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## Patient Perceptions of Prenatal Cannabis Use and Implications for Clinicians

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### Abstract

**Objective:** To understand pregnant patients' reasons for prenatal cannabis use, and perceptions of safety, desired and undesirable health care experiences, and desired information about prenatal cannabis use. Secondly, we sought to understand racial differences in the above perceptions and preferences.

**Methods:** We conducted a qualitative study including 18 semi-structured, race-concordant virtual focus groups with pregnant individuals who self-reported cannabis use at prenatal care entry in a large integrated health care system in Northern California from November 2021 to December 2021. The focus groups included semi-structured questions and were recorded, transcribed, and coded by the research team. Thematic analysis was used to analyze the data.

**Results:** Overall, 53 participants were included; 30 self-identified as White and 23 self-identified as Black. Participants averaged 30.3 years-old (SD 5.2), were on average 20.9 weeks pregnant at study enrollment, and 69.8% reported daily cannabis use, 24.5% reported weekly cannabis use, and 5.7% reported monthly or less cannabis use at entrance to prenatal care. While some participants quit cannabis use in early pregnancy due to concerns about potential health risks, many perceived a lack of scientific evidence or believed that prenatal cannabis use was safe. Many preferred cannabis to over-the-counter or prescription medications for treating mood, morning sickness, pain and sleep. Participants valued open interactions with obstetricians that acknowledged their motivations for use, and they desired information about potential risks

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through conversations and educational materials. White and Black participants' perspectives were generally similar, but a few Black participants uniquely described concerns about racial bias related to their prenatal cannabis use.

**Conclusion:** Pregnant patients used cannabis to manage mood and medical symptoms and many believed that prenatal cannabis use was safer than prescription medications. Obstetrician-initiated, patient-centered conversations around prenatal cannabis use, advice to discontinue cannabis use during pregnancy, and exploration of willingness to switch to medically-recommended interventions for pregnancy-related symptoms may benefit patients.

## PRECIS

Pregnant individuals use cannabis to treat mood and medical symptoms; they value open clinician–patient conversations that describe potential cannabis risks while acknowledging motivations for use.

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## INTRODUCTION

Rates of cannabis use during pregnancy are increasing over time despite potential negative fetal, neonatal and neurodevelopmental outcomes for children exposed in utero.<sup>1–7</sup> Pregnant individuals report using cannabis to address issues such as nausea and vomiting, sleep disturbances, depression and stress; or as a substitute for medications not recommended during pregnancy.<sup>8–11</sup> Prenatal cannabis use differs by race and ethnicity, with higher prevalence amongst White and Black individuals relative to those of other races and ethnicities.<sup>7, 12, 13</sup>

Many clinical settings provide training and resources to ensure that obstetricians are prepared to discuss cannabis use with patients. However, some obstetricians report a lack confidence and knowledge to have these conversations.<sup>14, 15</sup> Some patients report minimal communication with obstetric clinicians about cannabis use and fear disapproval upon disclosure.<sup>8, 16</sup> Patients may seek information from alternative sources, including online forums and individuals who work at cannabis retailers, who may recommend cannabis use in pregnancy or provide false or unsupported prenatal cannabis information.<sup>17, 18</sup>

Although some studies have provided recommendations to improve patient-clinician communication about prenatal cannabis use and associated harms,<sup>15, 16, 19, 20</sup> recommendations have largely focused on the perspectives of clinicians or researchers, missing patients' voices and experiences. To address this gap, this qualitative focus group study aimed to understand reasons for prenatal cannabis use, perceptions of safety, desired healthcare experiences, and preferred information about prenatal cannabis use from the perspective of patients who used cannabis during early pregnancy. Secondly, this study aimed to explore differences in these perceptions and preferences between non-Hispanic White and non-Hispanic Black participants.

## METHODS

We conducted 18 semi-structured virtual focus groups with non-Hispanic Black and non-Hispanic White pregnant adults aged 18+ who self-reported prenatal cannabis use as part of

universal screening at entrance to prenatal care (at ~8 weeks' gestation). Participants were members of Kaiser Permanente Northern California (KPNC), a large integrated healthcare system with universal prenatal substance use screening located within a state with legal medical and recreational cannabis use. The study was approved by the KPNC IRB and additional details on the study design have been published elsewhere.<sup>13, 21</sup> This study followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines to ensure that data collection and analysis was systematic and verifiable.<sup>22</sup>

Using electronic health record data, we identified a potentially eligible sample of pregnant non-Hispanic White and non-Hispanic Black English-speaking adults who self-reported any prenatal cannabis use since pregnancy on the universal screening questionnaire at entrance to prenatal care (at ~8 weeks' gestation). We chose to focus on Black and White participants for this initial study because of their higher rates of cannabis use at prenatal care entry in KPNC relative to other racial and ethnic groups,<sup>7</sup> and we wanted to evaluate differences in themes across these groups. After confirming that patients were still pregnant via medical record review, we emailed potential participants about the study and then contacted them by phone and invited them to participate. Individuals with at least weekly self-reported use during early pregnancy were prioritized because those with more frequent cannabis use during pregnancy were more likely to have knowingly used cannabis after pregnancy confirmation, and might benefit most from information about prenatal cannabis use and conversations with clinicians. Consent was obtained verbally at the time of screening and participants were assigned to race-concordant focus groups based on self-reported race at the time of recruitment. During the phone screening, participants were asked about current cannabis use and their quit date if not currently using. Participants were emailed a \$50 gift card after focus group completion.

A semi-structured focus group guide was developed by the team that included questions about prenatal cannabis use, including reasons for use, harms and benefits, desired information, and positive and negative characteristics of actual and potential conversations with clinicians about cannabis use during pregnancy. Virtual focus groups were conducted online between November and December 2021 using HIPAA-compliant video-based web conference software. Race-specific groups were facilitated by either an experienced female qualitative researcher (TF) or a female psychologist (AG). No relationship was established between the facilitators and the participants prior to study commencement, and no one else was present. We arranged for racial concordance of participants and facilitators to support participant comfort and openness; racially concordant groups have been found to be a beneficial and culturally-responsive approach in qualitative research, particularly when participants are asked to share potentially sensitive or controversial comments.<sup>23–25</sup>

Facilitators followed focus group guides to support open discussion. Participants were told that the study team was interested in understanding how patients make decisions about using cannabis during pregnancy and postpartum. Participants were asked about their cannabis use (including changes during pregnancy and beliefs about cannabis benefits and harms) and about cannabis-related communication and trust with healthcare providers. Questions included: "Have you discussed using cannabis during pregnancy with a physician or other healthcare provider? How did that go?", "For those of you who did not talk about [cannabis]

with your doctor or healthcare provider, why didn't you have that conversation?", "Can you think of a scenario where you would/would not trust what your physician or other healthcare provider had to say about cannabis", and "For those of you who didn't feel like you got helpful information from your doctor, what would have been helpful?" Focus groups lasted ~90 minutes and were audio- and video-recorded and professionally transcribed. Participants had a voice-only option if preferred.

Our team utilized thematic analysis to analyze the data.<sup>26, 27</sup> Initial themes were identified in advance based on the focus group guide. We inductively developed new themes based on participants' responses that we identified in field notes composed by focus group leaders after each session; weekly debriefing meetings; and iterative transcript reviews. We found that thematic saturation had been achieved by the 18<sup>th</sup> focus group.<sup>28, 29</sup>

Three authors (AA, KYW, TF) reviewed all the transcripts and drafted the initial codebook that consisted of a branching series of themes, codes, and subcodes that was based on the iterative themes and codes developed as described above. These three authors coded the same two transcripts jointly to test the codebook. The codebook was further refined via discussion and consensus until all themes, codes, and subcodes were finalized. The 16 remaining transcripts were coded independently by five team members (AA, EI, KYW, MD, TF) in NVivo Qualitative Analysis Software (Release 1.6.1).<sup>30</sup> During the coding process, team members infrequently consulted with each other regarding questions about how to code particular passages. Consensus was typically reached on use of an existing code or rarely a new code was collectively developed to describe the particular passage of text. Transcripts were not returned to participants for comment and participants did not provide feedback on the findings. The first author summarized themes, codes, and subcodes and identified exemplary quotes, with feedback from the full research team. Reviewers carefully compared summaries and participant quotes by participant racial group to determine the extent of concordance or discordance by race.

## RESULTS

Of 304 pregnant individuals identified as eligible, 104 (34%) were scheduled for a focus group. Of those scheduled, 53 (51%) participants (30 White, 23 Black) participated in one of 18 focus groups ranging from 1–6 participants (Appendix 1, available online at <http://links.lww.com/xxx>).

Of those eligible, the 104 scheduled did not differ from the 200 who were not scheduled on age, weeks pregnant or frequency of prenatal cannabis use; however, Black individuals were significantly more likely than White individuals to schedule a focus group (42% vs. 28%,  $p=0.008$ ). Of those scheduled, the 53 who participated did not differ from the 51 who did not participate on age, weeks pregnant, use frequency, trimester, or current cannabis use; however, White (versus Black) individuals were more likely to participate (63% versus 41%,  $p=0.03$ ).

Participants averaged 30.3 years-old (SD 5.2), were on average 20.9 weeks pregnant at study enrollment, and 47% were in second trimester at the time of recruitment; 69.8% reported

daily cannabis use, 24.5% reported weekly cannabis use, and 5.7% reported monthly or less cannabis use at entrance to prenatal care. At the time of recruitment (~15.1 weeks [interquartile range = 7.6–21.7 weeks] after entrance into prenatal care), most participants reported that they had already quit using cannabis (58.5% and 11.3% quit during the first and second trimester), but 30.2% reported current cannabis use. The average length of the 18 focus groups was 73.4 minutes (range 42–92 minutes).

We identified three main themes related to reasons for use/safety, healthcare experiences, and desired information. Themes and subthemes along with exemplar quotes are presented in Box 1.

Most participants reported using cannabis to self-medicate common pregnancy symptoms, such as nausea and vomiting, appetite, sleep disturbances, pain, and stress or mood disturbances (Box 1). Some participants reported using cannabis during pregnancy out of habit because cannabis use was ingrained in their everyday life prior to pregnancy. Many participants discussed a perception of safety of cannabis. Their perception of cannabis safety was sometimes attributed to it being natural (i.e., it comes from a plant). Some participants believed that cannabis is safe in pregnancy because it can be used medicinally, for example during cancer treatment to manage chemotherapy-induced nausea.

Participants also perceived overall health benefits and greater safety of cannabis in comparison to prescription and over-the-counter medications. Several individuals reported that they do not like taking medications generally, even when not pregnant, and see cannabis as a safer alternative to pharmaceuticals. A few participants described discontinuing prescription medications (e.g., for depression or autoimmune diseases), due to feared health risks for the fetus. With a perceived lack of safe, alternative pharmaceutical options, participants weighed experiencing unpleasant symptoms versus consuming cannabis for symptom management. For instance, cannabis was discussed by some participants as an effective and safer option than Zofran for morning sickness. Additionally, some participants reported using cannabis to treat co-occurring medical or mental health symptoms that would otherwise require several prescriptions.

Focus groups also contained conversations about the relative safety of cannabis compared to other substances. Some participants commented that they viewed occasional alcohol use in pregnancy as safe and believed this must also be true about cannabis. However, other participants made clear distinctions between cannabis and other substances. For example, several commented they did not like being viewed as a “drug user” for using cannabis, because they did not view cannabis as a drug. A few even preferred that the prenatal substance use screening include a separate section for cannabis to promote disclosure among patients who do not view cannabis as a drug.

In contrast, some patients reported quitting cannabis as soon as they found out they were pregnant because they believed it was unsafe; similarly, others reported discontinuing their use because they did not have enough information to confidently weigh the benefits and harms and did not want to risk potentially harming their baby.

Patients reported that they wanted their obstetric clinicians to initiate conversations about prenatal cannabis use and ask them about their experiences with and reasons for cannabis use during pregnancy (Box 1). Many participants appreciated when their clinician shared factual, scientific information about the potential harms of prenatal cannabis use while acknowledging perceived benefits. Further, patients wanted their clinicians to listen to them with neutral or positive facial expressions and to support them in decision-making while being respectful about their choices. Positive healthcare encounters engendered rapport and comfort in disclosing and discussing cannabis use, particularly when clinicians demonstrated care and concern for their patients. For example, one patient appreciated the non-judgmental support she received from her clinician, who told her: “I’m just here to talk to you, and listen to why you do it, why you don’t, and offer you other options.”

Participants reported healthcare experiences that involved disapproving language or tone and “scare tactics” would be undesirable. Some participants reported concerns about being perceived as bad parents or as having a substance use problem because they used cannabis during pregnancy. Additionally, participants preferred clinicians not issue definitive guidance to quit cannabis use during pregnancy without acknowledging the patient’s perceived benefits from cannabis use. Patients described that these clinician behaviors could contribute to them withdrawing from or avoiding conversations about cannabis or switching to a different healthcare clinician.

Participants reported difficulty finding scientific evidence about the effects of cannabis use in pregnancy. Many described “doing their own research”, including reading online articles, following social media and talking to friends and family (Box 1). Often, the information cited by participants was from non-medical sources and was either in support of or ambivalent about prenatal cannabis use. Patients reported when they received health information about cannabis from clinicians, the information focused only on potential harms or was inconclusive. A few patients said that they discounted clinicians’ warnings about the risks of prenatal cannabis use believing doctors were professionally required to discourage use.

Several participants reported knowledge of scientific studies on the health risks associated with prenatal cannabis use. A few recalled specific studies (e.g., “the Jamaican study”<sup>31</sup>) that did not find harms associated with cannabis use in pregnancy. However, participants more commonly described the scientific evidence on cannabis risks as unhelpful because it was not definitive enough. Some participants distrusted studies that identified increased risk for adverse birth and childhood outcomes, believing that studies demonstrating no harm would not be published due to anti-cannabis bias in traditional medicine.

Participants desired compelling, concrete data on specific risks associated with prenatal cannabis use. Often, the medical risks were not convincing, or participants had personal or social examples to the contrary. For example, some participants discussed awareness of normal-sized infants born after cannabis exposure in pregnancy, despite clinician warnings of low birth weight. Similarly, some participants shared their skepticism that in utero exposure to cannabis use could increase risks for neurodevelopmental disorders in children



based on the experience of friends or family. Such anecdotal evidence created doubt that adverse outcomes could result from prenatal cannabis use.

While most participants said they would prefer to receive information about prenatal cannabis use in conversation with their obstetricians during prenatal appointments, their preferences for other sources of information varied. Some wanted written materials (i.e., handouts, pamphlets, and clinic posters) with links to scientific studies. Others preferred electronically-delivered information, (i.e., emails, webpages and links on healthcare system websites, and YouTube videos), or pregnancy-related health classes.

Overall, Black and White participants were similar in their responses across themes. However, several Black participants expressed concerns about racial discrimination in their health care encounters related to prenatal cannabis use (Box 2). While some White participants appreciated continued conversations with clinicians about cannabis-related information, including praise for reducing use or quitting, one Black participant viewed ongoing queries or follow-up conversations about prenatal cannabis as condescending or racial stereotyping. Two Black participants noted that their partners had concerns about possible increased chance of being reported to Child Protective Services (CPS) for prenatal cannabis use because of their race. Another Black participant reported that they preferred having conversations about their cannabis use with midwives and doulas, believing these health care professionals may be more supportive and may have higher cultural competence to address the needs of Black patients.

## DISCUSSION

This qualitative study examined reasons for prenatal cannabis use, perceptions of safety, desired healthcare experiences, and preferred information about prenatal cannabis use from the perspective of patients who used cannabis during early pregnancy. Participants viewed cannabis as safer than prescription and over-the-counter medications and reported using cannabis to manage morning sickness, pain, sleep disturbances, and mood changes, or because it was entrenched in their everyday lives. Results complement epidemiologic studies that have demonstrated a higher prevalence of prenatal cannabis use among pregnant patients with nausea and vomiting, depression, and anxiety during pregnancy,<sup>32, 33</sup> viewing cannabis as safer than prescription and over-the-counter medications.

Participants reported they wanted their clinicians to initiate conversations about prenatal cannabis use in an open, non-judgmental manner, and inquire about motivations for use and perceived benefits. Participants wanted clinicians to share their medical perspectives, while simultaneously acknowledging the patient's choices, and presenting potential alternatives to cannabis use and strategies for abstinence (e.g., exercise, meditation).

Importantly, a few Black participants felt targeted by follow-up conversations with their obstetrician about prenatal cannabis use or expressed a concern about being reported to CPS due to their race. Underlying mistrust of clinicians and the health care system and prior experiences with racial bias likely influence these concerns.<sup>34</sup> In California, clinicians are

not required to contact child protective services or law enforcement based solely on prenatal cannabis use, but some pregnant individuals continue to express these concerns.<sup>35–37</sup>

Clinician–patient interaction may benefit from approaching conversations about cannabis use collaboratively, and with curiosity and openness. Building on participant feedback, we highlight potential recommendations for clinicians around discussing prenatal cannabis use with their patients in Box 3.

While some guidance for clinicians exists,<sup>38, 39</sup> prior qualitative studies have found that clinicians sometimes focus solely on potential legal implications of prenatal cannabis use, believe there is insufficient evidence about harms of prenatal cannabis use, or lack confidence in counseling patients.<sup>14, 15</sup> Further, pregnant patients may experience discomfort during cannabis-related conversations with clinicians,<sup>8</sup> or interpret a lack of clinician-led counseling on the negative effects of prenatal cannabis use as support for prenatal cannabis use.<sup>16, 40</sup> This study highlights how supportive, open, patient-clinician communication about prenatal cannabis use is an opportunity to use harm reduction and motivational interviewing to reduce or eliminate use in pregnancy.

Our study is also novel in its exploration of what information pregnant individuals desire around prenatal cannabis use and how they would like to receive this information. Patients sought information from multiple sources but found limited or inconsistent information about the safety and risks associated with prenatal cannabis use. Participants desired balanced information, particularly from their clinicians, that includes both benefits and risks of prenatal cannabis use, objective information based on facts and not clinician opinions, and compelling, concrete, and specific information about risks. However, the potential harms of in utero exposure to cannabis are complex, and may exceed easily measurable, concrete outcomes (e.g., low birthweight), extending into childhood when the connection between prenatal cannabis use and adverse effects is less obvious. Future research and interventions that focus on improving health literacy and the ability to seek and appraise health information around prenatal cannabis use may be helpful.

This study benefits from a large qualitative sample of White and Black patients who were organized into race-concordant focus groups with experienced facilitators to increase trust and promote depth of discussion. Focusing on White and Black participants allowed us to further compare findings across race, which is novel. However, this study also has several limitations. Participants were insured members of a large healthcare system who self-reported cannabis use in early pregnancy and results may not be generalizable outside this patient population. Two focus groups had only one patient each, and responses from those patients may have been different in a group setting. Only ~50% of individuals scheduled for focus groups participated, and the perspectives of those who participated may have been different from those who did not participate. White individuals were less likely than Black individuals to schedule a focus group, but they were more likely to participate once scheduled; however, there were no differences in completion of focus groups by other socio-demographic characteristics.



This focus group study found pregnant individuals report using cannabis to help with mental and physical health symptoms. While some participants were concerned about potential health risks and quit using cannabis, many perceived a lack of evidence on potential harms and generally believed cannabis use in pregnancy was safer than many over-the-counter or prescription medications. Results suggest obstetrician-initiated, patient-centered conversations with patients who use cannabis during pregnancy may improve patient disclosure and increase patient-clinician rapport and trust. Conversations can include education about potential harms, active listening, inquiry about reasons for use and perceived benefits, and exploration of patient willingness to switch to medically recommended interventions for pregnancy-related symptoms. Clinicians can also recognize the potential for racial bias and assure patients they will be treated with dignity and respect regardless of whether they use cannabis.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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**Box 1.****Representative Quotes for Patient Perspectives on Reasons for Prenatal Cannabis Use and Safety and Risks, Health Care Experiences, and Desired Cannabis Information****1. Reasons for Prenatal Cannabis Use and Safety and Risk****Self-Medication**

“You don’t have to be trying to get high out of your mind. I feel like that’s what a lot of people think it is...In reality, we’re using marijuana to be able to basically survive through this pregnancy in order to have the energy to get up and do these walks that they want us to do and be able to stretch and move and eat and get that water in.”

“I suffered from hyperemesis this entire pregnancy... I’ve lost around 50 pounds in the first trimester and [cannabis] was the only thing that made sure I could eat and take my prenatal vitamins.”

“I already struggled with sleeping... If I woke up in the middle of the night I could smoke a bowl and then in 20 minutes I could be asleep.”

**Cannabis as natural and safer than medication**

“I had really bad nausea... I got to like Zofran... They were just like, “There’s all these like possibly scary like side effects,” and I was just like, ‘Yeah. I think I’ll just start smoking again because that seems less scary.’”

“I’m very against any medication I do not need to take absolutely.... So I do feel like cannabis feels not just more natural but, like, closer to the source of what you’re getting.”

“Instead of taking [psychotropic] medications, [cannabis] kind of helped me better... and I feel like it will be way less harmful than the drug that they were giving me for bipolar or depression.”

**Comparisons of cannabis with alcohol, and other substances**

“A lot of people don’t really view cannabis as like a drug.... They don’t put it on par with alcohol or like crystal meth... like, “I know that this will damage my baby.”

“Maybe not referring to cannabis as a drug would be easier.... Have a separate spot for it in the intake questions might be easier for some people to be honest with it because honestly... you have a separate thing for caffeine, why not have a separate thing for smoking marijuana?”

“Smoking [cannabis] to me was like drinking a glass of wine. So I don’t see anything wrong with that.”

**Quitting due to potential harms**

“I do it because I like it, but I know that it’s not good for me. So, when I have another person in my body and it’s not good for them, I’m not going to just do that to them.”

“If something did happen or, you know, if my baby developed something, I would always wonder if it was because I smoked if it was something that I did. So, it’s just something that I just choose not to do so that I don’t have that worry down the road.”

“I don’t want to necessarily do anything to put the baby at risk. And so, I have tapered off my smoking of marijuana just because my paranoia of everything is up. I just wanted to be as perfect as possible because I’m a first-time pregnancy.”

**2. Health Care Experiences and Patient–Clinician Communication****Desired and Positive Health Care Experiences**

“Teach [doctors] how to bring [cannabis] up in a way that isn’t judgmental and be able to bring it up in a way that this is just an open, confidential conversation with your doctor. There’s no judgment here.”

“It’s really just the relationship you have with the provider, ‘cause even they views are different, you know, sometimes understanding people’s views that are different make your choices change, right? But I feel like if I’m comfortable with that person to be open-minded about what the feedback that they give you, like it’s easier for you to come and say,

“This is what I’m doing. What do you think?”

“...Give me the information that I need and let that be it. Like, just straightforward. Don’t impose your beliefs, your thoughts, your values upon me or what you think is better for me. Like, let me make that decision.”

**Off-Putting and Undesirable Health Care Experiences and Communication**

"I actually had a [clinician] that anytime my cannabis use came up, it was, 'You need to put an immediate halt to that. That is a no-no. You can't do that.'... So after, you know, the first couple of sessions of that, I was like, 'You know what, if he ask me... I'm not going to lie to him, but I'm not going to be forthcoming with him either.' And I ended up just having to change doctors. Because I feel like, what's the point in having you if I can't talk to you, you know?"

"I've noticed they say, 'Sbottom doing this.' And other than medicine, they don't really offer any other options. They just say you need to quit. That's the end of the conversation. They don't say, 'Well, here's another way,' or, 'Do yoga', or anything. They just say, 'Quit.' And it's end of discussion."

"I have my own opinion about smoking while you're pregnant... If I think it's okay and then you're telling me, like, 'Oh no, that's just, like, it's all bad,' like, not even an inch of it being okay, I will just be like, ok, I'm not gonna – I won't bring it up to you, you know, cuz I don't see that, necessarily."

### 3. Desired Cannabis Information

#### Patients Seeking Information About Prenatal Cannabis Use

"I remember I had stumbled across like this Instagram hashtag. It was like, 'Moms who smoke weed,' and it was just like pregnant women smoking weed."

"I think there may be people using it and realizing that their babies "turned out fine." So, you might have a friend who, who used it, and you may say, "Oh, well, you know what? At, at first, it was something I wouldn't do. But since she did it and her kids are fine, maybe it's okay for me to do it."

"Deep dives into the Internet late at night, you can find anything. But I would say, you know, they weren't necessarily you know, like journals or anything that are like really reputable from you know case studies or anything like that. I think that a few of them that I did read were from other countries like Australia and from Europe."

#### Perceived limitations of research

"The only risks that I have heard are just giving birth early or low birth weight. But I also know that there's no definitive studies that show that that does happen. It's just stuff that I've heard from people who are against [cannabis] mostly."

"If you don't want to take Zofran, then try some marijuana, and here are the benefits, and here are the risks. But right now, they're just assumptions. Yeah, you could have a low birth rate. You could have lower cognitive ability in your child. Well, we could have that with other drugs as well, you know, but we don't actually have the numbers and it'd be nice to have the numbers like we do with other medications."

"When I was doing research on cannabis and how it affects the fetus, all it kept saying was there haven't really been any studies. So, it was kind of inconclusive, but there haven't been any marked, you know, adverse reactions, long-term or short-term."

#### Desired Information and How to Best Receive It

"I would like to see pamphlets that have bullets and then cited research next to them... so that I could look it up again on my own and gather more information and better understand and see why so I know it's not just opinion or the cultural norm."

"Classes, I feel like, are the most educational. You know, people sometimes don't want to sit through that, and I understand that. But, just getting the knowledge, you know, in front of you. I'm like a verbal type, hands-on type of learner. So, to actually see something and like see charts and things like that, like to make it make more sense, get a better understanding of what it does, like I feel like I would feel more comfortable."

"Even just a little bit of a conversation and maybe some backup information—a pamphlet or an email, fine. Either way. But a conversation that really opens the doorway to say, like, "Look. I know this is a reality in your life. I want to know about it." And less talk about how negative it is. Let's talk about it first. Then you can give me the negatives and the effects of it. But let's just have an open conversation so that we can get that information out there."

**Box 2.**

**Representative Quotes for Racial Differences in Focus Group Findings**

<b>Perceptions of Follow-up Conversations</b>
<b>White Patients</b>
“It’s nice to have that check-in. And, you know, she was the one who really got me to quit. And she wasn’t – she didn’t pressure by any means, but just the constant, just, checking in and, you know, ‘Are you okay with these risks?’ and, you know, just kind of all that stuff.” (White participant)
“Because quitting was hard for me, having somebody to be like, ‘I’m really proud of you.’ You know, ‘That’s great.’ Like, ‘We’re cheering for you.’ That made me feel good.” (White participant)
<b>Black Patients</b>
“I don’t need you to scold me. Like, you can give me all the brochures you want, you know... But I sbottomped already. Then they want to applaud you like it’s a miracle that you don’t do drugs. Like, it’s not a miracle. You know, like, I made this choice to get my baby here as healthy as possible....They want to praise you because they think like they broke the cycle, when it’s really, like it was you who decided not to smoke....I feel like the judgment that you pass, like drugs used to be so one-sided. Like, ‘Oh, your parents was on drugs.’ Like, you know, the history of drugs in the Black community, how it got here, what affects it had on people.” (Black participant)
<b>Disclosure and Discrimination Concerns</b>
“[My partner’s] thing is like, “We Black.” He’s like, ‘You know, they don’t take other people’s babies.’ He’s like, ‘We Black, they’re just looking for a reason.’” (Black participant)
“[My obstetrician] gave me a counselor. Like I had to meet with her... I was like, ‘I don’t even smoke no more.’ Then, she was like congratulating me on not smoking. But it made me feel like, you know, I know people who do hard drugs and they don’t get counselors. Like, you know, did you only give me a counselor because I’m Black? Like, or did you feel like I wasn’t capable of quitting weed on my own or that I need an extra like push to like sbottom smoking?” (Black participant)
“I think there might be a lot of reasons why women, especially in the Black community, turn to midwives. They don’t want to go into the hospitals. They don’t want to be judged, you know, when the midwives are going to be completely supportive, or these doulas, right? Everybody is talking about doulas nowadays. It’s a heavy conversation. So I feel like they are advocating more for what women really want, especially women in the Black community.” (Black participant)



**Box 3.****Summary of Recommendations for Communication with Patients About Prenatal Cannabis Use****Initiate conversations**

- Ask patients about cannabis use
- Be open and curious about the patient's experiences, plans, and beliefs about cannabis use

**Listen to patients' "why"**

- Let patients explain their motivations and reasons for use
- Listen for particular benefits in pregnancy

**Provide education**

- Educate patients about the potential harms of prenatal cannabis use and reiterate that the effects are complex, go beyond low birth weight, and may not be immediately discernable

**Engage in dialogue with probes about alternatives**

- Ask patients about their willingness to abstain from or reduce cannabis use
- Ask about previous experiences and current willingness to use medically recommended strategies to manage pregnancy-related symptoms
- Explore patients' coping mechanisms and strategies for self-care in the absence of cannabis use

**Make recommendations**

- Share clinical perspectives and recommend a course of action for the pregnancy
- Avoid making demands

**Follow-up and praise success**

- Share standard of clinical practice for frequency of follow-up conversations