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Interpersonal Influences on the Choice to Treat Nausea during Pregnancy with Medication or Cannabis

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Abstract

Objective—This study aimed to better understand the interpersonal influences on a pregnant individual's decision of how to treat nausea and vomiting during pregnancy using a qualitative approach.

Study Design—A semistructured interview guide was developed to assess pregnancy symptoms, decision-making regarding treating nausea, and interpersonal influences on treatment decisions. Interviews were conducted with 17 individuals enrolled in a neuroimaging and behavioral study of prenatal exposure to cannabis who used medication and/or cannabis to treat symptoms associated with pregnancy.

Results—Interviews revealed four groups of stakeholders who influenced participant decision-making: medical providers, partners, family, and friends. Influence was categorized as either positive, negative, neutral, or absent (if not discussed or participant chose not to disclose). Those in the medication group reported only positive or neutral feedback from friends, family, partners, and providers. In contrast, the cannabis group participants reported positive feedback from friends, mixed feedback from family and partners, and negative feedback from providers, which was often felt to be stigmatizing. Many in the cannabis group also reported varying feedback from different medical providers. While the cannabis group frequently reported eliciting feedback from friends, family, and partners, the medication group often did not.

Conclusion—Medication group participants reported entirely positive feedback from providers and often did not mention any feedback at all from partners, family, and friends. Cannabis group participants reported much more varied feedback, both positive and negative, from a variety of interpersonal contacts and sometimes decided to conceal their treatment choice after receiving or fearing negative feedback. We recommend further research into the health outcomes of pregnant patients who chose not to discuss their treatment decisions with providers, family, partners, or

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Conflict of Interest

None declared.

friends. We also suggest further study of possible reasons behind a lack of disclosure, including fear of stigma and/or legal consequences.

Keywords

marijuana; cannabis; antinausea medication; pregnancy; nausea

Up to 80% of pregnant individuals experience nausea and vomiting during pregnancy, with severity of symptoms ranging from mild to very severe. Nausea and vomiting during pregnancy can have impacts on mental health, interpersonal relationships, and physical health.[1] Severe cases of nausea and vomiting may be associated with adverse health outcomes for the fetus.[2] Those experiencing nausea and vomiting during pregnancy need to decide if and how to treat their symptoms, weighing the potential impacts of untreated symptoms against the potential risks of a chosen treatment for the pregnant person and fetus.[3,4] A small amount of existing research has explored how pregnant individuals experiencing nausea and vomiting choose whether to use antinausea medication,[1,3] and how people may choose to self-treat their nausea and vomiting during pregnancy with cannabis.[5] Cannabis use during pregnancy is increasingly common,[6] and several studies show an association between nausea and vomiting during pregnancy and cannabis use.[7–9] The use of cannabis specifically as a treatment for nausea and vomiting during pregnancy is increasing,[6,10] and cannabis is the most used drug during pregnancy in the United States,[10,11] but little is known about how pregnant people make the choice to use cannabis or how interpersonal interactions influence this decision.

Interpersonal Influences on Decision-Making in Pregnancy

For most people, the time period of pregnancy is characterized by many complex decisions related to optimal health behaviors and, if necessary, medical treatment. Understanding how pregnant people navigate these decisions, including who in their life they consult or involve in these decisions (e.g., medical providers, partners, family, friends), is critical for supporting decision-making during this unique life stage. Much of the existing literature on decisions to seek medical treatment in the form of medication during pregnancy focuses on provider–patient communication. Lynch et al[12] reported that pregnant women often find the decision of whether to take medication challenging, and that they need specific information from medical providers to support them in making their choice. A small study by Pinfold et al[13] found that women who made independent decisions about whether to take antipsychotic medications during pregnancy faced increased pressure and had an impacted experience of pregnancy when their decision was not aligned with the preference of their medical provider. Talabi et al[14] found that pregnant women with inflammatory arthritis sometimes heard conflicting medication advice from medical providers, and that this decreased trust in their medical providers and in medication safety.

A small but growing literature has investigated the influences of other people besides medical providers on health decisions during pregnancy. Figueroa Gray et al[3] found that some women took the experiences of family and friends into account when deciding whether to take antinausea medication during pregnancy. In addition, decision-making about how

much physical activity to engage in while pregnant was found to be influenced by pressure from other people who wanted to protect against harm to the pregnant person, social media pressures to lose weight following birth, participants' beliefs about the benefits of being active, and participants' expectations for their physical activity level during pregnancy.[15]

Interpersonal Influences on Medical Use of Cannabis

The decision to use cannabis therapeutically, and interpersonal responses to that decision, have been studied outside of pregnancy. Boehnke et al[16] studied patients with chronic pain who used medical marijuana and found that only a small portion of their participants consulted with their medical providers when making decisions about which cannabis products to use. Bottorff et al[17] demonstrated that some patients who used cannabis for therapeutic purposes experienced stigmatization from family members and close friends and felt anxiety over cannabis use. Similarly, a sample of multiple sclerosis patients reported assessing likelihood of a negative reaction from providers, family, and friends before deciding to disclose therapeutic cannabis use.[18] Those who did disclose received mostly neutral feedback from providers and mixed positive and negative feedback from family and friends. Fear of negative feedback or stigma in some cases may prevent disclosure to providers. Satterlund et al[19] found that patients in California using cannabis for therapeutic purposes often did not discuss cannabis use with their regular physician, as a method to circumvent possible stigma from their doctor. Similarly, a sample of cancer patients who used medical marijuana in Florida, where medical and recreational cannabis use is legalized, reported a lack of support from their medical team, and researchers recommended better communication between patients, medical marijuana certifiers, and medical oncologists.[20]

The Decision to Use Cannabis during Pregnancy and Interpersonal Influences on this Choice

Given the increasing use of cannabis during pregnancy, specifically as a treatment for nausea and vomiting,[6,10] there is an urgent need to understand how pregnant people make the decision to use or avoid cannabis during pregnancy. Existing literature suggests that pregnant people find information about cannabis from a variety of sources, including medical providers.

Reporting on the reflections of mothers who engaged in "risky behavior" during pregnancy, including cannabis use, McKenzie et al[21] found that mothers drew information about risky behavior mostly from medical providers, medical brochures, and the internet. Holland et al[22] describe the lack of information that pregnant individuals receive from medical providers about cannabis use during pregnancy and report that the counseling that is provided often includes warnings that if the patient is found using cannabis when their baby is born, it could trigger Child Protective Services (CPS) involvement. Mark and Terplan[23] posit that when pregnant individuals do not receive counseling on cannabis use during pregnancy from a medical provider, they frequently rely on friends and family for more information.

Attitudes of medical providers toward cannabis use during pregnancy have been studied directly. In one qualitative study, a sample of obstetric providers reported being unfamiliar

with risks of prenatal cannabis use but thought of cannabis as less dangerous than other illegal drugs. They described their prenatal counseling strategy as centered on the illegality of marijuana (at the federal level and in some states) and the possibility of CPS involvement if the birthing parent tests positive for cannabis use at the time of birth.[22] A sample of midwives demonstrated positive and/or neutral views toward pregnant individuals using substances and overall expressed beliefs that individuals were using substances as a response to their environment and circumstance.[24] The American College of Obstetricians and Gynecologists's[25] most recent committee opinion piece recommends pregnant women should be encouraged to stop cannabis use, use an alternative therapy, and be counseled on possible adverse health effects of cannabis use on fetuses.

As these emerging data make clear, pregnant people who are considering cannabis as a treatment for symptoms of nausea and vomiting are likely to seek information from a variety of sources and may face active discouragement or stigma. In this study, we sought to better understand interpersonal influences on the decision of how to treat nausea and vomiting during pregnancy. We used semistructured qualitative interviews with a sample of participants who chose to treat their nausea with either cannabis or medication to learn about the types of interpersonal influences they experienced and how these influences ultimately impacted their treatment decisions.

Materials and Methods

This was a qualitative study consisting of interviews of a subset of pregnant individuals who had participated in the olfactory activation and brain development in infants with prenatal cannabis exposure (PCE) study, a prospective neuroimaging and behavioral study.

Prenatal Cannabis Exposure Study Design

The PCE study enrolled 72 pregnant individuals aged 21 to 40 from Washington and Oregon during the first trimester of pregnancy. Participants were recruited via a multipronged strategy including university- and hospital-based recruitment resources, social media ads, flyers in relevant clinics, and in-person recruitment at local cannabis-related events. Potential participants were excluded if they were: younger than 21 (minimum legal age to purchase cannabis in Washington and Oregon), carrying twins/multiples, or if they reported use or tested positive for illicit drug, tobacco, or alcohol use after fourth week of pregnancy.

Participants in the cannabis use group ($n = 37$) used cannabis-containing products a minimum of three times per week during the first trimester of pregnancy. Once enrolled, participants in the cannabis use group were followed in the study, regardless of amount of cannabis use, as the study utilized a naturalistic, observational design. No participant was required to continue to use cannabis to remain in the study. Participants in the age-matched control group ($n = 35$) did not have exposure to tetrahydrocannabinol (THC) or other drugs of abuse during pregnancy. Approximately half of the participants in each group (52% of cannabis use group, 42% of control group) used standard prescription antiemetics (such as oral ondansetron and doxylamine) to treat symptoms of nausea and vomiting. Participants of all gender identities were welcome to participate, and therefore, we refer to participants as "parents" and "pregnant people/individuals" throughout.

The PCE study followed participants throughout pregnancy and conducted behavioral and neuroimaging assessments of infant outcomes at least 6 months postbirth. Due to impacts of the coronavirus disease 2019 (COVID-19) pandemic halting in-person study visits, completion of the infant assessment was delayed for a portion of participants.

Qualitative Interview Study Design and Methods

While the overall PCE study included some participants who did not experience nausea during pregnancy, for the qualitative interviews, only participants who experienced nausea and chose to take either medication or cannabis as a treatment were included. All participants in the PCE study who met these criteria were invited to participate in the current interview study by the PCE study research coordinator via telephone. The single qualitative interview occurred after completion of all other PCE study activities. PCE participants who were interested in participating in the additional qualitative interview scheduled an interview via the PCE research coordinator. Interviews were conducted by telephone by the first author, who is trained and experienced in qualitative interviewing. Prior to beginning each interview, the interviewer discussed the study in detail with participants and received verbal consent to participate. All study procedures were approved by the University of Washington's Institutional Review Board. Participants received a $25 gift card for participating in the interview.

The interview followed a semistructured interview guide, which was developed to assess pregnancy symptoms, decision-making regarding nausea, and interpersonal influences on their decision-making related to nausea. See ►Table 1 for sample interview questions. Interviews were audio recorded and transcribed.

Interviews were conducted between December 2020 and June 2022. Out of 19 parents who scheduled a qualitative interview, one person was lost to follow-up. One person we interviewed did not use cannabis or medication, and therefore, their responses were not included. Data from 17 interviews, lasting between 25 and 60 minutes in length, were included in this analysis. Participant demographics are included in ►Table 2. The age of the child at the time of the interview ranged from 7 to 22 months; three participants had an neonatal intensive care unit stay.

Data Analysis

We used a structural coding approach[26] to capture the types of interpersonal influences on treatment decisions for nausea and vomiting during pregnancy. A codebook was developed inductively to index instances where participants mentioned sharing information about their decision-making with someone else, who they shared it with (providers, partners, family friends), and what the valence/quality of the influence was (positive, negative, neutral, or no input provided). To limit bias in coding, five transcripts were co-coded by two of three coders each (A.M., K.M., and E.M.W.). All discrepancies in coding were resolved between coders, and the codebook was modified as needed. The remainder of the transcripts were coded using the modified codebook by the first author. Qualitative coding was completed using Dedoose software.[27] Following coding, we identified qualitative themes that emerged as well as generated quantitative summaries. We summarized the data quantitatively by

tallying the number of people in each group (cannabis or medication) who reported each type of feedback and calculating proportions for each group accordingly.

Results

In 17 interviews with participants who used either cannabis (n = 9) or prescription medication (n = 8) to treat nausea in pregnancy, four distinct groups of stakeholders emerged who provided input relevant to participant decision-making: medical providers (obstetricians, midwives, nurses, and emergency room physicians), partners (romantic partners, boyfriends, husbands), family members (participant's or their partner's family), and friends. Participants reported a range of feedback, information, and opinions from these four parties, which we segmented into four categories of interpersonal influences: positive, negative (including bias and stigma), neutral, and absent (if participant noted that their treatment decision was not discussed or participant chose not to disclose with a certain party). Participants reported receiving both feedback (opinions, reflections, or directions on what to do) and information (data, stories, written or electronic resources) about their treatment decisions. Here-after, for simplicity we describe both feedback and information as "feedback."

►Tables 3–6 contain representative participant quotes describing feedback received from providers, friends, partners, and family, respectively. Common themes and response frequencies by group are summarized below.

Feedback from Providers

Participants in both the medication and cannabis use group had providers recommend antinausea medications to them. Those in the medication use group largely found these medications helpful, whereas those in the cannabis use group who took medication found it did not work for them. The medication use group received universal approval of their treatment decision from their providers, whereas the marijuana use group mostly experienced negative feedback, which often led to a decrease in communication with their provider. Some participants in each group worried about possible harmful side effects of medication.

Medication Use Group—A total of 7/8 participants in the medication use group reported positive feedback from their provider about antinausea medication as a treatment. The remaining participant in this group was a physician's assistant and reported feeling comfortable making her decision without the help of a provider. No one in the medication use group reported neutral or negative feedback from a provider.

Participants in the medication use group expressed a few common themes. They shared that providers sometimes directly recommended antinausea medication and sometimes provided general information packets or pamphlets that included information on the medication. Providers expressed confidence in medication's safety, and participants in this group shared that they trusted a medication was safe for their baby if a provider recommended it to them or confirmed it was safe, even if the participant was initially concerned about medication

safety. For many participants in the medication use group, their provider was the only person they spoke with about their decision.

Cannabis Use Group—All participants ($N = 8$) in the cannabis use group who shared their use of cannabis received negative feedback from one or more providers, whereas only a single participant reported positive provider feedback (►Table 3). Three shared that they decided not to tell their provider that they continued using cannabis after earlier receiving negative feedback. A single participant chose not to disclose cannabis use to any of their providers. Six participants reported neutral feedback from their provider(s).

Several themes were repeatedly illuminated by participants in the cannabis use group. Some shared that providers urged them to switch to a medication rather than continue using cannabis, even though the medications were sometime ineffective at treating participants' issues or had negative side effects, making one participant "even sicker." Several participants perceived bias from their providers related to cannabis use that led them to withhold information from their provider in the future about cannabis use; some reported feeling judged by their provider, with participants worrying that their provider saw them as "an addict" or "a bad mom." This experience was complicated for a few participants, who worried about harming their baby if they continued to vomit regularly but were receiving feedback from a provider that cannabis, the only treatment that had worked to ease their vomiting, would also hurt their baby. Further, some participants were warned by providers that their cannabis use could warrant CPS involvement, which emerged as a distressing concern for these participants. Relatedly, a few participants wanted cannabis use kept out of their medical record. A few participants wished they could communicate more openly with their provider about their cannabis use without fear of judgement or bias. Some participants worried about negative effects of antinausea medication, such as birth defects, and felt that cannabis was a more natural alternative than the medications their provider recommended, preferring "a plant, not pills." A few felt that their providers did not know enough about cannabis use during pregnancy.

Feedback from Friends

Both the medication and cannabis use participants reported hearing positive feedback from friends about their treatment decision. However, the cannabis use group engaged with friends about this decision much more than the medication use group. Participants in both groups mentioned the use of online mother groups to research the use of cannabis or medication to treat nausea.

Medication Use Group—Three participants in the medication use group reported positive feedback from their friends about their treatment choice (►Table 4). No participants in the medication use group described negative or neutral feedback from friends.

A couple of people in this group had friends recommend a particular antinausea medication to them or had friends share about a positive experience with the drug that influenced them to try it. Many participants did not mention discussing medication use with friends, sharing they "didn't talk to really anybody."

Cannabis Use Group—Two participants in this group heard neutral feedback from friends, whereas no participants in the cannabis group reported negative feedback from friends. All participants who used cannabis reported positive, “very supportive” feedback from friends.

Many more participants in the cannabis use group sought out information from friends, in comparison to the medication use group. Participants reported that it was useful having friends who had used cannabis during pregnancy who had healthy children, because it could assuage worries about cannabis use during pregnancy harming their baby and made them feel less alone in their decision to use cannabis. A few participants shared that “canamom” Facebook groups for mothers who use cannabis provided helpful information and support.

Feedback from Partners

While the medication use group heard exclusively positive feedback from partners about their treatment decision, participants in this group engaged less with their partners overall about their decision than the cannabis use group. Cannabis group participants heard mixed, but predominantly positive, feedback from partners. Participants in both groups at times sought reassurance from their partner that they were making a good decision in how they were treating their nausea.

Medication Use Group—Four participants in the medication use group heard positive feedback from a partner (►Table 5). No participants in the medication use group reported negative or neutral feedback from a partner about their treatment decision. Four participants in the medication use group did not mention feedback of any kind from a partner.

While most participants in the medication use group did not speak with anyone other than a provider about their treatment decision, those who did speak to another party typically spoke with their partner. Partners were overall reported to be supportive of the decision of the participant and expressed the importance of the pregnant individual’s well-being and comfort with regard to nausea “being alleviated.”

Cannabis Use Group—Six participants who used cannabis reported positive feedback from a partner about their treatment choice. One participant heard negative feedback on their decision to use cannabis as a treatment for nausea from a partner, and another participant reported neutral feedback from a partner.

Overall, the cannabis use group’s partners were “supportive” of the decision to use cannabis. Some participants’ partners helped research the safety of cannabis during pregnancy and relied on testimony from friends and family to bolster their understanding of their pregnant partner’s experience and decision. One participant’s partner felt very strongly that she should not use cannabis, but over time stopped trying to discourage her use. No participants in the cannabis group chose not to disclose their treatment choice to a partner.

Feedback from Family

Overall, both groups engaged less with their family about their treatment decisions than with providers, partners, and friends. For the medication group, it seems that most participants

found no reason to discuss medication use with family, whereas those in the cannabis group who did not share their decision with their family were concerned about receiving negative feedback. The limited feedback the medication use group heard from family was positive or neutral, and the cannabis group received more mixed feedback.

Medication Use Group—One participant in the medication use group reported positive feedback from a family member, and one participant in the medication use group reported neutral feedback from family about their choice to use antinausea medication (►Table 6). No participants in the medication use group reported negative feedback, and six participants did not mention feedback of any kind from family.

Overall, the medication use group reported very little familial influence on the decision to use medication. One participant was recommended to use medication by a family member, who was a doctor. For several participants, it did not seem necessary to discuss their medication use with family.

Cannabis Use Group—Five participants who used cannabis reported positive feedback about their treatment decision from at least some family members. One participant reported negative feedback from family about cannabis use, and another heard neutral feedback. Three participants in the cannabis group intentionally chose not to disclose their treatment choice to some or all of their family.

Some participants reported feeling comfortable using cannabis during pregnancy because they had family members who had done so and felt supported in their decision by family, who were “open with it.” Some family members were more understanding of cannabis use after the participant explained how helpful it had been for addressing their nausea and vomiting. Other participants did not share with family because they thought family members would be “super judgmental.” One who did tell her family about her cannabis use reported that a family member told her that her child would be developmentally disabled due to her cannabis use.

Discussion

These findings add nuance to the current understanding of how pregnant individuals make the choice to use cannabis during pregnancy and how pregnant people experiencing nausea and vomiting rely on those around them to make a decision to treat their nausea with cannabis and/or medication. We identified four key themes in the interviews that were particularly noteworthy. First, the medication use group reported almost universally positive feedback from a much smaller number and fewer categories of confidants. Second, the cannabis use group reported more frequently seeking out feedback from friends, family, and/or partners. Third, the cannabis group reported stigma from providers related to cannabis use and fear of CPS involvement emerged as an important concern related to discussing cannabis use. Fourth, the cannabis use group frequently reported varied feedback from providers.

First, in our interviews, the medication use group reported almost uniformly positive feedback, but frequently did not mention feedback of any kind from partners, family, or friends, and some participants specifically reported they did not discuss their treatment decision with anyone besides a provider. We did not explicitly ask these participants why they did not talk to anyone besides a provider about their decision. It is possible that the medication use group sought out less interpersonal support from partners, family, and friends because they had already heard positive feedback from a provider. This is in contrast to Baggley et al's[1] findings that women who chose to take pyridoxine/doxylamine, a prescription antinausea medication, felt the most reassured of medication safety by their friends and family, rather than their providers. It is possible that in the 18 years since the Baggley et al study was published, the use of prescription antinausea medications has become more widely considered routine care, consistent with evidence from Schrager et al,[28] who found that the use of several prescription and over-the counter antiemetics has increased over time. Figueroa Gray et al[3] found that pregnant women deciding whether to take prescription antinausea medication relied on both the opinions of medical providers and the experiences of friends and family. It is also possible that if participants took medication during a previous pregnancy, that they may have been less likely to seek out feedback on their medication decision for the current pregnancy.

Second, in contrast to the medication use group, all participants in the cannabis use group discussed their treatment decision with friends, family, and/or partners. Many reported that hearing about positive experiences and knowing the healthy children of friends and family who used cannabis during pregnancy facilitated their own decision to use cannabis. This aligns with McKenzie et al's[21] finding that pregnant women who used cannabis thought it was safe in part because the experiences of friends and family demonstrated that negative outcomes of a pregnancy were not related to risky behaviors during pregnancy. The cannabis use group may have sought out more feedback from these other parties because they heard negative feedback from a provider[29] or were nervous to share their treatment decision with their provider due to fear of stigma/bias.[5]

Third, participants in the cannabis use group experienced stigma from providers related to cannabis use. This included concerns related to triggering CPS involvement, which stifled honest communication with their provider. Patient perception of stigma in their interactions with providers has been shown to cause harm in varying contexts, including drug use during pregnancy.[30] Holland et al[22] found that a focus of obstetric providers' perinatal counseling on cannabis use were legal issues, namely the possibility of CPS getting involved if patients tested positive for cannabis at the time of delivery. Fear of legal issues and CPS involvement are some of the primary risks that pregnant individuals are concerned with related to cannabis use.[21,31] Some of the participants in the cannabis group reported that their providers shared the risks of legal issues and threatened to test them for THC use at birth, which can lead to involvement from CPS.

Our findings about fears of CPS involvement, as well as those of others,[21] are in interesting contrast to Young-Wolff et al's[32] report of increasing willingness of patients to discuss prenatal cannabis use with obstetric health care practitioners due to cannabis legalization in their state. Cannabis is legalized for both recreational and medicinal uses on a state-by-state

basis, although it remains illegal at the federal level. In Washington state, where this study was conducted, cannabis is legal, but substance use during pregnancy may be considered child abuse according to state policy. This is also true in 24 other states and the District of Columbia. However, when drug use is diagnosed or suspected, reporting and testing are not required in Washington state.[33] The legal landscape of cannabis use during pregnancy is evolving and the legal consequences for reporting cannabis use to a provider will likely vary by state and be circumstance-dependent. Regardless, the fear of CPS involvement was real for our participants.

Fourth, the cannabis use group received varied information from providers about cannabis use during pregnancy. Seven of the eight participants in the cannabis use group who disclosed their decision to a provider reported hearing differing information from two or more medical providers. This aligns with recent findings from focus groups with mothers who used cannabis during pregnancy, who reported hearing inconsistent information from providers about their cannabis use.[21] Talabi et al[14] found that when pregnant women with inflammatory arthritis heard conflicting medication advice from medical providers, their trust in their medical providers decreased. It is possible that hearing disparate information from medical providers regarding cannabis use in pregnancy could decrease trust in medical providers by pregnant individuals considering cannabis for treatment of nausea symptoms; other studies have reported on distrust of providers regarding the decision to use cannabis during pregnancy.[21,31] There is limited research on the possible harm of participants not feeling comfortable being truthful with their provider(s) about their treatment decisions.[34] In addition, incomplete patient–provider communication could lead to lowered satisfaction with care[35] and potentially worse health outcomes if providers are unaware of a patient's full health and drug history and therefore don't have their full clinical story. These results call for more open communication between pregnant people and their providers, while, as addressed above, also acknowledging the barriers that state-level mandatory reporting laws pose for creating a safe space for patients to disclose their use of cannabis during pregnancy.

Limitations

There are several limitations to our study. This was a small study at a single site. Participants considered a decision they made at least 6 months prior to their interview, which could have led to recall bias. Due to the disruptions in human subjects research caused by the COVID-19 pandemic, the timing of the interview ranged widely and recall bias might have been worse for those asked to reflect on decisions made during pregnancy many months after the fact. Another limitation is the cannabis use group only included people who decided to use cannabis despite feedback. We do not have a group of people who considered using cannabis to treat nausea but decided not to after receiving feedback about their decision. Demographically, the race and ethnicity representation of this study was close to the makeup of Washington state but was missing representation from some groups, particularly Indigenous people. The median household income of our participant group was higher than Washington state's average. However, participant incomes did vary widely. Finally, this study took place in Washington, the second state in the United States to legalize cannabis, which may limit the generalizability to states where cannabis remains illegal.

Conclusion

This study addressed gaps in understanding of how pregnant individuals engage with others to make decisions about how to treat nausea and vomiting during pregnancy. Pregnant individuals who used cannabis received more varied feedback and engaged more with friends and family on this decision compared with individuals who used medications only. Participants who used cannabis experienced stigma from providers and feared CPS involvement. Further work, particularly with patients who may be unwilling to share their cannabis use with providers, is needed to better understand the hesitancy to disclose, how perceived consequences of disclosure may vary based on personal characteristics and legal factors, and possible health outcomes related to the decision not to disclose cannabis use. Future research can also evaluate whether provider role impacts the feedback that cannabis users receive. Further, exploring provider perspectives would be valuable to understand how providers can best support patients as they make decisions that will impact their health and health care during the critical time of pregnancy.

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Key Points

- Providers, partners, family, friends gave feedback.
- Medication group got positive feedback.
- Cannabis group stigmatized by providers.
- Cannabis group got mixed feedback.

Table 1

Sample interview questions

Relevant stakeholder	Question
All	How did you learn about this treatment for nausea or other pregnancy-related symptoms?
	How did you make the decision to try it?
Provider	Did you talk with your doctor about this treatment?
	Did you feel heard and cared about during this discussion?
Nonprovider	Did you talk to other people in your life about this treatment?
	Did you know anyone who also used [treatment] during pregnancy?

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Table 2

Participant characteristics

Characteristic		Cannabis (*N*=9)	Medication (*N*=8)
Parent age	26–30	5 (56%)	3 (38%)
	31–36	4 (44%)	5 (63%)
Race/ethnicity	Black	1 (11%)	0 (0%)
	Asian	0 (0%)	1 (13%)
	Hispanic	4 (44%)	1 (13)
	White (non-Hispanic)	4 (44%)	6 (75%)
Education level	Some college	4 (44%)	1 (13%)
	College graduate	3 (33%)	6 (75%)
	Graduate school	2 (22%)	1 (13%)
Household income ($)	Below 35,000	1 (11%)	0
	35,001–50,000	2 (22%)	0
	50,001–100,000	3 (33%)	3 (38%)
	Above 100,000	3 (33%)	5 (63%)
Baby’s age at time of interview (mo)	7–9	6 (67%)	5 (63%)
	10–14	1 (11%)	2 (25%)
	22	2 (22%)	1 (13%)
Do others in household use cannabis?	No	3 (33%)	6 (75%)
	Yes	6 (67%)	2 (25%)
Types of medications used	Ondansetron (Zofran)	4 (44%)	2 (25%)
	Doxylamine/pyridoxine (Unisom)	0 (0%)	6 (75%)
	Vitamin B6	1 (11%)	2 (25%)
	Sucralfate	1 (11%)	0 (0%)
	Promethazine	1 (11%)	0 (0%)
	Compazine (prochlorperazine)	0 (0%)	1 (13%)

Table 3

Provider feedback

	Cannabis group *N*=9	**Medication group *N*=8**
Provider feedback: positive	*N*=1 "Their [my midwife and nurse practitioner's] response was supportive, because they knew how effective I had been with medicating cannabis for my PTSD, and they knew how much I was struggling with the medications" (participant 17)	*N*=7 "I didn't initiate the conversation. It was presented to me [by my OB] as… a really low-risk option for the nausea" (participant 5)
Provider feedback: negative	*N*=8 "She [my OB] was very, very, very 100% against it…if she thought that I was using at the time of my birth, she would drug test and have CPS called…So I just chose not to disclose that information with her" (participant 11)	*N*=0
Provider feedback: neutral	*N*=6 "I just let him [my OB] know that it's something that I partook in occasionally to help…with the nausea. And he was just like, 'Okay.' He didn't seem to have any kind of issue with it" (participant 16)	*N*=0

Abbreviations: CPS, Child Protective Services; OB, obstetricians; PTSD, posttraumatic stress disorder.

Table 4

Friend feedback

	Cannabis group *N*=9	**Medication group *N*=8**
Friend feedback: positive	*N*=9 “They’re very supportive…I had friends who... used it during pregnancy. I’ve had friends who have other friends that also used it” (participant 12)	*N*=3 “Once I knew someone who had used it with good success…I was more willing to try it” (participant 2)
Friend feedback: negative	*N*=0	*N*=0
Friend feedback: neutral	*N*=2 “She was just like, ‘It’s not something I would feel comfortable doing with my pregnancy, but I…have no judgment for you for doing it.’ So she was pretty cool about it” (participant 16)	*N*=0

Table 5

Partner feedback

	Cannabis group *N*=9	**Medication group *N*=8**
Partner feedback: positive	*N*=6 “He doesn’t partake at all, but he’s been very supportive of it. And he’ll tell anybody who listens…he’s not so sure that especially our first baby would have survived if I wouldn’t have had it” (participant 16)	*N*=4 “He was very supportive and…didn’t see any risk with it but saw more of the risk of constant vomiting” (participant 6)
Partner feedback: negative	*N*=1 “He wasn’t okay with it…he thought it was completely harmful to the baby” (participant 9)	*N*=0
Partner feedback: neutral	*N*=1 “He left the choice up to me…he was supportive either way” (participant 8)	*N*=0

Table 6

Family feedback

	Cannabis group *N*=9	**Medication group *N*=8**
Family feedback: positive	*N*=5 “I asked…family that I knew their parents smoked while they were pregnant…I just kind of got a little more insight from more experienced mothers and…[their children] are all happy, healthy, and fine. That…made me more comfortable” (participant 8)	*N*=1 “I talked to my aunt. She was originally the one who told me about Zofran” (participant 14)
Family feedback: negative	*N*=1 Heard from participant’s mother-in-law: “Well, he’s probably fine now, but you don’t know what he’ll be like at six years old. He could probably be developmentally disabled at that age” (participant 11)	*N*=0
Family feedback: neutral	*N*=1 “They didn’t have any kind of judgment or anything like that” (participant 16)	*N*=1 “I asked if she [my cousin] had heard of it and if she could look into it for me… so she went and literally copied out the pages from her med books”