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Navigating cannabis use during pregnancy: life trajectories, relationships, and contextual influences

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ABSTRACT

Background: In Canada, between 3 and 7 % of women have reported using cannabis during pregnancy despite public health recommendations. While fetal risks are well researched, the socio-economic, psychological, and environmental factors shaping cannabis use before and during pregnancy remain underexplored.
Method: Drawing on semi-structured interviews with eighteen women who consumed cannabis while being pregnant in Québec (Canada), this interpretive study explores the meanings pregnant women attach to cannabis consumption throughout their lives and pregnancy, the factors conditioning their decisions, and the impact of their choices on their wellbeing.
Results: Women's decisions to reduce, cease, or continue cannabis use during pregnancy are shaped by their life trajectories, gendered experiences, and broader socio-environmental influences. Pregnancy can serve as a motivation to stop or reduce consumption, but for some, especially those with a deep connection to cannabis, pressure for abstinence can generate stress and anxiety. Moreover, decision-making regarding cannabis use is tied to gender norms and inequalities that shape the meanings pregnant persons attribute to their own use during pregnancy.
Conclusion: This research highlights how the interplay of long-term social, relational, and environmental factors shapes cannabis use during pregnancy. It underscores the need for tailored, non-stigmatizing public health interventions that acknowledges this complexity, while also addressing stress, anxiety, and informational gaps. Providing harm reduction strategies and context-sensitive support systems can help ensuring that pregnant women receive compassionate, evidence-based care to navigate cannabis use during pregnancy.

Introduction

Cannabis is one of the most widely consumed psychoactive substances globally [1], including Canada [2]. Among women of childbearing age, nearly 50 % report having used cannabis at some point in their lives [3], and its use during pregnancy has become an increasing public health concern—particularly following cannabis legalization and the COVID-19 pandemic [4]. In Canada, between 3 % and 7 % of

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pregnant women report using cannabis during pregnancy [5–9].

Research on prenatal cannabis exposure highlights potential risks to fetal health, including lower birth weight, cognitive and emotional impairments, and increased vulnerability to chronic illnesses and sleep disorders [3,10–15]. In response, public health guidelines advise against cannabis use during pregnancy as a precautionary measure [16]. However, evolving legal and social norms surrounding cannabis, compounded by pandemic-related stress, have contributed to rising use among pregnant women in Canada [4,17–20].

A range of psychosocial and structural factors can influence cannabis use during pregnancy, including low risk perception, mental health challenges, concurrent use of other substances, the influence of partners, and broader socioeconomic vulnerabilities [19,21–31]. Pregnancy often represents a period of behavioral change, yet for many women, it is also a time of heightened surveillance, where institutional and societal pressures to prioritize fetal health can conflict with women's own needs and autonomy [32–35].

In Canada—and more specifically in Québec—antenatal care is provided through a variety of healthcare professionals, including family physicians, obstetricians, nurse practitioners, and other specialized programs within the health system, such as the *Ma grossesse platform* [36], which offers pregnant individuals access to information and professional support throughout their pregnancy. While midwife services exist, they are largely private or community-based and remain limited in accessibility, particularly for women in rural or marginalized contexts. These variations in care provision, combined with limited public health messaging on cannabis, contribute to persistent gaps in health literacy among pregnant women [37,38].

A thorough understanding of cannabis use during pregnancy requires placing it within the broader continuum of women's life experiences and trajectories [37]. Indeed, pregnancy may intersect with prior substance use patterns and broader life circumstances, shaping how women navigate health decisions, social stigma, and external pressures. When pregnancy is desired and carried to term, it can serve as a pivotal moment for behavioral reassessment while also introducing new psychological, material, and social challenges related to the future child [39–42]. At the same time, pregnant women who use cannabis face intensified gendered scrutiny from social and institutional structures, influencing their decisions to cease, reduce, or continue use and shaping their experiences of support, judgment, or marginalization [33–35].

Despite growing literature on the potential health risks of prenatal cannabis use and increasing public health concern, there remains a critical lack of research that centers the voices and lived realities of pregnant women who use cannabis—particularly in the context of shifting legal norms and evolving healthcare practices in Canada. Much of the existing research relies on quantitative data or clinical assessments, often overlooking how women themselves make sense of their use, interact with health providers, and respond to public messaging.

Building on these gaps, this study explores how women who use cannabis before and during pregnancy assess their choices and experiences in relation to evolving legal, medical, and social expectations. Using an interpretive qualitative approach, we examine how women understand health messaging, engage with antenatal care providers, and navigate stigma and autonomy in their everyday lives. By foregrounding their lived experiences, the study seeks to offer a more context-sensitive understanding of cannabis use during pregnancy—one that can inform more equitable and effective public health communication and care practices.

Methods

This study is part of a larger interdisciplinary project titled "Between tension and harmony: conversations around cannabis use amongst pregnant women in Québec" (#MP-04-2023-765) [43], which examines cannabis use among pregnant women in Québec, with a focus on their interactions with partners and health and social professionals. We conducted an interpretive qualitative study [44–47] with women who reported using cannabis at least three months before and/or during pregnancy. This approach allowed us to explore how their cannabis use evolved over time and how social, physical, and political environments influenced their decisions to cease, reduce, or continue use.

Recruitment

We conducted twenty semi-structured interviews with eighteen women who were either pregnant or had been pregnant within the two years prior to the interview, fostering a safe space for exchange by adopting a non-judgmental stance. Participants were given the option to choose the format for their interview (in-person or online), except in cases of geographic constraints. The interviews were conducted in French by women researchers involved in the project, trained in qualitative research. Our iterative coding process enabled us to conduct a second interview with two women to discuss emerging themes.

Recruitment was carried out through postings in perinatal services across different areas of Québec, including urban, semi-urban, and rural settings, and via social media networks (e.g., parenthood or pregnancy groups on *Facebook*). We also recruited through announcements placed in some perinatal services across the targeted territory.

The interview guide was designed to collect information on various aspects of the participants' situations. The dimensions of the guide were organized as follows: 1) identity and social determinants of health (e.g., adverse childhood events, ethnic background, education level, connections to child protection services, income, and other traumas); 2) cannabis use (e.g., age of initiation, changes in consumption habits, modified ASSIST detection tool); 3) pregnancy, health and motherhood (e.g., physical health, mental health, social support, financial situation); 4) experienced inequalities, including gender inequalities (e.g., distribution of mental load and tasks, partner's consumption) and daily life challenges; and 5) resilience and adaptive coping strategies, contributing to the recognition and empowerment of women. This approach ensured that the guide captured the evolving context of the participants' lives in a logical and coherent manner. Two participants did not complete questions from the identity and social determinants of health part, one refusing and the other not having the time to complete it and not being able to be contacted afterwards (residential instability).

Data analysis

An inductive thematic content analysis was conducted based on the verbatim interview transcriptions to unveil the meanings women give to their lived experiences [48,49]. Consistent with the goal of amplifying the voices of the women who participated in this study, we employed an inductive analysis approach [50–52] highlighting the issues, themes, and concerns reported by these women.

Given the scarce theoretical knowledge on the topic under study, the analysis followed a multi-step, iterative, and inductive process that involved: 1) familiarization with the data; 2) initial coding by a team member; 3) two group coding activities; and 4) targeted coding and categorization by two other team members. Throughout the initial phases of preparation and analysis of the data, we identified and categorized, grouped, structured, and refined key analytical concepts related to women's cannabis use before and during pregnancy, to understand the driving factors of their decision-making as well as the broader meanings they attribute to their substance use [49]. We present English translations of quotes alongside the original French text to ensure clarity and accuracy.

Ethics

The research ethics board of the *Centre intégré de santé et de services sociaux du la Montérégie-Centre* approved the study protocol (FRQS-CANFEMQC2022 MP-04-2023-765). Participants were informed of their

rights to withdraw and not answer questions. Original recordings and transcripts will be securely stored for 10 years on the investigators' password-protected computer before being permanently deleted.

Results

Several themes and subthemes have emerged from the interviews (see Table 1), highlighting the diversity of motives and habits related to participants' cannabis use during pregnancy, demonstrating the importance of situating this practice within women's broader life trajectories. In this section, we briefly introduce the participants' profiles and explore their cannabis use trajectories, including initiation, the evolution of consumption over time, and its role shaping their decision-making process during pregnancy. As we demonstrate, during pregnancy, while both extrinsic and intrinsic motives can weight in women's decision-making processes, intrinsic motives, often linked to long-term, mental-health related, and self-medicating cannabis use patterns, seem to add further challenges on women's ability to fully control their cannabis use.

Table 1
Themes and subthemes identified in the inductive analysis.

Life period	Themes	Description	Subthemes
1. Life trajectory with cannabis use before pregnancy	Family history and traumas	Self-reported childhood adverse events and family relations.	Experience with child welfare; family rejection; domestic violence.
	Health	Self-assessed health or wellbeing before pregnancy.	Physical condition; mental health condition; overall wellbeing.
	Social relations	Self-assessed social relations related to cannabis use.	Quality and quantity of social relations; perception of social relations' cannabis use; assessment of the role of cannabis in social relationships.
	Cannabis use	Self-assessed cannabis use before pregnancy.	Age of initiation; motives; evolution in motives and influencing factors; habits; supply before and after legalization; perceived benefits; perceived negative impacts.
2. Cannabis use during pregnancy	Fertility and family planning	Self-assessed reproductive behavior and preferences.	Pregnancy planning (timing, quantity, and desirability of pregnancies).
	Health	Self-assessed physical and mental health during pregnancy.	Pregnancy-related physical and mental health issues, overall wellbeing (financial situation, occupation, care responsibilities, social relations).
	Cannabis use	Self-assessed cannabis use during pregnancy.	Perceived risks and consequences of cannabis use on themselves and/or the fetus; initial decision and motives; consumption habits and their evolution; protective and risk factors; coping strategies and challenges; self- and social acceptability; perceived benefits; perceived negative impacts.

Participants profile

The participants were all cisgender women (n = 18/18), and most were heterosexual (n = 16/18). They ranged in age from 21 to 38 years old at the time of the interview (n = 17), with an average age of 25 (SD ≈ 4.3). Most women interviewed were originally from and lived in Canada (n = 12/14), including two women of African origin, one woman of Asian origin and one woman from an Indigenous community. Two women identified as migrants (n = 2/14), both born in Eastern Europe. The majority of participants appeared to live in secure housing, either as homeowners (n = 8/16) or renters (n = 6/16), but two, faced housing instability (n = 2/16).

Regarding pregnancy history, over half of participants had experienced more than one pregnancy. Eight women reported having only one pregnancy, seven had two pregnancies (including one case of a blended family with two more children), two had three pregnancies (including one case of twins), and one had four pregnancies at the time of the interview. Notably, only four women had planned their current or most recent pregnancy. Ten were unplanned, while three were preceded by delays or disruptions before they achieve pregnancy (e.g. prolonged attempts to conceive or miscarriages).

1. *Life trajectory with cannabis use: unpacking women's trajectories since initiation*

Although women's experiences with cannabis use varied, several common trends and overlaps emerged in their initiation of their consumption and the evolution of their use habits, including the factors that influenced it over time.

i) *Initiation of cannabis use: the importance of social influences*

For the most part, extrinsic motives appeared connected to many participants' initiation to cannabis, mostly during adolescence. The women interviewed started using cannabis between 11 and 23 years old, and half of them were initiated as young teenagers, before the age of 16 (n = 9). Only one woman started using cannabis after the age of 21, the legal age for cannabis use in Quebec since 2018. Most participants relate their initiation to social influences, including friends, partners, or both (n = 15).

This trend suggests a complex social dynamic in which cannabis use is motivated by social pressure, overlapping with the desire to experiment during adolescence. For example, as this woman states, "The reason I used cannabis was social pressure. I was a young girl who wanted to experience thing" (P17). However, two women were introduced to cannabis through family members (n = 2). For example, this woman mentions that: "I was 11 and a half, and my mother said, 'Here, do you want to try?' That was it." (P1). However, three participants started using cannabis for more intrinsic reasons: to cope with their traumas, manage their anxiety (n = 2). For these women, cannabis had a positive effect on their mental health, acting as a form of self-medication. As this woman relates: "It helped me with my anxiety. It became a vicious cycle, you could say; but it really helped me to self-medicate." (P8).

iii) *Changes in motives over time: from extrinsic (social) to intrinsic (personal)*

For just over half of the women interviewed, cannabis use in social contexts persisted over time (n = 10), sometimes evolving into a social habit with their partner and/or other friendship circles. Of the fifteen women who initially started using cannabis due to social influence, the majority later transitioned to using it for more intrinsic reasons (n = 13). For some, this shift occurred rapidly, while for others, it developed more gradually, depending on the perceived benefits on their well-being. For most participants interviewed, using cannabis for personal reasons

contributed to cannabis use becoming a daily habit, for example: "[…] We just wanted to try it like any teenager. And, unfortunately, I liked the feeling it gave me, so I just never stopped." (P6).

Most participants who developed intrinsic motivations used cannabis for the mental health benefits their experienced, particularly because it helped them to relax and unwind (n = 16). If some women compare it to a glass of wine associated with a moment of relaxation at the end of the day (n = 4), a significant number also reported using cannabis to manage their emotions, daily stress, and anxiety (n = 12). As this woman recalls: "I use it because it makes me feel good, the effects are kind of euphoric, and at the same time, it calms me down" (P2). Cannabis enables them to disconnect from stress and problems of their daily lives (n = 8), to feel good, improve their mood and patience (n = 6), and reduce intrusive thoughts (n = 2). Cannabis helped them to focus on the present moment and normalize stressful situations. As this participant explains:

> "*Considering that I'm someone who can experience anxiety over a long period of time, it's really like little things build up, and at some point, I feel really weighed down by all these little things that, in reality, aren't very important. Well, for me, using cannabis helps me release all of that and normalize it.*" (P10).

Parenting responsibilities seemed like an additional stressor in women's lives that cannabis partly addressed. For this woman, consuming cannabis was associated with an enjoyable moment, after completing her care and parenting responsibilities:

> "*I don't know how to explain it, [at first] I didn't feel the need to use. […] Eventually, it became a bit more necessary to relax, if you will, because I was always at a high stress level […]. So, I'd come home in the evening, and I'd be like, okay, the kids are in bed, I've done the dishes, I've done everything, now I can relax. […] it was more like an anti-anxiety thing.*" (P4)

Similarly, this woman describes her cannabis use as a way to cope with increased stress and intrusive thoughts related to her parenting responsibilities while remaining functional:

> "*It's like I have a hamster in my head that never stops running, and then I start thinking about a lot of things, and I really have intrusive thoughts. […] Because I don't want to die, because I don't want to lose my children, I don't want… […] So, I smoke as soon as the kids are in bed, and it relaxes me, it helps me escape from those thoughts, and I'm still able to function* […]" (P11).

Other less common personal reasons for cannabis use included improving physical health, such as a better sleep, appetite, and to address chronic pain (n = 4). Perceived physical and mental benefits often intersected; as this woman describes: "I discovered it much more for the benefits. […] It really took away the pain, in the evening, you disconnect, and you don't think anymore. For me, it took away the anxiety, it took away everything, it's wonderful." (P18). Last, less common motives included enhancing their inner connection and connection with others (n = 3) and boosting their productivity and motivation (n = 2). For example, this woman explains how cannabis helps her spirituality: "[…] cannabis took me to a space where I could reach after several hours of meditation. […] that does me a lot of good […]" (P10). In all, the diversity of motives and relationships to cannabis use suggests that it is most used as a self-medicated coping strategy to manage their daily lives, to address mental health challenges, and to enhance wellbeing.

iv) <u>*Factors influencing cannabis use*</u>

The women named various factors driving changes in their cannabis use over time, either contributing increasing, maintaining, or reducing it, including changes in their mental health (n = 11), relationships with their partners (n = 11), new social or family dynamics (n = 6), as well as changes in their studies or employment status (n = 5).

Half of the women interviewed reported increasing their cannabis use during more stressful periods of their lives, particularly when experiencing heightened anxiety (e.g., insomnia) and a greater mental load in a context of combining parenting responsibilities with work or studies (n = 9). However, on the contrary some women reported that cannabis contributed to increasing their anxiety levels, including symptoms such as paranoia or panic attacks (n = 5). By adjusting the frequency, quantity, and type of substance (e.g., THS/CBD dosage), they related being able to maximize the benefits of cannabis use for their well-being while minimizing the downsides. For example, this woman explains: "I stopped once for 7 months because I was having too many panic attacks, [and] [cannabis] doesn't help with panic attacks. So yeah, I stopped, but then I started again more socially" (P13).

Having a partner who uses cannabis also influenced women's own use—either by increasing or decreasing it (n = 11). For example, after ending a relationship with a partner who used cannabis, this participant stopped using cannabis herself: "My boyfriend at the time smoked a lot, so instead of turning to alcohol when I was young and doing things with alcohol, we smoked weed actually. […] when I broke up with him, I kind of stopped smoking" (P7). For example, three of these women mentioned that their cannabis use increased when they were in a difficult, toxic, or violent relationship (n = 3), to feel better or to try to connect more with their partner. As these women recall: "[…] we had less and less intimacy, and honestly, it just didn't fit anymore. At some point, I started smoking to still have enjoyable sex because we just couldn't connect anymore." (P16), or "Basically, I was in an extremely toxic relationship with someone, and we both started using together. […] we smoked a lot together just because it was the only way we felt good together" (P4). Two women also reported that their cannabis use decreased when their partner did not use (n = 2). One of them seemed to use her relationships with non-users as a harm reduction strategy, as she consciously sought partners who did not consume cannabis: "I find that being with someone who uses, well, it makes you use more. So, […] in the last two, my partners didn't use. That really helped me moderate my consumption" (P7). Finally, social and family networks (n = 6) as well as school and work (n = 5) were consistently protective factors, particularly when consumption was neither allowed nor valued and when the work environment was healthy.

2. *Cannabis use during pregnancy: unpacking women's decision-making*

Our results show that the interviewees' cannabis use shaped their consumption habits, decision-making process, and ability to cease cannabis use during pregnancy—despite their assessment of fetal health risks associated with the practice. To illustrate this, we present women's cannabis use shortly before becoming pregnant, their initial decision regarding their cannabis use, and the evolution in their consumption patterns throughout their pregnancy.

i) <u>*Cannabis use shortly before pregnancy*</u>

Shortly before their pregnancy, most of the women interviewed reported regular cannabis use (n = 15). More than half consumed it daily (n = 12) and a few used it more than once a week (n = 3). Among the women interviewed, some mentioned having a cannabis use disorder (n = 3). Moreover, seven women exhibited symptoms typically associated with addiction without directly labeling it as such. These symptoms include the need to use cannabis to be functional, repeated unsuccessful attempts to cease, withdrawal symptoms upon cessation, or cravings. These two women, for example, revealed patterns of addiction:

> *"[…] in terms of my anxiety, it became a vicious circle, let's put it that way, it was self-medicating, let's say. […] Yes, I was already taking medication. I take medication for depression, anxiety, and mood. […] [And] I didn't realize at the time that it would become self-medication.*

[…] Well, I consider it an addiction for me, [but] it took a long time before it actually became an addiction.“ (P8)

These two participants held rather negative emotional relationships with their consumption before becoming pregnant, observing a lack of support and resources to address their mental health challenges. Yet, only two participants had a medical prescription for cannabis use, one issued before pregnancy and the other after, to help manage their anxiety and addiction with cannabis (n = 1) or cocaine (n = 1). Lastly, four women reported not experiencing addiction when they became pregnant; these participants were unsurprisingly those with the greatest ability to manage their consumption and cease use upon becoming pregnant, without significant difficulty or withdrawal symptoms.

v) *Initial decision: between stopping and reducing cannabis use*

All the women interviewed expressed the desire to cease cannabis use. While two-thirds of the women (n = 13) reported cessation of cannabis use during their most recent pregnancy, all of them made at least one attempt to do so during their past or current pregnancies. The primary motivation for this cessation was the desire to protect their fetus' health and prevent potential developmental harm. For example, one woman mentioned feeling potentially guilty about harming her future child's health, motivating her decision to stop her consumption: "The health of my baby. I was just telling myself that I had a human being in my belly, and I felt guilty [about continuing to use], because otherwise, nothing else really mattered to me." (P13).

In total, five women continued their cannabis use during pregnancy, yet with one exception, reducing it to minimize health risks for their fetuses. Additionally, for one other woman, the continuation of use was primarily influenced by a late discovery of the pregnancy, at 22 weeks. For the others, several factors influenced their decisions to continue, such as unsuccessful attempts to cease during their current or previous pregnancies, due to negative emotional or psychological effects of cessation, or to continue experiencing the benefits of their cannabis use, notably on their mental and physical health. For example, this woman explains how negative physical effects were too strong, inhibiting her to cease her use despite her initial decision: "I had agreed to stop during my pregnancy, but my body had other plans. It said no, you [the baby], you [her], and cannabis are staying, so I said 'okay'" (P1). However, not all possessed the same resources or environmental support to successfully do so, which influenced both their initial decision and the ability to sustain this decision over time. Two women also reported experiencing more cravings for cannabis during their last pregnancy, which led them to relapse one or more times.

Finally, experiences with cannabis use during previous pregnancies influenced the initial decision-making of those who had experienced more than one pregnancy. On the one hand, failing to cease use during a previous pregnancy influenced some of them to continue in their most recent one (n = 2). On the other hand, a past success in reducing their use has also contributed to reducing their use further, reaching total abstinence, in the case of one woman (n = 3). For example, one woman reveals how she reduced her cannabis use between her first and second pregnancies:

"*My first pregnancy, I found it extremely difficult to abstain. It was really tough. I could barely reduce it, honestly. […] When I got pregnant [with baby 2], it dropped to once a month […]. Certainly, I was also living for someone else. My needs to manage emotions and the spiritual experience were also weighted in, with whether it would impact the baby, of course.*" (FP10).

vi) *Evolution of cannabis use during pregnancy: from abstinence to relapsing*

We observed a continuum of patterns of consumption and changes to those patterns throughout women's pregnancies, including cessation, reduction leading to cessation, occasional use, maintenance of reduced use, and resumption (see Fig. 1). Despite these variations, many women interviewed (n = 4) reported experiencing cravings for cannabis during pregnancy. Additionally, a few women (n = 3) were exposed to their partner's cannabis use, even after they had stopped using themselves. This highlights a diversity of experiences, and that they are not limited to early stages of pregnancy and to the woman alone.

An important element of this continuum is the return to cannabis use among several women encountered (n = 7), often contrary to what they had desired. Mental health issues, including pregnancy-related anxiety or physical symptoms (e.g., intense nauseas, absence of hunger), and symptoms of a substance use disorder (e.g., cravings) were the main reasons for this return. For example, this participant relates how intense anxiety and fears of dying during childbirth, made her turn to cannabis as a coping strategy, despite her initial intention to stop consuming:

"Well, I was more of the opinion to stop completely, but it was in January, when I found out about my son's [malformation], that's when I couldn't stop using. […] Around 34 weeks, childbirth was getting closer. I was convinced that I was going to die during childbirth and that my baby was going to die. It was my anxiety, I know it's irrational, I know very well, but I was overwhelmed by the fear of dying. So at that moment, I used a bit more. It was every day at that point." (P8)

vii) *Overall acceptability of cannabis use during pregnancy*

Women's opinions on cannabis use during pregnancy ranged from partly acceptable to completely unacceptable, drawing on recommendations from their healthcare professionals and information they encountered online regarding alcohol and tobacco use. Approximately one-third of the women interviewed (n = 5) considered cannabis use during pregnancy as unacceptable or even inconceivable. This perspective is largely driven by concerns about potential harm to the fetus, yet many considered acceptable consumption with medical authorization. For example, this woman claimed that cannabis requires the same treatment as other substances such as alcohol or medication:

"I think it's completely unacceptable during pregnancy because, as we know, there are studies that prove it's harmful, that it's not good for the baby, just like how we're cautious with so many medications. So, for me,

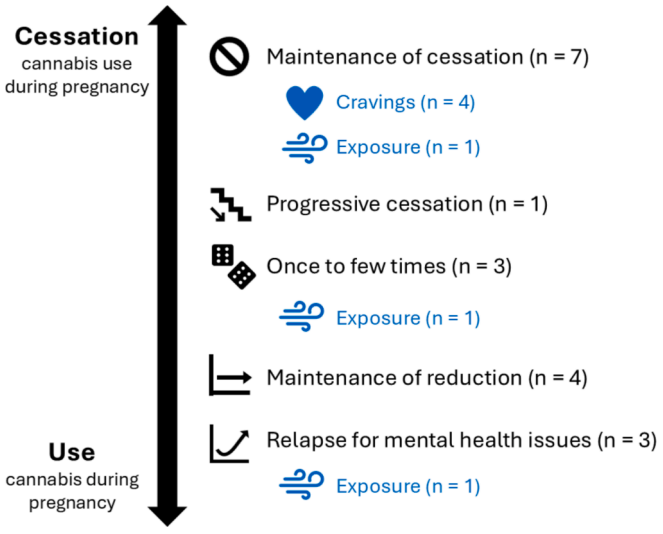

Fig. 1. Continuum of cannabis use among women during their most recent pregnancy.

it falls into the same category—if we can only take something as mild as Tylenol or need to consult a doctor, it should be treated the same way." (P9).

Most women interviewed saw ceasing cannabis use during pregnancy as an ideal. Nonetheless, while cannabis consumed in excess was generally seen as harmful, many participants were understanding of the women's circumstances and recognized that women may have different needs and can face major challenges during pregnancy, making cannabis use more acceptable in those cases (n = 10). One woman said: "I think it's better to abstain in the absence of knowledge on the subject, you know. […] but of course it depends on the situation. They say the same thing about cigarettes, that they're no good, but a woman who smokes a pack a day and quits overnight may not be better for the child. You must work on a case-by-case basis […]" (P2). In that sense, some women emphasized the importance of balancing the well-being of both the fetus and the mother when assessing health risks (n = 4).

Thus, women expressed their preference for tailored goals and approaches that consider each person's history of consumption (n = 4), the potential harmful effects of stress caused by cessation (n = 3), the challenges of abrupt cessation after prolonged use (n = 2), and the adverse conditions faced by women, such as trauma (n = 1). One woman notes that her opinion has changed over time, with her own experience leading her to adopt a more nuanced perspective:

"*Maybe when I was younger, you would have asked me this question, and I would have said, 'Come on, that's not acceptable.' But someone who has experienced trauma, who has gone through something like, I don't know, being raped and then becoming pregnant, well, let her smoke if that's what helps her, because otherwise, the poor girl can't cope. So, I think it's unique to each person and their situation. […] It's more about acceptance.*" *(P14)*

The quantity, frequency, and reasons for cannabis use emerged as factors influencing its acceptability during pregnancy (n = 7). For example, this woman considers more acceptable to consume small rather than big quantities, and to do so under exceptional circumstances: "[…] we need to see the quantity we talk about, and second, the reasons why we do it. […] if is associated with partying, with a form of entertainment, well then, I'd be more critical" (P10). Although they did not specify a particular quantity, some emphasized that overconsumption or substance abuse should especially be avoided (n = 3), for example:

"I think there are people who need it, and I have the impression that stress can be even more damaging to pregnant women than cannabis itself. So, I was thinking, if you don't use too much, I won't judge anyone if you ever tell me that's what happened." (P4),

"To be honest, I don't see any problem with someone smoking if they feel comfortable with it and if the baby's doing well. I think it's important to respect what you're capable of doing […]. I think it's really important for mom to feel good. Of course, if I see her smoking 50 joints a day, […] in my head I'm going to be like 'You need to calm down. I really understand, you have no idea how much I understand you, but this is not good.' Not for her and not for the baby." (P11).

Overall, participants stressed the need to recognize women's autonomy and agency, their genuine efforts, as well as the measures that could support them in their objectives to reduce or interrupt their consumption, such as harm reduction strategies. One of the women emphasized that they should be able to take control of their own pregnancy: "I think it's about letting each woman take ownership of her own pregnancy and decide for herself" (P3). Another one argues for the need to support women with an addiction instead of stigmatizing them:

"I think that people who have addiction problems, if they make a small effort [e.g., by reducing their consumption], I don't see why we should criticize them. I believe that at least the person has done what they can do. An addiction is not something that is easy to fight." (P4).

However, regardless of their stance on the social acceptability of cannabis consumption during pregnancy, almost half of women who used cannabis during that period, whether occasionally or more frequently, reported feeling guilty or anxious for their behavior at some point (n = 7). This was particularly true for women whose experiences did not align with their expectations or personal values (n = 3), as described by this woman:

"Of course, I can't say I'm proud of having used cannabis during my pregnancy […]. Every time, I felt bad. […] I think, and this is what's silly, I really believe it's not good to do that, even though I did it, because, in the end, I just couldn't resist my temptations at certain moments." (P6).

Discussion

This study explored the social, relational, and structural components of cannabis use during pregnancy, focusing on the women's life trajectories and the changing factors influencing their cannabis use before and during pregnancy. It offers insights into the multifactorial process of decision-making pregnant women experience, on three dimensions: (1) the presence of changes in cannabis use over time and social and structural factors modulating these changes, (2) different processes of the decision-making during pregnancy, and (3) the role of social acceptability and norms surrounding cannabis use during pregnancy that may or may not align with personal views. The results emphasize the importance of considering both women's current context as well as their longstanding relationship with cannabis use—often shaped by gender norms and inequalities—to better understand the meanings, decision-making processes, and behaviors associated with cannabis during pregnancy [53]. By using an interpretive qualitative approach centered on women's lived experiences, this study aimed to amplify marginalized voices and question ongoing stigma surrounding cannabis use during pregnancy. Most prior research has emphasized biomedical risks or relied on survey-based designs that exclude women's own narratives. In contrast, our qualitative approach centers women's voices and experiences, offering insights that would be difficult to capture through other methods. This epistemological stance allowed us to move beyond fetal health risk, to situate cannabis use within pregnant persons' broader life trajectories and social contexts, highlighting how structural and relational factors—not just individual behaviors—shape decision-making processes. In doing so, the study provides a deeper understanding of the sociopolitical realities that women navigate before and during pregnancy.

As we have shown, women's personal and social trajectory with cannabis plays an important role in shaping their decision-making process during pregnancy [42,54]. Our results show that social influences play a critical role in the initiation of cannabis use, often beginning during adolescence—including peer pressure, friendships, and intimate partner relationships [55,56]. Yet, while often initially socially motivated, for many women, cannabis use became later grounded in intrinsic motivations, visible through stress and anxiety management, confirming the claim that cannabis is frequently used as a form of self-medication [12,24,57,58].

Stressors and mental health challenges present before pregnancy tended to persist during this period and often appeared related to both structural and relational factors, such as (sometimes violent or toxic) intimate-partner relationships, work pressures, parenting responsibilities, and adverse life events. On the contrary, supportive partners and non-using social environments emerged as protective factors [59–61]. However, using cannabis for intrinsic motivations, especially for coping with emotional challenges and anxiety, carries risks of addiction and other mental health issues our study confirms [16,53,60,62]. Our results indeed show that while many used cannabis to enhance their well-being, some women have developed an uneasy, even negative, relationship to their consumption, especially when they experienced

symptoms of addiction. Indeed, many women who used cannabis regularly before pregnancy chose to reduce or cease their use for that reason, as raised in other studies [62,63].

A broad continuum of patterns related to cannabis consumption during pregnancy thus emerged from our interviews, which considers not only the initial decision, but also women's ability to sustain it over time. Initial decisions were often complicated by cravings, ongoing mental health struggles (particularly anxiety), personal judgements, information, beliefs and their experience with previous pregnancies, as well as environmental stressors [54,63]. Women's cannabis use was notably shaped by their prior consumption trajectory, but also by their desire to protect their fetus from potential harm – which, upon lack of information was often driven by societal expectations surrounding motherhood. Thus, even as many women accepted other women's limited consumption in specific circumstances, such as addiction and trauma, women's relationship to cannabis during their pregnancy remained marked by internalized stigma surrounding cannabis use during pregnancy as associated with irresponsible motherhood.

Many of our interviewees to the contrary associated all substances involving risks for the fetus, including cannabis, as equally harmful, while considering the perceived benefits to their well-being. Specifically, feelings of guilt resurfaced amongst most participants who used cannabis, associated with a sense of deviating from the image of the ideal mother, characterized by total abstinence [50,64]. Thus, women expressed using greater self-control than their male partners, and women who pursued their cannabis use felt heightened anxiety over the potential harm caused by their substance intake on the fetus. This highlights that pregnant women are still expected to bear the reproductive burden with little guidance and resources during their pregnancy.

These findings suggest that adopting a systemic approach to cannabis use during pregnancy is crucial to account for the gendered structural, relational, and normative factors that shape women's relationship to cannabis use throughout their lives. Indeed, we emphasize that cannabis use during pregnancy is often a coping mechanism responding to unmet health needs before pregnancy, that are grounded in broader social and societal factors [32,37,42,57,64,65].

The study's findings have significant implications for public health strategies aimed at supporting pregnant women who use cannabis, particularly in Québec where non-medical cannabis use is legal. First, public health should consider the social determinants of health, acknowledging the complex motivations behind cannabis use, including mental health struggles, stress and socioenvironmental factors [42,66]. Second, public health should value non-judgmental, trauma-informed, and harm reduction approaches to women's health, from youth to parenthood. Third, current public health efforts should prioritize accessible mental health resources, stress management strategies, and community-based support to empower women in making informed decisions. The study thus highlights the need for personalized interventions that are tailored to address women's specific needs by involving different healthcare professionals, such as social workers, psychologists, and midwives.

Furthermore, interventions, as well as research, should consider the role of partners in generating a supportive and healthy environment during pregnancy and postpartum [32]. In all, public health strategies should focus on enhancing women's decision-making power by providing clear, accessible information about the risks and benefits of cannabis use during pregnancy, attuning dichotomic discourses on this issue (abstinence vs autonomy) that may heighten feelings of guilt and social isolation.

This study makes several important contributions to the growing literature on prenatal cannabis use. First, it addresses a key gap by centering the lived experiences and voices of pregnant women, which are often missing from predominantly clinical and quantitative research. Second, its interpretive qualitative approach enables a nuanced understanding of how cannabis use is shaped by life trajectories, gendered expectations, and shifting policy landscapes. Third, by linking individual decision-making to broader relational and structural factors—including stigma, healthcare interactions, and social norms—the study moves beyond individual behavior models to provide a systemic and intersectional lens on prenatal substance use. These insights are especially relevant in contexts like Québec, where legal cannabis intersects with evolving public health mandates and unequal access to care. Ultimately, these findings not only support the development of more context-sensitive interventions, but also challenge dominant paradigms in prenatal care that often overlook the interplay between social determinants and substance use decisions. Future research can build on this study's findings and approach by integrating lived experience perspectives into the development of public health messaging, care models, and evaluation strategies—particularly in populations underrepresented in current datasets.

However, some limitations must be considered when interpreting the study's findings. First, the distinct experiences of Indigenous, immigrant, and LGBTQI + communities who face intersecting challenges should be further assessed, given their weak representativity in this sample. Moreover, participants were recruited based on their willingness to discuss their cannabis use, potentially introducing selection bias in the sample. The retrospective data collection also poses a risk of recall bias, especially given the sensitive nature of the topic. Furthermore, while the interviews were conducted in French, some nuances may have been lost in translation if participants used specific terms that were not easily captured. Although some interview excerpts referred to the use of other substances (e.g., tobacco or alcohol), this study was primarily focused on cannabis, and we did not systematically explore how polysubstance use shaped participants' attitudes or decisions. This represents a potential area for future research.

Conclusion

This research highlights the complexity of cannabis use during pregnancy and the need for harm reduction, gender-sensitive and trauma-informed public policies and public health interventions. Women's cannabis use is shaped by life trajectories, relationships, and broader socioenvironmental factors. Public health strategies should reduce stigma, improve mental and maternal health support, and address gender inequalities. Involving partners can foster more inclusive care, recognizing the shared responsibility in reproductive health.

Findings also underscore the importance of systemic approaches that account for individual, structural and relational dynamics. Many participants had unplanned pregnancies, and early cannabis initiation often occurred through male partners, pointing to the need for youth-focused prevention efforts. Public health messaging should balance abstinence recommendations with harm reduction, avoiding dichotomous discourses. Ultimately, empowering women with clear, accessible information and comprehensive support is crucial for informed decision-making aligned with their health and life priorities.

CRediT authorship contribution statement

Kristelle Alunni-Menichini: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Rose Chabot:** Writing – review & editing, Writing – original draft, Validation, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Genève Guilbert-Gauthier:** Methodology, Investigation, Formal analysis, Data curation. **Karen A. Dominguez-Cancino:** Validation, Methodology, Investigation, Data curation. **Lysiane Robidoux:** Supervision, Resources, Project administration, Formal analysis. **Nadia L'Espérance:** Resources, Project administration, Formal analysis, Conceptualization. **Christophe Huynh:** Methodology, Investigation, Formal analysis, Conceptualization. **Karine Bertrand:** Methodology, Formal analysis,

Conceptualization. **Helen-Maria Vasilidis:** Methodology, Investigation, Formal analysis, Conceptualization. **Julie Loslier:** Validation, Resources, Conceptualization. **Yolaine Frossard de Saugy:** Methodology, Investigation, Formal analysis, Data curation. **Pablo Martínez:** Methodology, Investigation, Formal analysis, Conceptualization. **Victoria Massamba:** Writing – review & editing. **José Ignacio Nazif-Munoz:** Writing – review & editing, Writing – original draft, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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