt the most comfortable and could respond freely. The interview included questions pertaining to sociodemographic characteristics and experiences during prenatal, labor and birth, and six months postpartum. Additional exploratory questions included experiences of maternal stress and postpartum depression.

All participants are identified using pseudonyms. Participants were selected through purposive snowball sampling. Individuals were recruited via community organizations and selected for characteristics (23) including: self-identify as First Nations, Métis or Inuit and reside in the Okanagan Valley of British Columbia, Canada; 16 years of age or over; and are currently pregnant or gave birth between January 2012 and October 2014.

Thematic Content Analysis (TCA), also known as Pattern Level of Analysis was used to sort the salient issues and identifying typical responses and themes (23). A line-by-line analysis was completed to identify word frequency, patterns and themes as a means of evoking additional conversation about the underlying phenomena, relationships among the themes that emerge, and the context(s) in which they occur. Themes were identified using MAXQDA, a software program for qualitative and mixed methods data analysis.

Results

The findings were 17 category patterns including education, employment and income, housing, homelessness, food (in)security, single parenting and relationships, violence and postpartum depression. Women spoke about their fear and barriers when accessing mainstream healthcare, as well as their experiences with foster care and history of residential school. The 17 patterns were divided into five main themes included: immediate contexts related to social determinants; stress; cultural safety; trauma; and strength-based narratives and resiliency. The themes are divided into three sections related to proximal, intermediate and distal determinants of health and well-being (Table 1).

Proximal determinants

The context of Indigenous women's maternity experiences is situated among complex, inter-connected layers. Proximal determinants are the first layer of immediate conditions that have a direct impact on health. These include health behaviours, education, employment and income, food (in)security, and physical environments, including safe and affordable housing (7).

Education

According to the 2012 Aboriginal Peoples Survey (24), Aboriginal people and specifically, Indigenous women, have lower educational attainment. Approximately 72% of First Nations people living off reserve, 42% Inuit and 77% Métis aged 18 to 44, had a high school diploma or equivalent, compared to 89% of the non-Aboriginal population. For Aboriginal women, 39% of First Nation, 27%

Determinants	Theme	Category Pattern	Number of Code System Entries	Word Frequency	Number (N=10)
Proximal determinants	Immediate context	Education	27	43	7
		Employment and Income	21	21	6
		Housing	6	12	4
		Homelessness (women's shelter)	4	8	2
	Stress	Parenting	42	58	6
		Relationships	36	42	7
		Violence	17	33	3
		Postpartum depression	4	11	2
Intermediate determinants	Cultural safety	Healthcare experiences	8	16	4
		Fears	4	8	3
		Barriers	5	6	3
Distal determinants	Trauma	Addictions	22	58	6
		Residential school	12	18	2
		Foster care attendance	8	10	1
	Strength Narratives Resiliency	Ending negative cycles	21	32	6
		Strong women	8	12	3
		Culture and Language	6	8	3

Table 1. Thematic Content Analysis by Theme, Category, Code Number, Word Frequency and Number of Participants

of Métis and 53% of Inuit women aged 25 or over had not graduated from high school (24). Of those who did not graduate, 34% of First Nation women indicated that pregnancy or taking care of children was the main reason for not completing their education (25). Education impacts employment, employment impacts income, and income/poverty influences access to food, clothing and shelter.

Participants expressed that the barriers to obtaining an education included pregnancy and lone parenting, lack of support and access to day care, as well as financial barriers associated with tuition and training costs and living expenses. All the participants identified finances as the main barrier.

Income

Although there is no set definition of poverty in Canada, the low-income

threshold in Canada is \$41,568 for a family of four (26). Statistics illustrate that more than 36% of Aboriginal women, compared to 17% of non-Aboriginal women, live in poverty (27), and that poverty affects 52% of Indigenous children. According to Statistics of Canada in 2011, 21.9% of Aboriginal households had incomes below the low-income cut-offs, compared to of non-Aboriginal households. 12.4% Many Indigenous low-income families, particularly lone parent Indigenous mothers can barely afford to pay the rent and put food on the table, let alone pay for dental care, eyeglasses, school outings, sports equipment for their kids, internet access or prescription drugs. These are things that most people in Canada take for granted and would consider necessities.

Among the participants, most (7/10 participants) were below the Canadian low-

income threshold. They struggled with financial stress associated with paying for rent, groceries, utilities, transportation and miscellaneous expenses. Lisa expressed how the stress and worry about how she was going to pay for everything affected her:

"I'm doing the best I can [tears rolling down her face, she hugs her two-year-old son and kisses him on top of his head]. There are some days I just don't want to get out of bed, but I know I have to for my kids. I gotta be strong for them. But honestly, some days it's tough and I honestly don't know how I'm gonna pay for everything." Food (in)security

Low-income levels and poverty also determine food access, food availability, nutrition and food security. According to Chen et al. 27% of Aboriginal people living off-reserve and 32% of lone mothers with children experienced "any food security," a concern that there will not be enough to eat because of lack of money in the previous 12 months. This concern was expressed by Donna who is a single teenaged mother living on assistance. In addition, 24% of Aboriginal people living off reserve and 28% of lone mothers experienced a "compromised diet" where the quality or quantity (or both) was compromised because of the lack of money (28).

Of the five participants who struggled with financial stress and worry about money, three indicated they have experienced stress around not having enough food to eat and worry that their children were not receiving adequate nutrition.

"Some months I barely have enough to pay for rent and bills or food. Not to mention the cost of formula. We use the food bank and we get bread from the Friendship Centre, but [long pause; there are tears rolling down her cheek] but... [long pause as she chokes back tears as she tries to communicate with me] but... it sucks when you're waiting for your next cheque just so you can go get groceries." (Donna)

"We use the food bank and the good food box, but I worry sometimes that my kids aren't getting enough fruit and veggies. Cuz in the winter, it gets expensive." (Lisa) Housing

In addition to financial stress related to adequate access to nutrition, the participants also expressed concerns about access to safe, adequate and affordable housing. According to Stat Can (2008), 15% of First Nation, 3% of Métis and 31% of Inuit people, compared to 3% of the Canadian population live in crowded dwellings. In addition, 28% of First Nation, 14% of Métis and 28% of Inuit, compared to 7% of the non-Aboriginal population live in dwellings in need of major repair (29).

Five of the participants struggled finding adequate and affordable housing, as well as the stress associated with moving and having enough money to cover rent. Two participants had encountered difficulties accessing housing due to long wait lists and barriers associated with the National Occupancy Guidelines. According to National Occupancy Guidelines, there must be enough bedrooms for each member of the family and opposite-sex children over the age of 5 years cannot share a bedroom. Access to safe, affordable and stable housing was a concern for two participants who shared that they were constantly moving due to inadequate housing.

"We're constantly moving. I swear to god we've moved like three times last year...the first we moved off the rez [reserve] and came here [to the Okanagan], then our first place was kind of a dump. It just wasn't good; so we came here [their current apartment]." (Susan)

In addition to inadequate housing, three participants indicated they had migrated from on reserve to urban areas to escape violence relationships to reside at a women's shelter. Although they were not homeless at the time of the interview, Susan and Donna were homelessness prior to giving birth.

"I lived out on the reserve and I felt like I had to get out of there. It [the violence] just got to be too much. I left. I was scared, pregnant, and had nowhere to go. So I went into a women's shelter ... I eventually got into low-income housing and finally, things were starting to come together." (Susan) Stress

In addition to adverse proximal social determinants of health, 8/10 participants felt "overwhelmed with stress." One stressor was single/lone parenting, whereby half of the participants were lone parents/single mothers. According to the Canadian National Household Survey, about one-third (34.4%) of Indigenous children (37.1% of First Nation, 29.8% Métis, and 25.8% Inuit children) lived in a lone-parent family compared with 17.4% of non-Indigenous children (30). In addition to lone parenting, participants identified parenting multiple and teenage children as ongoing challenge and stressor. an Participants also identified family issues, such as having a close family member who is sick or in the hospital or having to deal with addictions was stressful.

"I have my family that I worry about, and my mom's health. She's an alcoholic and I worry about her and her health and that's a lot of stress for me also." (Susan)

Another main source of stress was relationships with their partner. Negative maternity experiences were related with a lack of support from their partners and "bad relationships" or violence. Birth partners expressed that the child/pregnancy was not theirs, accused them of cheating and encouraged the women to abort the child.

"With my pregnancies, the dads would say, 'it's not mine' or they would encourage me to have an abortion because they weren't ready [to be a father]. And that was always a shot to the heart. So, I felt like my partner didn't want me to be pregnant."

The result of being the sole provider and parent for their children resulted in feeling alone and isolated.

In addition to a lack of support, three participants shared experiences of violence while pregnant. Violence against women is always a concern and violence against women of reproductive age is especially concerning. Younger women and women with low income and education and who lack social support (31), as well as single mothers, are at higher risk of violence during pregnancy (32). Their accounts illustrate the detrimental effects of violence against women, including low self-esteem, poor mental health and suicidal thoughts and actions. Donna's words express this:

"I couldn't take it anymore, the drinking, the fighting, and just feeling like I was a piece of shit. I hated looking in the mirror and seeing the bruises and [having] this feeling, like I was going crazy. What was wrong with me? Why? I was lying on the bathroom floor, 6 months pregnant, praying to the creator to make it stop ... [long pause, tears rolling down her face]. I thought of killing myself. I was looking for an out ..."

Susan explains that the father of her children struggled with addictions and she left the relationship due to intimate partner violence.

"Being in an abusive relationship is one of the hardest things you can ever live through. I was pregnant and I had a horrible pregnancy because of that [the violence]. I didn't have anybody to take me to the ultrasounds, talk to my belly or talk sweetly to me. Or to massage my feet. He was never there to massage my back or buy *me little things.* [...long pause, tears rolling down her cheek] I never knew what it was like to be cherished when I was pregnant. The entire time while he beat the shit out of me, all I could think is 'what's wrong with me'? I almost had my clothes ripped off me and [was] ditched on the side of the road in the middle of the night. I thought I was going to die that night." (Susan)

Both Donna and Susan have left their abusive relationships and spoke of being stronger now and that they would never tolerate violence again. However, it is difficult to leave an abusive relationship and the cycles of violence are complex and rooted in emotional and financial control, as well as feeling stuck and fearful of leaving. Susan said:

"I'm always taking him back. I'm always going through rough times with him and taking him back. I don't know what it is about him. I feel sorry for him. It took me a long time to be where I'm at now in my life. To not go back with him and to not believe his words and just stay away. Get away from the unhealthy cycle."

Support

Social support and access to supportive health care services have a positive psychosocial affect and are linked to better pregnancy outcomes (33).Most participants have support from family. In addition to family support, participants also utilized community resources and support offered by the Friendship Centers and local prenatal wellness programs. While most of the participants sought out support from local community organizations, three participants expressed that it is difficult accessing supports from reserve communities when you're not a Band member from that community. As a result, participants felt alone and isolated.

"I don't have any family here and I don't mean to isolate myself, but some days it gets pretty lonely, like it's just me and my kids." (Lisa)

Patricia grew up in foster care and she often feels alone.

"I grew up in care so, to be honest, I don't have anybody. The only person I rely on is myself. And my friends. I have good friends. But some days I just feel so alone."

Intermediate determinants

The context of Indigenous women's maternity experiences is situated among complex, inter-connected layers. The layer intermediate second is the determinants of health which include health educational systems, care systems, community infrastructure, resources and capacities, environmental stewardship and cultural continuity (7).

Health care systems

Most experiences with health care systems and providers were positive. However, participants also felt judged and fearful of child apprehension.

Because of invalidating experiences by mainstream healthcare, participants preferred to deal with things on their own. Isolation, delay or avoidance in healthseeking behaviors such as late and/or inadequate use of prenatal and other health care supports and services (34).

Indigenous mothers face unique barriers including healthcare provider's perceptions of Indigenous women (35), including negative stereotypes attitudes, beliefs, and misconception. This contributes to avoiding health care or delays seeking healthcare when it is needed (36,37), including accessing maternal health services (38). Delay or avoidance is heightened when there is a fear of child apprehension from government officials (39). Mothers under the state's gaze are fearful and this is reinforced by the overrepresentation of Indigenous children in the child welfare system (40-42); a system that is described as a contemporary residential school system (41).

Although none of the participants were involved with the Ministry of Child and Development Family (MCFD) or experienced child apprehension, three participants expressed fears about accessing mainstream health care because they were afraid of being judged and thus their children would be apprehended.

"I think there's a fear admitting that we can't do it [raise our children] or admitting that we're struggling—it's seen as a weakness—or because we [Aboriginal mothers] are scared that the kids will be taken away. That's a huge fear for me! When I think about it now, it still scares me inside, because it happens all the time ... kids are taken away. And it's scary when it does happen because I see people who struggle trying to get their kids back and they can't." Lisa shared those fears and describes how women's fear of child apprehension affects their decisions when accessing healthcare.

"I'm afraid someone's gonna judge me ... You know, my cousin ... she lost her kids. She's been fighting to get them back and ... I don't know, I guess it [dealing with things on her own] is just easier that way. I do feel so alone sometimes."

A lack of culturally safe and appropriate supports, information and resources, as well as Indigenous women's varying levels of power, choice and control over their maternal health and maternity experiences (43), resulting in a mistrust of healthcare. This mistrust further marginalized Indigenous women and impedes them from reaching out for help.

Donna: "I didn't know where to go [for help while struggling]. I think it's that, I didn't know where to go and maybe I'm scared to go, so I just dealt with it on my own."

JL: "Why don't you reach out for help?"

D: "I guess because I was scared that they'd see me as a bad mom or that I was too messed up to take care of my baby."

Rather than access to mainstream services and supports, a common theme throughout the interviews was that, Indigenous women chose to deal with it on their own, which left them feeling alone and isolated. Lisa has also struggled with her history of foster care and dealing with things on her own.

Lisa: "I've struggled with suicide. I've struggled a lot."

JL: "Have you ever reached out for help" Lisa: "Yeah, when I've needed it. My family has helped me though, a lot."

JL: "What about healthcare providers or mental health professionals?"

Lisa: "No, I'd rather not. I either choose to deal with it on my own or with family or friends. Less judgment."

Rather than reaching out to external health care providers, programs and supports, Donna also chose to deal with things on her own because there is less judgment:

"I don't really access any of the programs except the ones at the Friendship Centre. But even then, those are few and far between. I just try to deal with things on my own."

Racism

Racism perpetuates health disparities (44) and negatively impacts Indigenous people's health. In one extreme, but probably not unique case, Lisa recalled a very negative experience of racism from her family physician.

"I was in my doctor's office for a routine visit a month after my baby was born. The doctor is a recent immigrant physician. I asked her for a prescription for Tylenol, calcium, vitamin E, Polysporin and Band-Aids, because it's covered under FNIB [First Nations Inuit Health Branch]: but vou need a prescription in order for it to be covered. She asked why and when I explained I was First Nations and that it was covered, she said, 'I'm tired of you people abusing Tylenol. vou Abinationals.' When I corrected her, and said we were Aboriginal, she said, 'I'm tired of you people abusing Medicare, you're a drain on Canada's medical care.' *She refused to write a prescription and told* me that if I had a headache, I could make an appointment and that she would write me a prescription for two Tylenol then. Or, if I cut myself and needed one band-aid that I could come in and she would write me a prescription for a Band-Aid then. When I walked out of there, I have never been so embarrassed in my life. It was so degrading. I felt terrible. After I left the office she came out to the waiting room and spoke to her secretary that she couldn't believe that I would even ask for a prescription for Tylenol. There were people in the waiting room and I was so embarrassed. I'm still embarrassed when I see that secretary downtown. I was really upset. You can't not give it to me. I wasn't asking for a controlled substance or even a prescription drug, I was just asking for over the counter medications. I didn't know what to do, so I phoned Aboriginal Affairs

and the lady from there said 'well, find another doctor.' But the truth is, she's the only one in town and I was so humiliated and embarrassed that I'll probably never go back again."

Barriers

Indigenous women who reside in rural and remote reserve communities are uniquely impacted by small community dynamics and access to services and supports. In addition to experiences of racism. judgment, and fear of accessing healthcare, one participant highlighted the lack of patient/client confidentiality, specifically when accessing abortion services on reserve. Previous research found barriers to abortion services, including geographical distance (45). Indigenous women have expressed a concern for the absence of confidentiality in small communities and lack of anonymity when dealing with preauthorized travel (46). Indigenous women have expressed a need for a model of care wherein their health concerns are addressed in an integrated manner, and where they are respected and given the opportunity to shape and influence decision-making about services that impact their own healing, including access to information on birth control and abortion services (16,47).

Resources

Indigenous women also expressed their experiences of barriers when accessing programs during scheduled hours at specific locations, as well as transportation. Programs are often scheduled according to the needs of the organization, rather than the needs of women.

"Some of these programs aren't very realistic and you have to conform to their times and locations." (Mary)

This issue of access is further elaborated by Susan:

"Our emotions aren't on a schedule. For healthcare providers and program people to be present is important too. Just being there, listening, having tea and just talking is good. Sometimes you just need to feel like you're not alone in this world."

Distal determinants

The third layer is distal determinants. That includes colonialism, racism and social exclusion, and self-determination (7). Colonialism, including the Canadian residential school system (48) is the guiding force that has shaped Canadian history, politics, policies and practices, society, economics and the context of Indigenous people's contemporary realities. Examining the historical and accumulated intergenerational effects of colonization is imperative to understanding contemporary Indigenous peoples' health (49) and the intergenerational effects on women and is a negative determinant of health for pregnant women and mothers.

Residential school

The direct intergenerational impact of colonization was apparent in conversations that linked residential school experience with alcoholism, violence, depression and poverty. Susan explains that "we carry out a lot from our past and I don't know how anybody can't."

"Our parents and their parents before us ... they went through all the residential school stuff. My mom, she was abused. I think that's why she drank ... she went to residential school and went through all that [physical and sexual] abuse too. She was trying to survive." (Lisa)

Susan talked about her mother's experiences of residential school and how she struggled with depression.

Susan: "My mom went to residential school ... and she had a nervous breakdown when we were young and she never got back from it. It was life-changing for her and I saw her go through those changes. I saw her live the good life, from that to depression. I remember her just sitting there at the kitchen table being a zombie. Not talking to anybody and not all there. And I didn't want that for myself. And seeing my mom go through that really gave me some perspective."

JL: "What do you mean like a zombie? Do you mind sharing what it was like?"

Susan: "She was in the house but she wasn't ever present, like really there. She always shooed us away. She didn't want us to see her like that."

Foster care

In addition to parental residential school attendance, Lisa's earliest memories were when she and her two siblings were apprehended and placed in foster care as a result of her mother's addiction.

Lisa: "We were put into foster care [in a home]. But after three months of going through treatment and stuff, they [her parents] called to get us back but the ministry told them that we had already been adopted out. When my mom found out we were adopted out, her heart broke. She was heartbroken. She said she burned her pictures of us because it hurt her so much. She gave us up."

JL: "Do you mind sharing how you feel when you say that she gave you up?"

Lisa: "[... Long pause]. I feel angry. But I forgive her, she tried. I think she did the best she could and I learned a lot from her. I also learned from my step-dad because he is so patient and calm. He's been through his demons too so he's just like my mom. I learned from experiences. I learned from the people that I looked up to. I learned from them."

JL: "Do you think your experience has impacted your kids or on you being a mom?"

Lisa: "Definitely. It's not that I think about it every day, but it's definitely a part of me. I struggle sometimes... not so much with drinking or drugs, but I feel sad some days..."

JL: "So, what happened?"

Lisa: "By the time I was 12, I was in 14 different homes. Fourteen different foster homes! From a baby, I was in fourteen different homes. Wow, that's sad. That's not normal. Every time I had to leave, for whatever reason ... I would put all my stuff in a big black garbage bag, like it was garbage. But it was all I had. [There is a long pause as she looks down. When she looks up, there are two tears rolling down

her cheek]. Like I was garbage. Like I don't matter."

Not only did residential school impact the participants, but Mary also explained that her partner was adversely affected as a father due to his parents attending residential school. She attributes his parenting style and lack of attachment because "he's missing that unconditional love" between parent and child, because he didn't have anyone to take care of him. She periodically said he was homeless throughout his teenage years and struggles with addiction, which consequently affects his parenting and attachment to his children and his relationship with Mary.

Warrior women

Despite adverse histories of colonization, barriers associated with adverse proximal social determinants of health, stress, and invalidating experiences related to racism, Indigenous women's stories of resilience, persistence and strength illuminate their overcoming experiences of adverse circumstances and working to end negative cycles to create a better future for themselves and their children. the women's narratives as warrior women are inspirational. Stout et al. caution that, "with surprisingly few exceptions, work dealing with Aboriginal women has tended to be highly problem-focused, and it has pathologized these women's agency and realities." Therefore, it is important to include and highlight Indigenous women's strength-based narratives, persistence and resiliency as warrior women (50).

"I come from a long line of strong women. My grandma was also abused by my grandfather and she had a tough life, let me tell you. She got through it. And it's that warrior woman in all of us that we pass down. It's that strong blood and we can't give up because of our babies. We were taught not to give up on our babies and to take responsibility." (Mary)

"We are built tough. Creator gave us something extra as women and when we need an extra bit, we can dig deep and we know it's there. Don't give up! Find that *little bit extra to help you on your journey."* (Susan).

"I was very fortunate to have strong women in my family and we take care of each other. We shared our teachings with each other ... When days get tough, you can't give up. You got to keep going for these babies. We were taught not to give up on our babies and to take responsibility because babies are a gift." (Lisa)

The participants were "proud" of who they were as Indigenous women and mothers, and proud of their children. They drew strength from their culture, its teachings, and their Indigenous identity.

"As a mom, it makes me proud because I'm teaching them how to be proud of who they are and what they do and how they speak. I am proud of our culture and teachings and the way that we live." (Lisa)

"To be Indigenous for me is to be free to be who I am. I'm St'át'imc and Blackfoot. So that's my identity. So, my culture and my spirituality come first. I want him to go to ceremonies. He will go to ceremonies with me. It's important to me that he cherishes ceremonies and language and is proud of who he is." (Mary).

Despite her adverse experiences, Susan hopes to continue her education and to support other Indigenous women.

"You're not alone in your experience. Women are strong. A lot of people think they're not. You need someone to say that. Yes, you're pregnant and you may be alone. You're strong, you're making a human being! I make humans, what's your superpower?" (Susan)

Intergenerational strength and resiliency were evident in the maternity narratives that built on the past to create a better future for their children. Wanting more for their children and being a catalyst for change included ending negative cycles and learning from past mistakes.

"Enough is enough. Why would I ever want to put my children through that? Why would I want to give them a hard life, when I could save them from all that hardship? I just think about all the alcoholism in my family and the child abuse and I don't want my kids to go through that. I do not want them to see that. I want to give them the best possible upbringing I can and I want them to have possibilities." (Lisa)

"I want more for my kids. I remember thinking, when I was little, when all this [child apprehension] was going on, that I was going to have kids and I would never treat my kids like that. Even at 5 years old, I said I would never treat my kids that way. So, I think that's where that totally comes [from]." (Patricia)

Discussion

Indigenous women's narratives and experiences during pregnancy, birth and the early months of parenthood are critical to understand the underlying causes related to maternal-child health disparities and inequities, as well as the proposed solutions.

determinants Proximal of Indigenous experiences women's maternity how education, income, demonstrate employment, housing, and food (in)security impact women and their infants, children and families. This includes pathways, stressors and barriers related to birthing and raising children, while also addressing complex and embedded midstream (intermediate) and upstream (distal) contexts and interventions. Unfortunately, due to embedded racial stereotypes and racism towards Indigenous women in Canada (51)and the continued marginalization of Indigenous women's voices and experiences, too often Indigenous women are blamed for their 'poor choices' and individual behaviours. These attitudes fail to take into consideration, the complex context of Indigenous women's lives and circumstances. Therefore, there is a need to "study up" and redirect our attention to focus solely on individual behaviors and immediate or proximal social contexts (52). Indigenous women's narratives demonstrate the complexity of contexts that are also embedded within midstream

determinants such as access to healthcare services and supports. Indigenous women face barriers when accessing mainstream health care. Barriers are related to geographic distance and a lack of sustainable funding for women's health. In addition, there are barriers to maternal, reproductive and prenatal health care services (47,50) including experiences of racism, fear, and a lack of confidentiality when accessing maternal health care. This was particularly apparent from the women who shared that they would rather deal with things on their own, or "suffer in silence". Isolation and a fear or distrust of mainstream healthcare is also the result of a history of colonial relationships and power imbalances discussed in the next paragraph. of Participant's experiences racism illustrate the need to address power imbalances, institutional discrimination, colonization, and colonial relationships (33) and what the patient perceives as "safe service". There is a need for cultural safe patient-physician relationships that consider the individual's culture, history, and personal sociocultural background cultural awareness, through cultural sensitivity and cultural competence (2,11). Most experiences with health care systems and providers were positive. However, participants also felt judged and fearful of child apprehension. This finding is consistent with previous research of invalidating encounters with health care including feelings of being judged, discrimination, and having healthcare employees disregard their personal circumstances including a history of residential school attendance (36,46).

In addition to proximal and intermediate social determinants, Indigenous women's narratives demonstrate the immediate and cumulative effects of colonialism, racism and sexism which continues to marginalize Indigenous women. Racism, sexism and colonialism have impacted Indigenous women's identities, belonging, health, and access to resources and supports with social determinants of health. This disparity can be attributed to the colonial experience in Canada, which is unique to Indigenous peoples (53,54). Indigenous women's maternity narratives provide insight into the distal impacts of colonization, including historical and cumulative emotional and psychological impacts, over the lifespan and across generations (49,55). Parental residential school attendance and foster care placement have had an indelible effect on generations of parenting and attachment, as well as impacted Indigenous mothering (56). The women shared their struggles of how colonialism has impacted their own mental health, including experiences of how their past has resulted in post-partum depression and suicidal thoughts and ideations (57,58). However. further research is needed to understand the complexity of internalized colonialism and its full impacts on Indigenous maternalchild health.

Despite adverse histories of colonization, barriers associated with adverse proximal social determinants of health, stress, and invalidating experiences related to racism, Indigenous women's stories of resilience, persistence and strength illuminate their grit. Their experiences of overcoming adverse circumstances and working to end negative cycles to create a better future for themselves and their children are both powerful and inspirational.

Although the research includes a small nonrepresentative sample size, this research demonstrates how Indigenous women's maternity experiences are embedded within their historical, social and cultural experiences, explaining thus the importance of addressing contexts related to social determinants of health. However, there is a need to expand research on Indigenous women's maternity experiences as a way of moving forward for culturally safe and improved maternal-child health, healthcare and maternity research, as well as highlighting the need to address and alleviate adverse social determinants.

As we move forward, Indigenous women's narratives, voices and experiences are imperative to further understand and address adverse social determinants of health. By understanding how these pathways influence Indigenous maternalchild health outcomes, we can then begin to address the underlying causes of health inequities. Thereby, creating culturally safe and improved maternal-child health, healthcare and maternity research.

Conflict of interest

Authors declare no conflict of interests.

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