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Treatment for substance use disorders in pregnant women: Motivators and barriers

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ABSTRACT

Background: Pregnancy is a unique opportunity to provide broad and necessary medical care for women- including treatment for Substance Use Disorders (SUD). The standard of care for SUD in pregnant women is treatment at a comprehensive care facility. There is little existing qualitative research exploring what brings pregnant women with SUD to treatment and what barriers to treatment exist for this population. This study explored women's self-reported reasons for pursuing treatment or hesitating to do so.

Methods: This qualitative study used interviews to explore common factors that motivate pregnant women with SUD to seek comprehensive care during pregnancy and common hesitations/ barriers to treatment. The study population included 20 women in treatment at a comprehensive care facility for pregnant and parenting women at Johns Hopkins. Participants volunteered to do interviews which were recorded and transcribed for analysis.

Results: Interviews revealed several major themes in motivators to seek treatment: readiness to stop using, concern for the baby's health, concern about custody of the baby or other children, wanting to escape violent environments or homelessness, and seeking structure. Barriers to treatment included fear of loss of custody, not wanting to be away from children/partner, concern about stigma or privacy, and lack of childcare and transportation.

Conclusions: This study revealed common motivators to seek treatment and barriers to treatment for pregnant women with SUD. These themes may help direct future studies and guide efforts to increase access to crucial care in this vulnerable population.

1. Introduction

Substance use disorder (SUD) in pregnant women is associated with many factors affecting health outcomes for mothers and children. Women with SUD are more likely to have comorbid psychiatric conditions, feelings of guilt and complications of pregnancy (Chou et al., 2018; McHugh et al., 2018). Infants born to women who use or misuse opioids and other substances during pregnancy are at risk for neurodevelopmental and behavioral problems, and Neonatal Abstinence Syndrome (NAS), a constellation of withdrawal signs and symptoms that can be distressing for both mother and infant (Bakhireva et al., 2019, 2018). Pregnant women with SUD— disproportionately, poor women and women of color— are increasingly stigmatized and prosecuted for their substance use, leading to financial, emotional and legal consequences in this population (Chou et al., 2018).

The 2017 National Survey on Drug Use and Health (NSDUH, conducted by the Substance Abuse and Mental Health Services Administration) states that 8.5% of pregnant women reported recent

(past month) use of illicit drugs, 7.1% reported past month marijuana use and 11.5% reported past month alcohol use (CBHSQ Data Review, 2012). These numbers have increased yearly since 2015 (from 4.7%, 3.4% and 9.3%, respectively). Nearly half (48%) of pregnant women who reported past-month illicit use of opioids reported concurrent alcohol use, and it is estimated that roughly 30% of pregnancies in the U.S. are affected by in-utero alcohol exposure (Clemans-Cope et al., 2019). In 2016, almost 22,000 pregnant women began treatment for a SUD at a publicly funded facility in the US (Cochrain et al., 2018).

Pregnancy is a unique window of access to medical care. Due to the risks of substance exposure in the perinatal period and the potential benefits of treatment during this time, pregnant women should be prioritized for treatment. Pregnant substance users are more likely to meet DSM IV criteria for SUD than non-pregnant substance users (given their continued use in the context of increased risk to self and to the fetus) and may be more motivated in recovery than non-pregnant women (Desai et al., 2014). However, pregnant women are significantly less likely to receive appropriate SUD treatment than their non-

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pregnant counterparts (Eggertson, 2013), as are women with children, due to low (6%) provision of childcare in treatment facilities (Forray, 2016).

Optimal treatment for SUD during the perinatal period is multifactorial and comprehensive, including gender-specific, trauma-informed SUD counseling with concurrent obstetric and psychiatric care, case management, and inclusive pediatric care for the infant (Forray et al., 2015). The use of medication treatment (MT) with methadone and buprenorphine during pregnancy for opioid use disorder decreases illicit opioid and other substance use for the mother and substance exposure for the fetus (Gopman, 2014). While these medications per se can predispose the infant to developing NAS, polysubstance use is associated with more severe NAS expression (Jansson and Patrick, 2019), underscoring the utility of comprehensive care for this population. Use of MT also increases adherence to prenatal care, especially when services are provided in one location (Jansson, 2018; Jansson et al., 2017).

The Center for Addiction and Pregnancy (CAP) at The Johns Hopkins Bayview Medical Center in Baltimore, MD is a facility providing comprehensive care for pregnant and parenting women with SUD. The program provides intensive outpatient treatment and has 16 shelter beds for women experiencing homelessness, violence, or otherwise unstable living conditions. The care model at CAP is comprised of: SUD treatment (individual and group therapy), pharmacological care (MT for opioid use disorder, psychiatric medications as warranted), pediatrics and case management (housing, legal, financial support). CAP care is non-fragmented (all services are available in one location), dyadic, non-judgmental, non-punitive, trauma-informed, and educational.

Despite the existence of comprehensive treatment centers like CAP, a 2012 study found that only 9% of pregnant women in the US who met DSM-IV criteria for SUD received treatment (Jansson and Velez, 2012). While many women might be geographically isolated from available SUD treatment, it is important to ensure that those women who can access care do not face significant barriers to treatment.

Pregnant women with SUD face various barriers to care: unstable financial situations, drug-seeking/ functional impairment from drug use, and fear of Child Protective Services among others (Johnson, 2019). There is limited qualitative research exploring what motivates pregnant women with SUD to seek treatment and what makes them hesitate to seek treatment, from the perspectives of women who are currently pregnant and currently in treatment. This project aims to identify these factors— an important step in reducing barriers to treatment, optimizing women's motivations for seeking treatment, and ultimately improving access to care in this population.

2. Materials and methods

This study used directed interviews to explore factors that motivate pregnant women with SUD to seek comprehensive care during pregnancy, as well as common hesitations/ barriers to treatment. Participants were interviewed at CAP between July 18 and October 10, 2018. The study was approved by the overseeing IRB and all participants provided informed, written consent. Inclusion criteria were verified by medical record review and included: Participants were currently pregnant, 18 years of age or older, and in treatment at CAP for at least 4 weeks at the time of interview without a gap in treatment for more than one week in the 4 weeks preceding interview. Participants were excluded from the study if they were postpartum or had a diagnosis of schizophrenia.

Participants did one 15 to 45-minute interview using a 28-point questionnaire developed by the study team (see Table 1). Interviews took place in a private office at CAP with only the participant and the interviewer, who was previously unknown to the participants and has no official affiliation with CAP. Interviews were recorded using an Evistr Voice Recorder and transcribed using Trint software. Transcripts were de-identified. There was also a retrospective chart review

Table 1
Interview Script.

INTERVIEW SCRIPT
How did you find out about CAP? What were your initial thoughts about CAP?
Why did you decide to come to CAP for treatment?
Were you seeing another OB/Gyn elsewhere before you came to CAP?
If YES, did they ask about the use of drugs, alcohol, smoking? If NO, did you bring up the use of drugs, alcohol, smoking? If YES, did they refer you to CAP/ SUD treatment?
If not stated above, were you referred to CAP? If YES, by whom? Was it court-ordered?
Were there any reasons you did not want to seek treatment at CAP?
Did you run into any problems getting started with treatment at CAP?
Did you know any other women who had been in treatment at CAP? If YES, what did you think about CAP based on what you knew about other women's experiences?
Is this your first pregnancy? If NO, can you tell me about your medical care during your first pregnancy? <i>If not addressed:</i> Were you using substances during your previous pregnancy/ pregnancies? Were you in treatment at CAP for your other pregnancy/ pregnancies?
Did you run into any problems getting started with treatment at CAP? If YES, what were those problems?
Tell me about your treatment here at CAP.
What additional services are most helpful? What other services would be helpful to have?
How do you feel you have changed since you began treatment at CAP? How have your relationship with with substance you and your motivation to stay in treatment changed since you began treatment at CAP?
If you could tell something to women in your situation who are not in treatment, what would it be?
If you could tell doctors/ medical professionals something about women in your situation, what would it be?
Do you think you are more prepared for your delivery than you would have been if you were not in treatment at CAP?
Tell me about any plans for treatment after CAP.
Were you in treatment for Substance Use Disorder at another location before CAP? If YES, tell me about your experience.
Were you on medication (buprenorphine or methadone) before CAP? If YES, was it prescribed?
How often do you attend group sessions at CAP? How often do you see the psychiatrist at CAP? How often do you meet with your counselor individually?
Have you stayed overnight at CAP (on the housing unit)? If YES, how often?
If you have children, do they get pediatric care here at CAP?
What was your reaction when you found out you were pregnant? Was the pregnancy planned?
How long after finding out you were pregnant did you come to CAP?
If you have children, are they in your custody? If NO, when did you lose custody?
Who do you consider your support group for the pregnancy and for your treatment?
Do you currently have a partner? What do they (your support group and/or your partner) think about you seeking treatment at CAP?
Have you had any gaps in your treatment or left for more than one week since starting treatment at CAP? If YES, would you mind talking about why you had that gap/ those gaps in treatment?
Do you think you are more prepared for parenting than you would have been if you were not in treatment at CAP? If YES, in what ways?

component of this study. Treatment records were reviewed for clinical and demographic information: age, race/ethnicity, zip code, psychiatric diagnoses, time in treatment at CAP, gestational age, history of spontaneous and therapeutic abortion, gravida, drug most commonly used at intake, substance use history, tobacco use history, history of physical, emotional and/or sexual abuse and weekly urine toxicology results. Treatment records include results from a standardized intake form administered to all patients, which provided information such as primary drug used at intake, tobacco use and abuse history. The Addiction Severity Index (ASI) was administered as part of the standard intake.

2.1. Data analysis

Interviews were preliminarily analyzed by reading through transcripts to identify major themes. Themes were then coded within transcripts using NVivo qualitative analysis software. Major themes were identified in women's motivators to pursue treatment, hesitations to seek treatment, and barriers/ obstacles that hindered access to or

Table 2
Psychiatric diagnoses among CAP patients interviewed (n = 20).

Psychiatric Diagnosis	%
Depression	85.0
Anxiety	65.0
Bipolar	30.0
PTSD	25.0
Other *	35.0
1 or more psych diagnoses	95.0
2 or more psych diagnoses	75.0
3 or more psych diagnoses	30.0

* Other psych diagnoses included Adjustment Disorder, ADD/ADHD, Personality Disorder, and Insomnia.

convenience of treatment. Qualitative data analysis was performed by the interviewer.

Descriptive analyses, including proportions and frequency counts for categorical variables, and mean (SD) for continuous variables, were conducted to describe the demographic and treatment characteristics of the sample population. Group comparisons of categorical variables were made using Pearson's chi-square (χ^2) tests and continuous variables using ANOVA and T-tests.

3. Results

3.1. Demographics

There were twenty participants in this study. Most (65%) were non-Hispanic White and 35% were non-Hispanic Black. Forty percent were homeless at the time of intake, 25% lived in Baltimore City and the remaining 35% lived elsewhere in Maryland. Most participants had a psychiatric diagnosis, as determined by chart review (see Table 2). The majority (74%) reported being in a partnered relationship or married.

Participants were mean gravida 5 (median 5, mode 5, range 1–11). Mean gestational age at the time of interview was 28 weeks as determined by electronic medical records and center intake records (based on ultrasound dating at the time of admission) (see Table 3 for additional demographic information). Most (90%) of current pregnancies were unplanned.

Primary reported drug used was opioids (70%), including heroin and prescription opioids. Most participants (85%) used more than one substance. Most (90%) were current smokers, with a mean of 12 cigarettes per day at intake and 8.7 pack years. Twenty percent of participants used or misused substances during previous pregnancies, half of whom had been in SUD treatment (at CAP) during a previous pregnancy. Most (90%) participants had been in SUD treatment at some point prior to coming to CAP, and 65% of them had been on MT prior to

Table 3
Demographic and treatment characteristics of participants (n = 20).

Characteristics	Mean (SD)	Range
Age, in years	29.7 (5.3)	22-38
Gestational Age at time of interview, in weeks	27.7 (7.7)	12-39
Length of time at CAP at time of interview, in days	61.9 (44.6)	28-127
Lifetime # of spontaneous abortions	0.6 (0.9)	0-3
Lifetime # of therapeutic abortions	1.1 (1.4)	0-5
Gravida (# of confirmed pregnancies)	4.9 (2.3)	1-11
History of abuse in lifetime (percent)	84	–
History of residing on the CAP housing unit at any point during current CAP admission (percent)	75	–
<i>Cap Referral Source</i>		
Friend/ Partner	35.0	–
Other treatment facility	50.0	–
Court-ordered	15.0	–

coming to CAP, with 80% receiving MT at the time of interview. A majority (85%) of participants had experienced some form of abuse (physical, sexual or emotional) in their lifetime, and 20% reported abuse within 30 days of coming to CAP (see Fig. 1).

3.2. Major interview themes

Three major categories were highlighted through interviews: (1) major motivators to seek SUD treatment, including: seeking daily structure, concern for the health of the baby, homelessness, and desire to retain custody of the baby and other children; (2) hesitation to seek treatment because of: not wanting to leave children or a partner at home, fear of punitive measures or loss of custody and lack of information about available treatment options; and (3) logistical barriers to treatment including lack of childcare and transportation and limited availability on the housing unit.

3.3. Motivation

Participants listed many motivating factors to seek SUD treatment at CAP, including seeking structure, concern about the health of the baby, homelessness, hoping to maintain/gain custody of this child and other children, feeling ready to stop using, being motivated by a partner, and inability of other treatment facilities to treat pregnant women. Only 3 (15%) of participants were court-ordered to join a treatment program (see Table 3).

3.3.1. Seeking structure

Half of the participants spoke about lack of structure contributing to their SUD because they felt bored or depressed; they discussed the benefit of structured day-to-day activities in helping them avoid relapse by giving them purpose.

“...When I'm here, they got me doing stuff. They got my mind occupied and all that, so I'm not really worried about what's going on outside of the building. But as soon as I leave, then I'm worried about stuff... I'm not focused until I come back to the program.”

“I needed to come here for many different reasons but one thing that I benefitted by greatly is having the routine and the structure because I'm not in bed and I'm not as sad as I was.”

3.3.2. Concern about the health of the baby

Roughly half (45%) of participants said that the health of their babies motivated them to seek treatment, and 20% said that concern about the baby's health distinguished this treatment attempt from others when they were not pregnant.

“I know [opioid use during pregnancy] can cause withdrawal for the baby and I would prefer the baby not to have to go through that when I give birth, so that's what kinda affected my decision.”

“...Normally I would go use. But now that I feel like I have another life to live for, I haven't.

They took me for an ultrasound and I saw the baby in me....That was actually motivation for me to change my ways and start over”

3.3.3. Came to treatment after considering terminating the pregnancy

Of the 20 women interviewed, 45% had a history of therapeutic abortion and 30% of spontaneous abortions. Twenty percent of the women considered or attempted termination of the current pregnancy and either changed their minds or were unable to get an abortion.

“[My initial thought was] to get an abortion, but I had a previous abortion and I didn't feel like that was fair to me or the baby. Because that's like emotionally damaging as well to keep getting an abortion because of my carelessness.”



Fig. 1. Participant history of recent and lifetime physical, sexual, emotional abuse.

3.3.4. Homelessness

Of the participants, 40% were homeless before coming to CAP for treatment, and 75% stayed on the housing unit at some point during their treatment.

“I was homeless when I first found out I was pregnant. I was sleeping in abandoned houses and abandoned cars.”

“I would be sleeping on a bench or something. [Now] I don't have to prostitute... I don't have to be with somebody to have a roof and get the drugs. CAP gives you the opportunity to move forward and not use...”

3.3.5. Custody

While 25% participants thought coming to treatment could attract unwanted legal attention and negatively affect custody status, 30% of participants came to CAP because they thought it might help them maintain custody of the baby and/or maintain or regain custody of other children.

“I knew that I would have to deal with [Child Protective Services]. And I knew that [being in treatment] was a good look. So that was my initial reason for coming...”

3.3.6. Ready to stop using

Most (90%) participants had been in SUD treatment at some point prior to coming to CAP, so the concept of personal readiness to pursue treatment was a common and important theme. 45% of participants mentioned feeling ready to stop using when they came to CAP.

“I think it's all a matter of willing to be here. You have to want to be here to get the results. I'm starting to see that because in the beginning it was like a waste of time... nothing was changing because I wasn't taking in any of the information.”

“I just knew that I didn't want to be on heroin anymore. It's not for me... this was my only option.”

3.3.7. Partner inspired motivation

Some (30%) of the participants reported that their motivation to come to treatment was negatively impacted by having a partner who was also using, although 10% reported being motivated to seek treatment by a partner.

“My boyfriend is ecstatic because this is something that we've been going through for a while together. And he actually initiated it...he went to treatment... now we're both clean and we're pushing each other.”

3.3.8. Other facilities would not treat pregnant women

Most (90%) of the participants had experienced SUD treatment at another facility prior to this pregnancy, and 72% of those women had previously received MT (not necessarily during previous pregnancies). 40% of participants spoke about other medical facilities that refused to

provide SUD treatment while they were pregnant, which led them to find CAP.

“...Nobody would take me because I was pregnant and on methadone.”
“I went to an addiction counselor who also prescribed... Suboxone and Subutex before I came here, and I was not using frequently but I did use a couple of times while pregnant, so she was not comfortable seeing me and wanted me to come here.”

3.4. Hesitation and barriers

Half of participants reported hesitation in pursuing SUD treatment during pregnancy because of lack of information or misconceptions about availability of treatment, fear of legal action affecting custody of this child or other children, not wanting to leave children or a partner at home, and concern about stigma associated with being pregnant and in SUD treatment.

3.4.1. Misconceptions or lack of information

Many participants (65%) reported having no hesitations about coming to CAP once they found out about the program, though many women initially did not know about CAP at all or had misconceptions about the program.

“I was a little confused at first because it used to be inpatient, now they have the shelter. But it gets confused by a lot of people as still being inpatient.”

“I didn't know about it until I was seven months when I applied for TCA [Temporary cash assistance] ... this is my first time ever being in a drug program. So I was nervous. But when I came here, I really liked it...”

“I didn't know about resources or I would have [come] a long time ago.”

3.4.2. Custody

Half of the participants who had other children had lost custody of at least one child at the time of interview. Although 30% were motivated to come to CAP because they thought it would help their chances of retaining or gaining custody, 25% were concerned that being in treatment would attract attention from Child Protective Services (CPS) that could portend loss of custody.

“Getting treatment when you have a child is scary because they come and take the baby...”

We are also discriminated against- because of coming here, CPS automatically is called.”

Some (25%) women thought it would be better to try to attain sobriety without professional help, so they could avoid attention from CPS.

“Sometimes I think maybe I should have got clean on the street instead of coming here cause even though I have clean urines the whole time I've been here, they said since you're still on methadone, CPS is still gonna

have a referral.”

3.4.3. Not wanting to leave children or a partner at home, using with partner

More than half (55%) of participants had children in their custody, and 70% were married or partnered. A quarter of women mentioned concern about leaving their children and/or partner at home to come to treatment, especially those women who were staying in the CAP housing unit throughout treatment. Several women either left treatment at some point to rejoin a using partner or did not come to CAP until their partner was ready to go to treatment:

“The only reason [I hesitated to come to CAP] is I have three children already. And a good man at home. And this is the first time I’ve ever been away from them.”

3.4.4. Concern about judgement, stigma and/or privacy

Participants (30%) talked about judgement or stigma they have experienced within the medical system and in general. Others were concerned about sharing information in a group setting with other women at CAP.

“Some people look at you different when you’re coming to treatment and you got a big belly. If when you’re smoking a cigarette, they look at you funny. So, a lot of people don’t come to treatment because of shame, guilt.”

“I wasn’t a fan of a bunch of people my business. At NA meetings you tell people stuff about you and I wasn’t sure if I was comfortable with people... knowing about me like that.”

3.4.5. Obstacles and practical barriers

Half of all participants mentioned at least one practical barrier to attending CAP consistently, even if they were motivated. These included lack of childcare (mentioned by 30%), limited availability of the CAP housing unit (15%), and affordable, convenient transportation to and from CAP (20%).

“Transportation’s really difficult. Yeah. Especially with a baby... I’ll have to carry a stroller, a car seat, a diaper bag, my purse, anything else... Like how do you do that on a bus? It’s difficult.”

“I think that they should open... a daycare. Cause there are days that I can’t come because I don’t have day care for my daughter.”

4. Discussion

For women with SUDs and their fetuses/infants, pregnancy is a time of high vulnerability. Accessing treatment identifies the woman as having a SUD, and her infant as substance-exposed, opening the dyad to social service interventions. There is additional social stigma for women with SUD when they become pregnant (Klaman et al., 2019; Kvaale et al., 2013). But pregnancy may also represent a unique period in the woman’s life to consider SUD treatment for the health of her pregnancy and infant. All pregnant women in the US are eligible for Medicaid and other social services, theoretically increasing access to treatment when it is available. This study demonstrates that pregnant women are motivated to seek SUD treatment by the daily structure of treatment, concern about the infant’s health, seeking stable housing, concern about custody outcomes, readiness to stop using, and being encouraged by a partner.

Half of the participants talked about the positive effect of day-to-day structure in their recovery. People in SUD recovery derive a sense of meaning and pride from consistently attending a job once they are able to do (McHugh et al., 2018). Connecting women in SUD treatment with educational and job opportunities might provide structure, supporting motivation to stay in recovery while building important skills.

The importance of a comprehensive care model for pregnant women with SUD was further supported by this study. Participants were motivated to seek treatment by concern for the health of their babies, supporting the provision of obstetrics and pediatrics in one location. A significant relationship exists between lower custody percentage and having 3 or more psychiatric diagnoses (30% of participants in this study, see Table 2), providing another incentive to include psychiatric care in the comprehensive model. Finally, 85% of study participants used more than one substance, which is associated with increased severity of NAS in infants and higher rates of postpartum relapse in mothers, necessitating a model including counseling and social work in addition to MT (Paterno et al., 2019; Roberts and Pies, 2011).

Women with SUD are likely to have partners who also struggle with substance use. Many participants reported partners who encouraged treatment and some studies have shown that increased social support is linked to higher self-efficacy in parenting, an important factor in new mothers (Stokes et al., 2018). The potential positive impact of partner support therefore suggests that connecting women’s partners with treatment (when warranted) may improve motivation.

Barriers to treatment include lack of information/ misconceptions about treatment, fear of legal action affecting custody, not wanting to leave children or a partner at home, concern about stigma associated with being pregnant and in SUD treatment, minimal access to transportation or childcare and limited availability on the housing unit.

Some barriers to treatment can be addressed at a local level, by increasing housing unit beds within treatment centers and connecting women with affordable childcare and transportation. These interventions require increased funding for treatment centers or more extensive coverage through existing programs. The high rates of violence exposure (85%) and homelessness (40%) in this population emphasize the importance of providing trauma-informed care and safe housing for clients.

Ideally, there should be no downside to women accessing treatment including fear of punitive measures or loss of custody, but concern about custody loss was a common reason that participants in this study hesitated to seek treatment. Illicit substance use during pregnancy is criminalized in some states so many women fear punitive measures and hesitate to present to treatment (Stone, 2015). Maryland state law now requires providers to report cases of substance-exposed infants to social services. In addition, unintended pregnancy is much more common in women with SUD than those without SUD, so this population may already present to care later than women who planned a pregnancy (Substance Abuse and Mental Health Services Administration, 2018a). Education for mothers regarding children’s welfare services involvement, confidentiality and mothers’ rights may alleviate apprehension which can extend an already delayed presentation to treatment.

The American College of Obstetricians and Gynecologists (ACOG) recommends early universal SUD screening for all pregnant women with validated tools such as the NIDA Quick Screen, 4 Ps and CRAFFT (Substance Abuse and Mental Health Services Administration, 2018b). SAMHSA recommends use of a al screening, brief intervention, and referral to treatment (SBIRT) protocol to effectively screen and initiate treatment for pregnant women (Terplan et al., 2012). Although 40% of participants in this study saw an obstetrician outside of CAP for the current pregnancy, less than half of those women were asked about substance use/misuse, and none of them were referred to CAP by their obstetrician. Thus, education for providers about the current recommendations, and available tools is crucial to enhance awareness and screening and to increase those identified.

Finally, participants in this study identified stigma as a concern surrounding entry to treatment. Stigma is one of the largest identified barriers to effective treatment for pregnant women (Treatment Episode Data Set (TEDS), 2016). Mothers with SUD perceive stigma from healthcare providers, the general public, loved ones and themselves (Velez et al., 2018). Women reported increased perception of stigma from within the addiction community after becoming pregnant (Velez

and Jansson, 2012). Consequences of stigma can include poor self-image and self-esteem, shame, fear, depression, anxiety and defensiveness resulting in damaged relationships, relapse to substance use/misuse, suboptimal prenatal care, non-treatment seeking, incarceration and death. Stigma can come in the form of labeling (i.e. crack babies, NAS babies) in medical literature and the lay press, misinformation (methadone exposed babies are “born addicts”), punishment (forced detoxification from MT, incarceration for pregnant women using or misusing substances), or devaluing the maternal relationship with the child (“saving” the vulnerable infant from a “harming mother”). While prejudice towards this population may be partly alleviated by continuing to educate providers (beginning early in training,) journalists, the legal and child welfare systems, families and mothers themselves, we acknowledge that this remains an issue and requires further research and work.

The findings from this study add to our knowledge about what motivates pregnant women to seek SUD treatment and what barriers exist to treatment in this population. Where it is available, the ability to access comprehensive, gender-specific and trauma-informed treatment during pregnancy can be critical for the health of women with SUD and their children. This study provides insight into motivators and barriers to treatment that should be explored and addressed in the future to improve access to care. Understanding the barriers to accessing such programs is crucial to mitigating them; understanding motivating factors is important to enhance them. Doing both will necessarily improve outcomes for this vulnerable population of dyads.

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Zane Frazer, BS (corresponding author) (Zfrazer1@jhmi.edu): Came up with project question and proposal, created questionnaire, conducted interviews, assisted with data analysis, worked on manuscript. Krystle McConnell, MPH (Kgreen39@jhmi.edu): Quantitative data analysis, worked on manuscript. Lauren Jansson, MD (LJansson@jhmi.edu): Principal investigator. Created questionnaire, oversaw data collection and analysis, worked on manuscript.

All authors have approved the final article.

Declaration of Competing Interest

No conflict declared.

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