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A qualitative study of treatment needs among pregnant and postpartum women with substance use and depression

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Abstract

Little is known about treatment for pregnant and postpartum women with co-occurring substance use and depression. Funded by the National Institute of Drug Abuse, we conducted three focus groups with 18 pregnant and postpartum women in 2011 at an urban substance use treatment clinic. A semi-structured discussion guide probed for factors impacting treatment outcomes and needs. Data were analyzed using grounded theory. Women identified motivational, family, friend, romantic, and agency characteristics as facilitative or challenging to their recoveries, and desired structure (group treatment, a safe environment, transportation) and content (attention to mental health, family, and gender-specific issues) of treatment.

Keywords

substance use; major depressive disorders; pregnant and postpartum women; treatment; social support

INTRODUCTION

Substance use and major depressive disorders among pregnant and postpartum women pose significant public health challenges. National data indicate that 5.0% of pregnant women (ages 15–44) use illicit drugs, 9.4% use alcohol (Substance Abuse and Mental Health Services Administration, 2012), and 7.4% to 12.8% experience major depressive disorder (Bennett, Einarson, Taddio, Koren, & Einarson, 2004). Substance-using pregnant women are especially likely to experience depression: data from clinical samples indicate that 36% to 40% of pregnant patients with substance use disorders also meet criteria for major depressive disorder (Fitzsimons, 2007; Martin et al., 2009).

Both substance use and depression can have negative consequences for pregnant and postpartum women and for their children. For example, substance use can increase risk for abortion (Pinto et al., 2010), and psychological disorders including depression may lead to

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preeclampsia (Kurki, Hiilesmaa, Raitasalo, Mattila, & Ylikorkala, 2000) and suicide among pregnant women (Lindahl, Pearson, & Colpe, 2005). Co-occurring substance use and psychological disorders among postpartum women may increase risk for chaotic and violent home environments, inadequate caregiving, child neglect and abuse, and multiple foster care placements (Kalland, 2001; Pollack, Danzinger, Seefeldt, & Jayakody, 2002). In addition, depression and substance use disorders can inhibit a mother's ability to implement protective prenatal care behaviors (R. Kelly et al., 1999), resulting in poor child outcomes including low-birth weight (Burns, Mattick, & Wallace, 2007; Irner, Teasdale, Nielsen, Vedal, & Olofsson, 2012; R. H. Kelly et al., 2002; Robins, 2009), pre-term birth (Fassin, 2007; Robins, 2006, 2009), and developmental and behavioral problems (Beck, 1998; Faden & Graubard, 2000; Kurstjens, 2001; Martins, 2000; Newport, 2001).

Despite the health and psychosocial risks associated with substance use and depression, little is known about the treatment needs of pregnant and postpartum women with these disorders. Although a few studies have shown promise for treatments of co-occurring substance use problems and depression in the general population (e.g., Baker et al., 2010; Lydecker et al., 2010), adaptations may be needed for pregnant and postpartum women. For example, unique psychological stresses and physiological changes occur during pregnancy and postpartum periods, and these changes may increase sensitivity to substance use problems and depression. Also, these periods pose unique barriers to treatment. For example, women may not seek treatment for substance use disorders, due to fear of losing custody of children (Grella, 1997). Pregnant women may disrupt or discontinue current medication regimens for substance use problems and depression because of real or perceived effects of fetal exposure to medication (Cohen, Altshuler, & Harlow, 2006).

Even though there may be barriers to treatment during pregnancy and postpartum, these periods may be an ideal time to offer mental health and substance abuse treatment. Pregnant and postpartum women have a great need for treatment of co-occurring disorders; pregnant substance-users have a greater dependence on drug use (Finnegan, 1991), have lower ability to quit these substances during pregnancy (Daley, Argeriou, & McCarty, 1998; Huang & Reid, 2006), attend treatment less reliably, have higher dropout rates, and are at least twice as more likely to be readmitted for treatment (Daley et al., 1998; Finnegan, 1991; Huang & Reid, 2006). Although substance problems among pregnant and postpartum substance abusers are often quite severe, these periods represent a time of high motivation to engage in positive health behavior change, as has been demonstrated in smoking cessation studies (Kruse, Le Fevre, & Zweig, 1986). This type of motivation might also extend to positive behavior change for substance use and in protective mental health behaviors and therefore pregnancy and postpartum may represent ideal times to capitalize on increased motivation to modify or eliminate substance use. In order to develop tailored interventions, however, more information is needed on the treatment needs of this high-risk population. Qualitative research approaches offer a method by which to gather rich, detailed information from this understudied population. The qualitative nature of inquiry, in which open ended questions and discussion are used to elicit data, enables one to gather the unique perspectives and suggestions that pregnant and postpartum women have for treatments and interventions. Such data is essential to tailoring treatment in a manner that is more likely to meet the needs of this population of women.

This paper reports on qualitative data from focus groups that were conducted to learn more about factors affecting treatment outcomes and treatment needs of depressed pregnant and postpartum substance users. We also specifically explored women's relationships and access to social support including support from existing professional and community resources because the quality of social support, including the level of support for abstinence, can be crucial for substance use outcomes. Furthermore, interpersonal conflicts within social

networks are highly related to substance use relapse in other populations (Andersson, Cockcroft, & Shea, 2008; Hontelez et al., 2012), but social network support can also play an important role in diminishing postpartum depression (Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993; Seguin, 1995). In addition, social network support may be particularly critical to pregnant and postpartum women with substance use and depression since the transition to motherhood is replete with interpersonal difficulties and challenges that arise from the renegotiation of close relationships.

METHOD

Participants and Setting

Participants were recruited from August 2011 to September 2011 at an urban Northeastern outpatient and intensive outpatient (9–15 hours per week) clinic for pregnant and postpartum women with drug and alcohol use disorders. Services offered at the clinic include individual and group psychotherapy, medication management, and case management. Groups offered at the clinic cover topics such as relapse prevention, early recovery, the twelve steps, domestic violence, mental health, coping skills, and parenting. The clinic provides transportation and childcare. The program is the only outpatient pregnant and postpartum substance use specialty clinic in its metropolitan area. Treatment at this clinic was typically not patients' first substance use treatment experience; clinic attendees often report previous substance use treatment at outpatient, residential, or prison facilities.

Participants were drawn from both outpatient and intensive outpatient programs and were eligible if they scored 10 or above on the Edinburgh Postnatal Depression Scale (EPDS), indicating likelihood of depressive illness (Cox & Holden, 2003), and were at least 18 years old. A research assistant made announcements about the focus groups during the clinic's treatment day. The research assistant explained study procedures, obtained consent, collected brief demographic data privately, and then scheduled participants for the focus groups. Participants received US \$20 for attending focus groups. All study procedures were approved by the Institutional Review Board at Women and Infants Hospital in Rhode Island (Protocol #10-0090).

Three focus groups were conducted with 4–7 participants per group with a total of N=18 pregnant and postpartum women meeting eligibility criteria. Participants included 7 pregnant women and 11 postpartum women (all less than 6 months postpartum). Eleven women identified themselves primarily as non-Hispanic White, four as Hispanic, and three as mixed race (African American and Native American). The mean EPDS score was 17.6 (range 10–27; SD = 4.8). Focus group discussions were moderated by the study principal investigators (JJ and CZ) and ranged in length from 90 to 120 minutes. The semi-structured discussion guide set out to answer the following primary question: “What are the treatment needs of pregnant and postpartum women with substance use and depression problems?” (see Table 1 for detailed protocol). We were especially interested in women's perspectives on social support, sober support, and professional support needed for recovery from co-occurring substance use and mental health problems during pregnancy and postpartum.

Analysis

Our analytical approach was guided by a grounded theory approach; this consisted of creating a preliminary codebook, based on the focus group discussion guide, open coding (i.e. identification and categorization of recurring patterns), and axial coding (i.e. reexamination of categories to see how they are linked) (Strauss & Corbin, 1998). Open codes were generated by at least two independent coders to ensure that detailed codes would emerge around each key area of inquiry. Team meetings were then used to verify codes and

identify utterances, and they included discussing each transcript line-by-line and reconciling differences in coding using team consensus. Coding was initially conducted on the specific concept level (e.g., preference for addressing dual diagnosis), and codes were subsequently clustered into broader unified themes (e.g., preferences for content of treatment). Final selective coding was conducted by the first author (CK) and research assistants (NB, RT, JK) to verify that the final codebook accurately reflected themes discussed by the participants. Final changes to the codebook were made and were verified by an additional coder (YCS).

RESULTS

Qualitative data analysis identified factors impacting treatment outcome and treatment needs. Participants provided informative feedback on their treatment perspectives, offering specific suggestions for new aspects or modified aspects of treatment.

Factors Affecting Treatment Outcomes

Participants highlighted the importance of relationships in treatment for substance use and depression. Several participants described that a relationship focus “*seems relevant*” for the creation of treatment and that they wanted a focus on how to get their needs met in relationships. Structural factors, namely the availability of community support, were also highlighted as important influences on treatment outcomes. Each of these factors is described in more detail below.

Self—Individual factors, including depression, were described as having a substantial influence on how one relates to those around them, as well as how one is able to commit to substance and mental health recovery. As one woman stated, “*my self helps me stay clean*,” suggesting that being able to help oneself remain sober and motivated was essential. Seeing sobriety as an independent choice was also described as being a central ingredient of staying motivated: “I think that I’ve been to every treatment program in the state two times over. I’ve been to every outpatient. It just I think having the connection with myself and feeling like I can do it instead of doing it for the board, doing it for probation, doing it for my family. Knowing that I’m here for me this time and cuz’ I want to get better and I want to change. Not because anyone else is forcing me here.” However, other women noted that independence should be counterbalanced with support and access to other resources: “It’s like half and half. It’s like the motivation is there, but I needed my resources... With the resources it helps.”

Family Relationships—Relationships with family members were described as being both helpful and unhelpful. Given that this was a pregnant and postpartum population, a family member of great importance was the new baby. Indeed, many of the women described the transition into motherhood, and, more generally, the role of being a mother as motivating them to change substance use behaviors. One woman noted, “I didn’t want to do anything. I didn’t want to be there. I was just trying to get it done with. Then I found out I was pregnant and I actually made the program work as opposed to just getting in and getting it down.” Another noted that once the baby had arrived, “being a mother is a motivation and a job like they say. A job that you don’t get paid for that’s worth it. It’s more than worth it. It pays off more than what anybody could ever think of... It’s motivation.” One woman explained the change in her thought process regarding substance use in the following way: “... before it was all just thinking about partying, where’s the next blunt coming from? Where’s the next bottle coming from? Now that I have my baby, it’s just like ‘no’. Like I have my moments, yeah, where I’m depressed and bad and it feels awful, and yeah, I want to use, but then where’s my son gonna go? That’s how I feel.” Participants also described other supportive

family members, but noted that their support could be further enhanced through opportunities to increase their understanding of what the women were experiencing: "... my husband, he's like real supportive of all of it. I was just thinking more along the lines of I feel bad for him because he doesn't understand depression at all and he knows I have it."

In contrast, some family relationships were described as not being helpful to making changes to substance use behaviors and maintaining positive mental health. Some women noted that these family members had established expectations for how they would behave, making it challenging to make changes. One participant described "... I just always feel like I have like a label on me. Like I just feel like I'm always being judged no matter what I do. Again, that comes more with the family. Like no matter what I do, I feel like I'm just never good enough. I've always had that feeling since I was a kid so maybe that's something I've just had." Other participants described family relationships in more complex ways. One participant described her mother as being both helpful and unhelpful: "... she means well. She's very supportive. She's doing everything. She's getting custody of my kids right now, but she's very awful with the way she speaks to me...It's like they're supportive, but in other ways they just treat you awful." It is clear that for many women, familial relationships are complicated and navigating these relationships successfully is relevant to treatment outcomes.

Friends—Participants also described how friends impacted treatment outcome. Women largely focused on how friends were unhelpful to them in their recovery. The women noted that many of these relationships had been developed during a period of substance use and did not transition well into a period of sobriety. For example, one woman noted that "... where she's at and I'm different... I don't know how many times I have to tell her I'm in treatment, I'm doing good. I don't want to hear about [her use] anymore." Another woman described that: "... everyone else around me still smokes weed, still going to fucking parties, popping pills, drinks. All of them too, they all do sit here and tell me oh, we care about you. We want to see you do the right thing, but they're also talking on the phone going oh, you want to come out tonight?" One woman described the challenge of moving on from these relationships in the following way: "I told my counselor here. I said I know it's not healthy to be with [my friend], like I just know because we were like drinking buddies and we just kinda and we lived next door, but I didn't have anybody else at the time." Having a limited sober support network of friends during the transition into recovery therefore represented an especially challenging time for these women.

Romantic Relationships—Romantic relationships were also described as influencing substance use outcomes. For many, these relationships were detrimental to recovery, particularly when the partner was continuing to use while the woman was working towards recovery: "I got away from my partner and I stayed clean for seven months. We got back together, I moved in, and I relapsed." Other women discussed fears about how romantic relationships might transition from a using relationship to a sober relationship: "I said that to him, I said I'm afraid... I don't know what he's like, like am I gonna like him? Like, I like the addict in him. I like getting high with him. Do I like the sober him? I don't know him sober." Concerns of transitioning relationships that involved substance use prior to recovery into newly sober relationships therefore applied to both platonic and romantic relationships.

Structural Factors—In addition, a variety of structural factors were identified as influencing treatment gains. Of note, community organizations were mentioned. In particular, the Department of Children, Youth, and Their Families (DCYF) was described to be, by and large, detrimental in the context of women's recovery. As one woman noted, "they, [DCYF], don't treat you like a human being. Instead of helping me and doing what you're supposed to do, and then not even that." Women described that they felt that DCYF

case workers “can talk to you like you're garbage and you're gonna take it because if you don't take it and shut your mouth, they'll be vindictive and put your kids in foster care or whatever the case is.”

In contrast, a number of positive structural supports were identified, including support groups and a program for outpatient treatment for pregnant and postpartum women with addiction and psychiatric issues (subsequently referred to as The Program), and was also described as being extremely helpful for treatment outcomes. Similarly, women described helpful twelve step groups as environments where they felt that they could “*start opening up*,” and as places where they “*could talk to somebody about it*.” Of note, when women described why these community resources were important structural sources for support, they highlighted the interpersonal factors. For example, women described the “*‘caring’ and ‘nurturing’ environment provided by the Program*.” Women also highlighted the importance of the relationships they formed with individuals they met through The Program and twelve step programs. For example, one woman noted that she did not need to “talk about the statistics or the drugs or this or that or why or God or anything. I needed comfort. I needed to meet other girls that were going through it. I needed to know that I could get through it.” Women noted that support sought in a setting where they could connect with individuals in similar circumstances to their own was more valuable than other forms of support: “I would have group for everything, and I'm not saying the individual is worthless, it's just that I get more help from groups.” Women identified both the emotional support as well as opportunities to normalize their experience among others with similar experiences as part of what was helpful about group member support: “I think the benefit of this group therapy is mostly just for people to identify with each other. That's what they get out of it. I think one of the biggest challenges I'm having is having somebody who's not an addict try to teach you things.” In addition, being held accountable to other group members was cited as an important motivator for maintaining treatment gains: “I don't know. I'm making this stuff up. Something as simple as that, it is very motivating. I don't want to disappoint [Name] because she's gonna lose faith in me. You know what I mean? So if I don't do that with her Friday, I'm gonna feel like I failed her. So for no other reason, you might start doing it to help somebody else, but really you end up helping yourself.”

Treatment Needs

Perhaps most importantly, women were given an opportunity to describe their treatment needs, and to articulate what they identified as being useful and non-useful aspects of treatment. Women elucidated important aspects of what structure and content were desired for treatment, what specific interpersonal and support needs exist, and what types of treatment structures would be most effective.

Structure of treatment—Difficulty scheduling yet another treatment program on top of what women were already attending was identified as problematic. One participant noting that “... to add an hour of like individual counseling to my schedule is not gonna happen.” Another participant described the challenge in the following way: “I'm already doing it at like three different places. I can't [be at yet another group].”

Timing and frequency of treatment were also discussed. Some women noted that weekly group meetings were helpful, but that they could be tapered down over time as women became less dependent on treatment: “I think once a week is good though if you really want it, but I think they would be gradual groups. People as they don't need it as much, you might have it like phase one is once a week, phase two is biweekly and phase three is once a month because I only want to come here once a week, you know what I mean?” Others suggested that rolling admission and “... a chance for new people to come into the group” might be

useful, given that “the old timers [could] help [newcomers]. They say the same thing like in AA meetings, like the old timers help the newcomers.” One participant even gave a specific suggestion for timing new admissions: “You start it off like in a cycle—say we start and six weeks into it, I think that's when you start the new one, when we're six weeks into it because then they'll come and we'll be coming every two weeks and starting their cycle.”

When queried about preferences for treatment reminders, participants gave suggestions for what worked best for them. While some noted that reminder calls were helpful, others stated that they “*don't pay attention to them*,” because, particularly “when you go to the same groups every week and you get a call every week for those same groups, that's annoying.” However, if the reminder is to be helpful, participants stated that it would be important to leave a message rather than try back several more times. Women stated that text reminders “*would probably be less annoying*” than phone calls.

The logistics, such as transportation, of accessing treatment were also described as a significant limitation for this population: “Here's the thing. We're poor. We don't have cars. We don't have licenses... We need the transportation.” In a newly developed program, one woman noted that providing transportation would facilitate attendance: “I think too if there are resources out there with this program, make sure I can get there. Make sure I can get to these people. Push these people towards me. You know what I mean? Like especially what I'm going through right now.” Other logistical considerations included the provision of childcare: “What really helps is like if you have your kid, you can bring him here.”

Participants also noted that length of session was an important constraint to consider. Time with doctors and other providers was described as being inadequate: “I wish for more therapy and to see the doctor more. You can only see the doctor 15 to 30 minutes sometimes and just once a month. I need more, but I think it goes according to health insurance.” Therefore, despite recognizing the limitations of reimbursement for providers, women noted that longer sessions would be helpful in getting more out of the treatment experience.

Some participants differed in their desire for group versus individual treatment, but the overall majority preferred group treatment: “[Initially,] I was the one really against group. I really was. I was the type that just wanted to go in, do my appointment, talk to that one person, that's it. Ever since I've been with [the Program] and been in these groups, I've actually totally changed my mind. I think I'd rather be around people I can just talk to.” However, for some women, the preference was to have group treatment for substance treatment and mental health treatment in an individual format. One woman stated, “For talking, I'd rather have that individual, and I like learning about substance and stuff in like groups to get other people's feedback, other people's stories. So you know you're not the only one.” For one woman voicing a preference for individual treatment, she noted that “I do like individual a lot cuz' there are some things that I won't share that are just too personal to me.” However, the majority of women described preferring group over individual treatment if they could only have one of the options. They qualified that preference by noting that “*if you're gonna do a group, a small group*.” Furthermore, for groups to be effective, women noted that a “*safe environment*” was essential.

Content of treatment: Women described genuinely wanting to get something out of the treatment experience despite possible expectations that pregnant and postpartum substance abusers may not care about that: “I think it's the worst thing that a counselor could do is say' oh, you have to go this', but if you're not enjoying it or getting anything out of it, then what is the point of making you go to it because you're not going to get anything out of it?” In this vein, participants noted that it was essential to have groups that were minimally redundant over time so as not to lose their interest: “... either it got repetitive or I was hearing the same

stuff and I was just like ah, forget it.” The desire for variety was also described as more feasible in groups that had a more flexible approach, and allowed women to influence the selection of topics: “The groups that helped me the most, honestly, were like the ones that didn't focus on like one specific subject. They were like the check in groups.” Other participants suggested ways to infuse variety and creativity into groups by incorporating unique approaches to treatment, such as art therapy: “... Like there's a lot of people out there who can't express themselves. So if you put out a creative twist to it or some sort, I know you have like art therapy, you have writing groups.”

Participants described a variety of areas of content that were of particular value for them. For example, women noted preferences for addressing dual diagnoses, focusing on specific mental health issues, and having varied, but specialized focus groups depending on what needs a group of women might have. With respect to addressing dual diagnosis needs together versus separately, some women noted that there should be some joint addressing of the problems, as well as some distinct treatment groups: “I think ... it would definitely benefit to have at least a group or two that linked them together that was like a combination of the two. I just don't think every group should be—I feel like there should definitely be some separate.” Women did note the interdependence of depression and substance use, and the importance of looking at both at the same time in some cases: “Depression is the major role why people are addicts because we're sick. We don't feel well. We're mentally ill. If we feel well about ourselves then we won't the pill or the stuff.”

Women expressed a desire for treatment that was tailored to their unique needs, whatever these might be. Needs identified ranged from past sexual molestation to assertiveness training. Some women noted that they wanted to learn specific coping skills that would be helpful for them in dealing with their unique stressors: “I've already learned like a lot of skills and things like that being inpatient... So I already learned that skills that I needed to just like be clean, you know what I mean? I just need to know now where to go, like what to fill my time with other than use.” Women also pointed out that a specialized focus on treatment for borderline personality disorder would be useful: “I think they should hire somebody who's specialized in that area here for women because a lot of women, young women to women my age have it.” Other areas that women noted were important to offer specialized groups for included anxiety (e.g., panic attacks), self-care and childcare. One woman even suggested the possibility of having “one group where everybody can talk about things with your kids in the same room.” Another woman noted the utility of group therapy as being a place “where recovering addicts could go and meet with children” that they had been separated from, offering a safe place to repair family connections and learn parenting skills. Finally, women identified one treatment need as support during the postpartum period. One participant described the postpartum period as an increased period of risk: “I think postpartum would be easier to relapse because you're not pregnant anymore and being new to recovery depending on how far in it you are, all the triggers and the stress of being a new mom and everything. It's easier to relapse being postpartum because you have a brand new baby and the crying and the getting up 100 times a night.”

Interpersonal (i.e., support) needs during treatment: Participants described needs for interpersonal support from a variety of specific sources, including counselors and other group members during the treatment process.

Partner involvement: Participants described a desire for partners to join parts of their treatment process. In part, women noted that it would be helpful for significant others to learn more about “where we're coming from, what we deal with everyday, and [then] they can see some things that partly maybe help.” Another woman noted that “[my partner] doesn't understand borderline personality. That's a tough one.” Participants described

treatment targeting improved communication strategies as a specific area that would offer considerable benefit. Another participant highlighted the benefits in this way: “I try to break some stuff like I said down to my boyfriend like about pregnancy or about depression and sometimes he won't get it. Well, could you just try to get those feelings out, [he says]? I can't. If I try to get those feelings out, I need to cry. I need to break something.” Providing a safe environment for the women and their partners to share their feelings would therefore offer considerable benefit for these women.

Role of counselors: Some women described finding support in their counselor or therapist. One woman noted that “my counselor's really helpful. She always puts fire under my ass... by motivating me.” Logistical support through one's counselor or caseworker was also described as being quite important: “They do help you. They really do help you if you need help like going to counseling classes, certain things. You need help with your electric, your gas. They help you with everything, your appointments.” In particular, The Program was described as providing all of these supports, as the following woman noted: “[the Program] really helped because they really do take the time like to try to like get to every issue, like they really do... There are some days where I don't feel like coming in, but I never regret coming.” One important aspect of seeking support from counselors during treatment was the issue of respect in the clinician-patient relationship. Women described that they “*really don't like it when people talk down to me.*” They noted that the experience of being treated with respect motivated them to work harder in their treatment: “Just that fact that they're not downgrading you like DCYF is, that helps. That's something that motivates you to want to do more.”

Support needed from others within personal support network during treatment:

Despite the support that could be obtained with counselors and others, women noted that additional support would be useful. In particular, women noted that having access to a support person through treatment, who they could be in touch with at any time, would mitigate the effect of a limited supportive social network: “I'm pretty independent too, and I don't really have like a lot of support systems in my life. So going somewhere and having somebody that connects you with somebody that would be there for you, I think would be a good thing.”

This need for support during treatment extended to the finding that, in treatment groups, women wanted to meet and connect with other women who have experienced similar circumstances. As one woman described, “I needed to know that there were other people that were going through similar or different stuff. I needed to know that I could cry. I needed to know that I could talk to somebody about it. I needed to know that other girls had been there and they got through it.” Another woman emphasized the importance of this in the following way: “I need to know I'm not the only one that feels like I can't get out of bed. I need to know that I'm not the only one struggling with things every day, like that helps me. I would have group for everything, and I'm not saying the individual is worthless, it's just that I get more help from groups.”

Treatment needs specific to existing community resources—Although many women endorsed Twelve Step Groups as an important source for treatment within the community, they noted that these groups did not fully address their need for interpersonal support in a group setting. As one woman noted, “I go, but it's not the same thing. You don't talk to each other.” Others noted that “*it's not a good fit for some people*” and that some groups felt like “*a cult*.” However, other women noted that Twelve Step Groups were an excellent place to expand one's sober network and meet people (including sponsors) that they could call “instead of picking up the phone and calling my dealer.”

Wanting a Safe Environment—Women described the need to feel that the treatment environment was a safe one given that many of them “have a problem with safety issues, like feeling safe.” Being able to build trust over time in such an environment was therefore identified as being essential to the treatment experience. For many of the women, part of feeling safe in treatment was the knowledge that whatever was discussed in the treatment would remain confidential. As one woman described, “I don't like to know that they can be telling my business every chance they get.” Another woman noted that she wanted to be confident that group members wouldn't “go and snitch... as soon as she leaves, [and] call the police and tell them to go to her house.”

DISCUSSION

This study explored challenges faced by depressed pregnant and postpartum substance users when seeking treatment and assessed the treatment needs of this high-risk population. Findings are important given the prevalence and consequences of substance use problems and depression symptoms for these women and their developing fetus/infant. Our findings can inform the design of population-specific dual diagnosis treatments tailored to the pregnant and postpartum periods. This study provides an opportunity to obtain information from the perspective of this understudied, growing population with respect to thoughts on recovery, treatment resources available, and desired treatment resources. As such, results point to future directions in effectively tailoring treatment to the needs of pregnant and postpartum populations with substance use problems and depression symptoms.

Pregnant and postpartum women interviewed highlighted the importance of relationships of many kinds to treatment outcomes. They discussed family members as potentially helpful to recovery; in particular, women viewed their relationship with the new baby as a positive motivating factor that encouraged treatment engagement and abstinence. However, family members were not always viewed as facilitators of recovery, particularly if family posed expectations for women's behaviors or had poor communication with women. Interestingly, relationships with both friends and romantic partners were for the most part perceived as negative influences on treatment outcomes, largely due to the fact that these were relationships associated with substance use.

Structural factors, including the availability of community sources of support, were also identified as important influences upon treatment outcomes. Developing treatment programs that incorporate linkages to existing community resources (e.g., child care, jobs, and twelve step groups) may be useful to this population, given their positive review of these resources and because linkage to existing resources may address socio-economic barriers associated with accessing treatment. It is notable that women highlighted that the reason these community programs were helpful was because of the supportive social relationships formed in these environments. Overall, these findings highlight that pregnant and postpartum women viewed relationships – including positive social support and sober social networks – as critical for positive substance use and depression treatment outcomes. Bolstering the social support/sober network elements of existing community programs may increase the utility of these programs. For example, this might include discussing strategies for enhancing communication with significant social supports, and providing additional opportunities to build rapport with the sober networks established in these community programs.

Participants also expressed specific treatment needs, with suggestions for content, structure, and format of treatment. On the whole there were no differences between pregnant and postpartum women. The only exception was postpartum women highlighted the challenge of coping with triggers during the postpartum period and wanted treatment to focus on how to

cope with the stresses of motherhood in addition to adjusting to a new period of sobriety. Women also highlighted what structure of treatment they would prefer, including the importance of ease of access to treatment including. For example, women wanted substance use and mental health issues to be addressed within one treatment setting to ensure that dual treatment needs were addressed in an integrated manner. Women also desired longer sessions so that their needs could be more thoroughly met by providers. Women also noted that potential barriers to treatment - including logistical barriers such as transportation and child care - needed to be addressed. Reflecting the finding that relationships were important for treatment outcomes, women highlighted relationships as an important aspect of treatment needs. For example, participants' largely preferred group versus individual sessions, since this type of format allowed women to access supportive social networks. Women strongly expressed a desire to incorporate positive relationships into their treatment, whether this consisted of forming positive provider-patient relationships, incorporating partners into the treatment process, or forming positive relationships with other treatment group members, which includes creating a positive and confidential environment to share their challenges.

Strengths and Limitations

This study has several strengths. This study can inform the development of tailored treatment for pregnant and postpartum women who face a set of unique challenges during this period in their life, especially those with comorbid substance use and depression. The current study highlights the particular stressors that these women face in their major life transition into motherhood. Our study also indicated that pregnant and postpartum women are highly motivated to address their both substance use and depression, suggesting that treatment may be able to build on this motivation. Findings highlighted that positive social support and sober network members may be especially important to their recovery during this period of transition, and treatment may want to incorporate ways to build stronger social support and sober networks. The qualitative nature of the data was particularly useful for highlighting the unique pregnant and postpartum experiences that impact treatment outcomes.

Despite the strengths of the study, there are some important limitations. For example, the sample size was small, limiting generalizability of findings to other clinics and other communities are unknown. There may be variations in findings depending on race and ethnicity, availability of existing community resources, and types of substances used. We did not gather longitudinal data, but such data might provide additional information on how changes during the pregnant and postpartum periods affect treatment outcomes and treatment desires. In addition, the nature of the data precluded testing of hypothesized pathways between risk and protective factors and treatment outcomes but offers insights into which factors might be assessed in future quantitative studies. Findings, however, offer an initial perspective on the needs of an understudied, yet, highly-affected population.

Conclusion and Future Directions—This qualitative study identified several areas for future research. Findings indicate that women view their social and sober support networks as important to dual recovery during the pregnant and postpartum periods and that they find treatments focused on their relationships acceptable and relevant. Future research could test the efficacy and effectiveness of treatments that intervene to improve women's relationships, support for sobriety, and access to social resources. In addition, women expressed a strong need for treatments need to address the challenges that are associated with this stage in women's lives, such as pregnancy and motherhood, which may complicate their recovery. Since it appears that pregnant and postpartum women are especially open to making changes in their lives, mental health and substance abuse treatments that address the barriers inherent to this stage of a woman's life (e.g., childcare) would be important to sustain engagement in

treatment. Additional treatment development research needs to be conducted to advance towards population-specific treatments for pregnant and postpartum women with comorbid substance use and depression.

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Table 1

Interview guide

General treatment and specific interpersonal needs relevant to IPT	
1.	<p>What did you hope to get when you came into treatment for substance use and depression?</p> <ul style="list-style-type: none"> ◦ In the past (treatment or otherwise) what has helped the most so far in overcoming their substance use? What has helped them the most in overcoming depressed moods? ◦ What is your biggest obstacle to substance use recovery? ◦ What helps you most to keep your substance use recovery? ◦ What are your biggest obstacles to feeling happy? ◦ What helps you the most overcome depression? ◦ How is this different when you're are pregnant/postpartum?
2.	<p>Is it easier to seek treatment for depression or substance use or does it not make any difference?</p>
3.	<p>You're here because you have both substance use and some depression. How do you feel about coming to a treatment that addressed both at the same time? Why would that be helpful/unhelpful?</p>
Interpersonal themes relevant to treatment	
1.	<p>How do relationships help or hurt in your recovery from substance use and depression? Does this change when you're pregnant or postpartum?</p>
2.	<p>When do you feel it is OK to: Talk about personal problems with others? Talk about relationship problems with others? Talk about feelings with others? Admit to feeling depressed? Does this change when you're pregnant or postpartum?</p> <ul style="list-style-type: none"> ◦ What kinds of help or support do you expect to get from friends, family, neighbors in general?
3.	<p>Do you want to deal with recovery from your substances and mood by yourself, or with the help of others in your life?</p> <ul style="list-style-type: none"> ◦ If you have a romantic partner, what do you want his/her role to be in your recovery? Do you want to involve him/her at all? ◦ Which persons or organizations are most supportive/least supportive to you in terms of your sobriety? ◦ What kinds of things make it easier for you to access sober support? ◦ What kinds of things get in your way of accessing sober support? ◦ Which persons or organizations are most supportive/least supportive to you in terms of your depression? ◦ Which persons or organizations are most supportive/least supportive to you in terms of your pregnancy or new baby?
4.	<p>Are there people in your life who try to help you, but do it in ways that aren't helpful? Tell us about that.</p>
5.	<p>Appropriateness of a sober network support approach:</p> <ul style="list-style-type: none"> ◦ While you're pregnant/postpartum, what will make you more likely to go to meetings, reach out to sober support, new people? ◦ While you're pregnant/postpartum, what makes it difficult to see less of people who drink or use around you?
6.	<p>Adapting IPT themes:</p> <ul style="list-style-type: none"> ◦ Are you having any disagreements with important others in your life right now? What do you think is the appropriate way to resolve interpersonal conflicts with friends, family members, partners, parents, children? ◦ What changes are you going through in your life right now? What kind of support would be helpful to you in coping with those changes? ◦ What losses have you experienced in the last few months? What kind of support would be helpful to you in dealing with those losses?
Feedback on proposed treatment	
1.	<p>Intervention structure (e.g., frequency, length, time).</p>

◦ For once a week outpatient treatment, what gets in your way of attending?

◦ What would make it easy for you to attend these sessions? What would make it difficult for you to attend these sessions, even if you wanted to? What could we do to make it easier for you to attend the sessions? (transport, time of day, reminder calls, calls if you miss appointments – how persistent to be?)

2. Session structure and content.

3. Overall impressions of the proposed treatment (e.g., perceived need, acceptability of a focus on relationships).

Open ended question (e.g., Have we missed anything that you would like to tell us?)