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ORIGINAL PAPER

Relationship-Based Home Visiting Services for Families Affected by Substance Use Disorders: A Qualitative Study

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Abstract

Home visiting programs face many challenges when providing evidence-based services to families affected by substance use disorders (SUDs). We conducted interviews and focus groups with community stakeholders and parents to elucidate important considerations when intentionally attempting to meet the needs of families affected by SUDs through home visiting programs. We identified one primary theme "*Who is the client?*" that describes how to ensure caregivers perceive themselves as an important focus of the program. Collectively, participants revealed that understanding caregivers' emotional experiences was critical for effectively transforming their subjective experiences of the program. These emotional experiences were related to the quality of their relationships with their children, other family members, and service providers. Three sub-themes illustrate specific examples: 1) responding to the unique emotional needs of mothers in recovery, 2) considering emotional states to inform inclusion in programs, and 3) addressing complex family dynamics related to SUDs in the home. Implications of these findings are discussed.

Keywords Home visiting · Substance use disorders · Qualitative methods · Parenting support and education · Workforce development

Highlights

- Barriers to providing relationship-based interventions to families affected by substance use disorders still exist within traditionally child-focused home visiting programs.
- Participants revealed that understanding the caregivers' emotional experiences was critical for effectively transforming from a child-focused to a relationship-focused program that meets the needs of mothers in recovery.
- Responding to the emotional needs of mothers in recovery could inform changes in program inclusion criteria and address complex family dynamics.

Introduction

In the past two decades, the number of infants born to mothers with substance use disorders (SUDs) has more than

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tripled (Patrick et al., 2015; Patrick et al., 2012). In the United States in 2019, 7.2 million women reported having a SUD, with 678,000 women older than 18 reporting opioid use disorder (*2019 National Survey on Drug Use and Health: Women*, 2020). More than 30,000 newborns are diagnosed with evidence of neonatal opioid withdrawal syndrome each year in the US, with symptoms presenting along a continuum of severity (Winkelman et al., 2018). Emerging evidence suggests that these children are at risk for greater behavioral, developmental, and educational problems over the long term. Specifically, opioid-exposed newborns are at increased risk of language, cognitive, and fine motor delays, as well as problems with executive functioning, memory, inattention, hyperactivity, and school performancex when compared to peers (Oei et al., 2017; Welton et al., 2019). This increased risk is likely due to complex interactions between genetic, biological, and environmental factors (Larson et al., 2019; Lee et al., 2020; Suchman et al., 2013). Socioeconomic factors and the caregiving environment contribute significantly to long-term outcomes of affected children (Larson et al., 2019). Mothers with SUDs are at increased risk of overdose following the birth of a child and substance use-related deaths are a leading cause of postpartum maternal mortality (Diop, 2018; Goldman-Mellor and Margerison, 2019; Schiff et al., 2018). For this reason, a wide variety of maternal–child health, social, and developmental services are recommended for infants and their mothers to support both early infant development and maternal recovery from SUDs.

However, families affected by SUDs often experience barriers to receiving services for multiple reasons. Mothers often face lack of childcare and transportation, challenging work schedules, co-occurring psychiatric conditions, perceived stigma, and fear of custody loss (Klaman et al., 2019; Prevatt & Desmarais, 2018; Roberts & Pies, 2011; Saunders et al., 2018; Schiff et al., 2018). In order to support optimal development of children, dedicated resources are needed to address the unique challenges faced by families affected by SUDs during their infants' early lives. Questions remain about how to best implement sustainable and effective programs.

One approach to increase support for families affected by SUDs and thereby improve maternal and child outcomes is to integrate services, tailored specifically for mothers with SUDs, such as parenting interventions, into existing home visiting programs. While home visiting programs are not intended to treat SUDs, they can help support families by addressing basic needs, providing evidenced-based/informed services shown to improve the developmental outcomes of young children, and reducing some of the barriers that exist for clinic-based services in the postpartum period (Finello et al., 2016; Mahoney et al., 1998; Nordhov et al., 2012). Additionally, parental SUDs may themselves interfere with the delivery and effectiveness of home visiting programs. For this reason, supporting parents in their recovery and addressing the specific needs of affected families is relevant to the work of home visiting programs.

Some home visiting programs have taken on a mandate to serve this population. Two of the largest programs serving families affected by SUDs are Maternal, Infant, and Early Childhood Home Visiting (MIECHV) programs and the Individuals with Disabilities Education Act Part C Early Intervention (IDEA). Henceforth, when referring to "EI," we are referencing the IDEA Part C Early Intervention (EI) services. EI specifically requires states to offer voluntary child development services to children age 0–3 years at risk for developmental delay ("Individuals with Disabilities Education Improvement Act," 2004), with many states including substance exposed infants in this category. In Massachusetts, for example, infants with neonatal abstinence syndrome, a common sequela of in-utero exposure to opioids (Kocherlakota, 2014), qualify for a minimum of one year of EI services. While this mandate makes EI one of the primary sources of early childhood support for affected families, EI began as a program aimed to address child disability and their role is still often see as primarily focused on supporting the child's development (Magnusson et al., 2017; Peacock-Chambers et al., 2020). In contrast, other home visiting programs have focused on both maternal and child health together since their inception (e.g., Early Head Start or Healthy Families America).

Challenges in Home Visiting Program Engagement

However, many home visiting programs face challenges with engagement, namely enrollment and retention of families in services, particularly among those facing the greatest psychosocial need (Akin et al., 2016; Ammerman, 2016; Azzi-Lessing, 2013; Hanlon-Dearman et al., 2017; Ingoldsby et al., 2013; McCurdy & Daro, 2004; Peacock-Chambers et al., 2019; Sweet & Appelbaum, 2004). Yet, those with complex psychosocial needs represent a large component of those receiving home visiting services, with close to 40% of parents receiving services reporting substance misuse in the 3 months prior to beginning services (Dauber et al., 2017; Michalopoulos et al., 2015). Although no one factor reliably predicts attrition, mothers with alcohol and other SUDs frequently have lower levels of service completion (Akin et al., 2016; Ammerman, 2016; Damashek et al., 2011; Finello et al., 2016; Hanlon-Dearman et al., 2017; McCurdy & Daro, 2004). While the underlying reasons for attrition of women from SUD treatment and other social services are not fully understood, prior studies suggest that the maternal subjective experience of a home visiting program is a key driver of retention (McCurdy & Daro, 2004; Peacock-Chambers et al., 2020). With respect to EI, mothers in recovery report fear of enrollment in EI related to fear of child welfare services, feeling judged or stigmatized by EI providers, and not understanding why EI is necessary for their infant simply because of in utero exposure to substances if they appear to be developing well (Peacock-Chambers et al., 2020). These real-world challenges make delivery of evidence-based services more challenging and may result in a mismatch of mothers' expectations with the program objectives, particularly for women in recovery (Peacock-Chambers et al., 2020; Peacock-Chambers et al., 2021).

Families' subjective experiences and engagement in home visiting programs vary widely based on program design and an individual provider's commitment and ability to include mothers (Azzi-Lessing, 2013; Burrell et al., 2018; Korfmacher et al., 2008; Lea, 2006; Melvin et al., 2019). For example, programs that are more responsive to a mother's immediate needs (e.g., adapting content, flexible scheduling, connecting to ancillary services) demonstrate higher rates of retention (Damashek et al., 2011; Folger et al., 2016; Gomby, 2007; Ingoldsby, 2010; Ingoldsby et al., 2013; Korfmacher et al., 2008). The focus and content of home visits plays an important role in the retention. A focus on parent–child interactions during home visiting sessions, more so than addressing case management, has been shown to increase the number of completed visits and lead to improved retention at 6 and 12 months among families with greater needs (McKelvey & Fitzgerald, 2020; McKelvey et al., 2018). In addition to improved retention, more time focused on facilitating mother–child interactions led to an increased engagement in interventions and services, improved the quality of home visits, and decreased parenting related stress (Nygren et al., 2018; Peterson et al., 2018; Peterson et al., 2007; Roggman et al., 2008).

However, home visiting providers have reported feeling underprepared to identify and respond to the needs of mothers with SUDs in particular, with providers reporting education on topics related to SUDs, but a lack of skills to respond or to address barriers for parents in accessing treatment services (Dauber, Ferayorni, et al., 2017; Dauber, John, et al., 2017; Schreier et al., 2018; Tandon et al., 2008). Programs tailored specifically to mothers with SUDs and their maternal–child relationships have shown to have improved retention (O'Malley et al., 2021).

Addressing the Needs of Mothers in Recovery from SUDs

Understanding of the unique needs of mothers with SUDs may therefore be critically important for promoting their engagement in home visiting. Although home visiting programs vary significantly with respect to program design, inclusion criteria, and targeted outcomes, a focus on the quality of the maternal-child dyadic relationship is a key factor shown to impact engagement as well as maternal recovery and child health (Suchman et al., 2006). The critical importance of supporting the maternal-child relationship for mothers in recovery is likely related to a number of different factors. For example, children may be a primary motivator for mothers to seek treatment for SUDs (Taplin & Mattick, 2015; Van Scoyoc et al., 2017). In addition, chronic drug use may also affect maternal–child relationships in part by disrupting the reward systems of the brain (systems that encourage the repetition of behaviors that bring pleasure) (Rutherford et al., 2011). As a result, mothers with SUDs may experience a decrease in pleasure and increase in stress activation during interactions with their children (Leckman & Mayes, 1998; Rutherford et al., 2011). This can be problematic given that mothers' stress levels and mental health impact child behaviors, regulation, and long term development (Reck et al. 2004).

To prevent or address these unfavorable child outcomes, parents with SUDs are often referred to participate in parenting interventions. Common skills-based approaches made available to parents with SUDs often focus on having therapists coach or teach parents concrete skills for positive interactions with their children with the goal of fostering child development and reducing child misbehavior (Ashery et al., 1998; Kumpfer, 1998; Lahti et al., 2019; Nenide & Sontoski, 2014). However, evidence suggests that such approaches may not adequately improve the quality of maternal–child interactions, attachment security, substance use, and psychiatric outcomes among mothers with SUDs in particular (Bosk et al., 2019; Suchman et al., 2006). In contrast, treatment models (e.g., *Mothering from the Inside Out, Family Based Recovery, Project BRIGHT, Attachment and Biobehavioral Catch-up*) that focus on strengthening mother–child relationships by improving maternal emotional self-regulation, decreasing parenting stress, increasing sense of satisfaction in parenting, and promoting associated positive parenting behaviors, show promise in improving the day-to-day interactions between mothers and their children (Berlin et al., 2014; Bosk et al., 2019; Hanson et al., 2015; Lowell et al., 2021; Paris et al., 2015). These parenting improvements can impact child health outcomes including increased parent-child dyadic reciprocity, increased child involvement in play with their parents, and improved child attachment security (Suchman et al., 2017). Given that the more common delivery of skills-based home visiting services, such as EI, do not address these potentially important mechanisms of action, this may be an additional reason why families affected by SUDs are less likely to engage in in these programs.

Many home visiting programs, including EI programs in Massachusetts, provide relationship-based dyadic service delivery. This approach often actively involves mothers through strengths-based coaching toward more positive parenting behaviors (McCollum et al., 2001). However, many programs still struggle to engage mothers with SUDs in their services more broadly. The introduction of an explicit relationship-based model within a traditionally child-focused system may require a shift in perception for both families and providers, from the child or caregiver as the focus to the caregiver-child relationship as the focus. How to shift traditionally child-focused home visiting services toward relationship-based practices that also address the unique needs of mothers with SUDs is not well understood (Azzi-Lessing, 2013; Peacock-Chambers et al., 2020). In this study, we elicited the perspectives of various stakeholders, including parents and community SUD, health, and child development providers, in order to elucidate important considerations when intentionally tailoring home visiting services to meet the needs of families affected by SUDs. We focus largely on EI services as they are the most widely available to families affected by SUDs in this community.

Methods

Study Design and Sample

The study team conducted semi-structured interviews and focus groups with participants identified as key stakeholders, including parents with SUDs, EI staff and directors, physicians, nurses, and addiction treatment and social service providers working with families affected by SUDs. The parents and providers did not have direct relationships that we were aware of. The study was approved by the Baystate Medical Center Institutional Review Board. We conducted the study in both rural and urban communities in western Massachusetts. We recruited participants through perinatal collaboratives and coalitions focused on improving the care for pregnant and postpartum women with SUDs (primarily opioid use disorder). Flyers with contact information for the research team were distributed to providers through email list serves and in-person at meetings with staff members. Staff members at the same community organizations distributed flyers to potentially interested parents. Potential participants underwent screening by phone to ensure they were ≥18 years old and English-speaking. In addition, parents were asked if they had a history of SUDs (i.e., were in recovery/treatment from a SUD) while parenting, and providers were asked if they worked directly with families affected by SUDs either currently or in the past. We invited parents and providers to participate in a focus group with a lunch provided or an individual interview at a time of their choice. Parents were offered to join the multi-disciplinary focus group or parent-only focus groups, based on their comfort and availability. Interviews and focus groups impart different methodologic strengths and weaknesses when discussing potentially stigmatizing topics (Ruff et al., 2005). For example, focus groups provide insight into social norms as well as observation of interactive discussion between group members. However, given the logistical challenges associated with focus group participation, particularly for under-resourced communities, we offered participants the choice of either form of participation based on preference, availability, and logistical considerations. We held meetings at healthcare facilities, community-based service organizations, or in participant homes. Some of the participants in focus groups knew each other through professional relationships, or in the case of one of the parent focus groups, as residents of a residential treatment program. Participants received a \$50 gift card as compensation for their time. Forty-three potential participants were screened, and recruitment continued until thematic saturation was achieved ($n = 38$).

Research Team and Reflexivity

The Principal Investigator (PI) (EPC) and at least one other study team member conducted the study visits. The PI is a female primary care pediatrician with experience conducting qualitative research. The PI had no prior relationships with parent participants. The PI had professional relationships with some of the provider participants through local perinatal collaboratives and as a physician in the community. The remainder of the research team included a psychologist clinician-scientist (AL), a clinical social worker (MCC), an addiction health services researcher (PDF), a maternal mental health services researcher (NB), a pediatric health services researcher (EF), and a medical student (DB). In preparation for this study, the study team reviewed the extant literature on perinatal SUDs and home visiting engagement. Feedback from key experts in the field and iterative feedback from community partners and researchers was obtained to inform the study design and interpretation of the findings. Perspectives from the study team's multiple disciplines were integrated throughout the research process.

Data Collection

Verbal informed consent was obtained from all individual participants included in the study prior to the interview or focus group. The study team then invited participants to participate in a 90–120 minute focus group or a 30–60 minute interview followed by a brief survey. Questions for both interviews and focus groups were the same but differed for parents and providers (Appendix 1). The guide was informed by the research team's prior qualitative studies and conceptual models used to understand maternal engagement in perinatal services (Peacock-Chambers et al., 2021). The PI facilitated conversation between participants in response to the guide questions, using probes as needed. Interviews and focus groups were audio-recorded with a digital recorder, and field notes were handwritten or typed by the PI and an additional study team member.

The PI presented participants with general information regarding an evidence-based parenting program designed specifically for mothers in recovery from SUDs: *Mothering from the Inside Out* (Suchman et al., 2017). This program is an attachment or relationship-based intervention delivered via individual weekly sessions to mothers with SUDs by a mental health clinician. Sessions focus on building mothers' capacities to manage challenging parenting situations and self-regulate via reflective discussion. There is also an emphasis on promoting understanding of the thoughts and feelings that underlie adult and child behaviors. The PI informed participants that the study team was proposing delivering *Mothering from the Inside Out* through EI and other MIECHV home visiting programs. The PI then asked participants two main questions: "What is your initial reaction to the information you just heard?" and "How would the program need to be adapted to meet your needs (or the needs of your community)?" Two additional questions were added after the second interview in order to probe deeper regarding family relationships: "Who do you think should be offered the intervention (e.g., fathers, grandparents, mothers in specific phases of recovery or with specific needs?)" and "How do you think other family members should or should not be involved?" Participants completed demographic surveys at the conclusion of each interview and focus group. Recruitment continued until thematic saturation was achieved.

Data Analysis

Recordings were transcribed verbatim, and all transcripts were independently coded by two study team members. Data from provider and parent participants were analyzed together. The study team used NVivo software to organize the analysis (*NVivo qualitative data analysis software*, 2018), which included both inductive and deductive analytic codes and corresponding definitions in a codebook. Deductive codes were derived from the research team's prior qualitative studies and conceptual models used to understand maternal engagement in perinatal services (Peacock-Chambers et al., 2020; Peacock-Chambers et al., 2021). Coders met on a weekly basis for discussion and comparison of codes. Coders resolved discrepancies between codes through open discussion until consensus was achieved. The codebook described definitions for specific codes, and memos were used to document discussion of the codes. The study team iteratively identified themes through open coding with monitoring for thematic saturation. Early in the data analysis process, we recognized that most existing services for parents with SUDs were geared toward mothers. We retained data from fathers in our analysis because their perspectives were important in terms of contextualizing our study findings, however, we refrained from further purposive sampling of fathers, excluded quotations from fathers in the results section, and limited our analysis to focus on the needs of mothers.

A descriptive content analysis (Boyatzis, 1998) involving the full study team identified the primary theme and subthemes. Consensus was achieved on the sub-themes that provide specific examples of how the primary theme related to different aspects of home visiting service delivery. Thematic saturation was determined by the study team in relation to the primary theme and sub-themes when no new themes were identified. Descriptive statistics were used to summarize demographic data from the survey. We note that some providers disclosed a history of SUDs in response to interview questions and this information is presented when available, however, this data was not collected across all providers as part of the survey.

Results

Participants

Participants included 13 parents in recovery from SUDs and 25 providers (some of whom were in recovery from SUDs themselves). We conducted 4 focus groups (1 with parents, 3 with providers, range of 4–10 participants) and 11 individual interviews (Table 1). The average age of providers was 51 years old, and average age of parents was 34 years old. Parents included 3 fathers and 10 mothers with between 1 and 6 children each. Approximately half of parents ($n = 7$, 54%) had some education beyond a high school degree. Providers had an average of 12 years of experience and came from the fields of SUD treatment (16%), Early Intervention (25%), healthcare (16%), and a number of other fields (43%) as described in Table 1.

Primary Theme: 'Who is the Client?'

Although many EI providers and leadership described the family unit as the client, this perception was not always conveyed to or shared by families affected by SUDs. Providers and parents alike perceived that services in general were often divided to focus on the needs of either the child or the caregiver (in most cases the mother) without being inclusive of both: *"a lot of places focus on the parent or focus on the kid, but not really focus on both"* (mother). This was seen as detrimental to both parent and child (*"I feel like if you don't work with the mom, you're not treating*

Table 1 Participant Characteristics – Focus Groups and Interviews

	Duration (minutes)	Providers (n)	Setting	Age Range (years)	Occupations	Work Experience Mean Years (range)
Focus group	74	10	Rural	24–63	Substance use treatment ($n = 2$) Healthcare ($n = 2$) Early Intervention ($n = 1$) Other* ($n = 4$) Multiple[¥] ($n = 1$)	15 (1–38)
Focus group	66	4	Urban	36–58	Substance use treatment ($n = 2$) Healthcare ($n = 1$) Other* ($n = 1$)	7 (1–15)
Focus group	71	7	Urban	27–59	Healthcare ($n = 1$) Early Intervention ($n = 4$) Multiple[¥] ($n = 2$)	11 (2–20)
Interviews	Mean: 38 Range: 26–56	4	Rural ($n = 2$) Urban ($n = 2$)	27–65	Healthcare ($n = 1$) Early Intervention ($n = 2$) Multiple[¥] ($n = 1$)	15 (4–26)
Parents	**Duration (minutes)**	**Parents (n)**	**Setting**	**Age Range (years)**	**Demographic information primary language, number of children (range), education**	
Focus group	35	Mothers ($n = 6$)	Rural	20–48	English speaking ($n = 6$), 1–3 children, 10th grade ($n = 1$), some college ($n = 1$), college graduate ($n = 2$), graduate school ($n = 1$), unknown ($n = 1$)	
Interviews	Mean: 36 Range: 25–45	Fathers ($n = 3$) Mothers ($n = 4$)	Rural ($n = 0$) Urban ($n = 7$)	25–45	English speaking ($n = 6$), other language ($n = 1$), 1–6 children, less than high school graduate ($n = 2$), GED/high school graduate ($n = 2$), some college ($n = 3$)	

*Other occupations included: Child welfare services, department of public health, home visiting programs, Early Head Start, social work, outreach specialist/case management

[¥] Multiple occupations included: Developmental Specialist, Parent Educator/Home Visitor and Recovery Coach, clinical social worker, mental health counselor and supervisor, and registered nurse

the child" (provider)) and likely to impact the degree of parental involvement in a service. One EI provider described how her work was centered on the maternal-child relationship, particularly for mothers with infants. The provider described explaining this concept to families in the following way:

> "When babies are little, it's really the relationship [that matters], the baby has some things that he or she is dealing with for sure. But the most important thing for babies right now is the relationship. So our focus… is really to look at how the two of you are doing together" (EI provider).

For many service providers across different disciplines, the concept of focusing on mother-child and family relationships made intuitive sense, and was generally not perceived as a new concept. However, it was also not considered common practice within EI services.

The primary theme *'Who is the client?'* speaks not only to the question of *who* should be included in receipt of relationship-based home visiting services, but also *how* to ensure that parents in recovery perceive themselves as being an important focus of the service with respect to their unique needs. Collectively, participants revealed that understanding the emotional experience of mothers, as well as the emotional quality of their relationships with their infants and other family members, was critical for effectively transforming their subjective experience of the program. Given the participants' focus on the needs of mothers in particular, we henceforth focus our description of this theme on maternal experiences within EI programs among mothers in recovery. The primary theme is supported by three sub-themes that demonstrate how maternal emotional experiences and the emotional quality of relationships are central to mothers' perceptions of EI programs (Fig. 1). These sub-themes included: 1) responding to the unique *emotional* needs of mothers in recovery, 2) considering emotional states to inform inclusion in programs, and 3) addressing complex family dynamics related to SUDs in the home.

Responding to the Unique Emotional Needs of Mothers in Recovery

Participants identified that the postpartum period is a distinct period for women with SUDs, resulting in a significant impact on mothers' emotional health and requiring unique service approaches compared to those in the prenatal period.

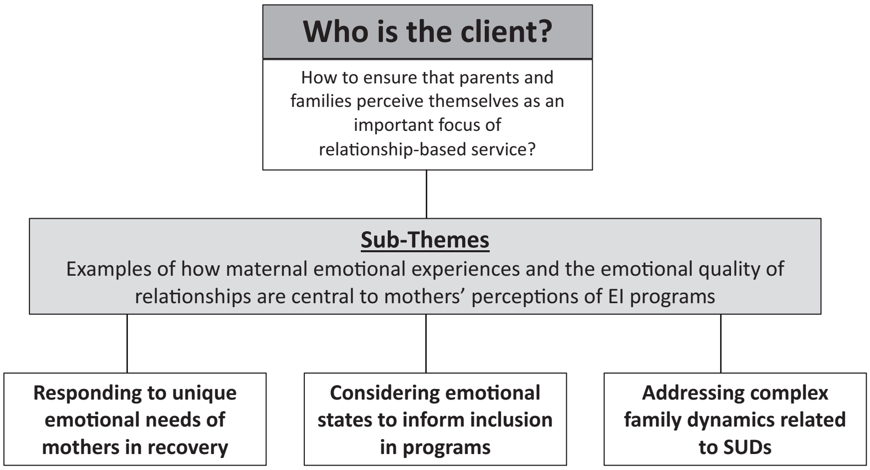

Fig. 1 Prominent Theme and Sub-Themes

Mothers in recovery described the intersecting complexities of having an infant, parenting while in recovery, and being in a potentially new phase of recovery. Providers noticed the impact of these simultaneous stressors on service engagement in general:

> "She preferred coming [to a prenatal group for women with SUDs… [She] came to all the groups prenatal. But now she's got a new baby and then three other children… And so, she can't make it to a weekly session and there's less incentive, too" (midwife provider).

At the same time, women experienced extreme pressure to be "perfect." These high expectations associated with guilt resulted in intense emotional environments that could be detrimental to their recovery: *"She blames herself… and may even risk herself relapsing because she can't get over the fact that she did something that may not have been positive for her child"* (SUD treatment provider). These emotional and logistical challenges of the postpartum period, social stigma, and the discontinuation of the resources present during the prenatal period all have the potential to lead to social isolation:

> "Isolation is… one of the hugest problems, feeling like you're out there on your own and you're a new mom? Whoa! You know, and you're trying to be sober and in recovery?… because there's a stigma in our culture… there's no people coming around and giving you casseroles" (Recovery Coach and mother).

Participants determined that EI programs had the potential to address some of these challenges directly in order to meet the needs of postpartum women with SUDs.

However, participants also felt that in order to address the gaps in current service provision, it was necessary for clinical work within EI to incorporate support for mothers' emotional needs: *"A [home visiting program] is great… if they're coming in for the baby… But we can't forget that the mother has these emotional needs"* (hospital nursery social worker). Emotional support was seen as critical for relapse prevention because, as one provider with lived experience described: *"You relapse emotionally long before you pick up physically"* (provider and person in recovery). Understanding and addressing the unique and dynamic experience of recovery from SUDs in the postpartum period, the shift from prenatal to postpartum services, and the emotional vulnerability of postpartum women were seen as vital areas for EI providers to provide greater emotional support and, in turn, encourage greater maternal engagement in the program.

Considering Emotional States to Inform Inclusion in Programs

Many participants believed that mothers' emotional states, rather than the specific stage of recovery, should be considered a more important factor for determining eligibility in EI services. Overall, this theme was more strongly expressed by mothers in recovery than providers without histories of SUDs. Although participants recognized that identification of specific emotional vulnerabilities could be a challenge, broader inclusion criteria were recommended. One participant highlighted a gap in identifying women in recovery from opioid use disorder specifically that would benefit from support but were not identified because they did not use opioids (prescribed or illicit) during pregnancy:

> "So I'll get personal… I had a couple years in recovery myself… and I didn't qualify for any of this. I'm kind of like the person over here, like 'Hey, I wasn't using while pregnant, but I really needed help!' and I still struggle with depression… but my postpartum [depression] was insane… try to be all-inclusive" (Recovery Coach and mother).

In this mother's case, traditional screening efforts focused on objective medical history (i.e., infant's in-utero opioid exposure) failed to identify her emotional needs as a woman in recovery.

As a second example, interviewees repeatedly raised the importance of including mothers in recovery that did not have custody of their children given the negative impact separations had on their emotional health. Participants saw inclusion in relationship-based services as having the potential to address two key maternal concerns: the emotional quality of mothers' relationships with their infants, and mothers' abilities to manage the impact of separation on their recovery. Non-custodial parents reported frequently not being involved in EI services given that services were typically provided where the child was residing. This logistical barrier often exacerbated mothers' concerns about their ability to bond with their infants. Some non-custodial parents described their relationships with their children as fragile and many expressed anxiety related to connecting emotionally with their children while separated: *"One of my worries is my bond with my baby… How am I going to make sure that he knows that I'm his mom?"* (mother). Furthermore, some participants reported that the discouragement parents experienced while dealing with child welfare agencies had a negative impact on their recovery and their relationship with their child: *"They took their kid, and they only get to see their kid one hour a week, and it's like frustrating for them, because they're doing all these things to stay clean and do the right thing, but they're getting discouraged"* (mother). Both mothers and providers wondered how EI could include non-custodial mothers or provide greater support during formal or informal separations, given the concern about the quality of the mother-infant attachment and the fragility of the relationship after reunification: *"All of a sudden they give [the children] back to you when the mother's already lost the bond, lost all the closeness… How is the mother supposed to cope?"* (mother). Participants identified non-custodial parents as an important target population that needed greater assistance navigating these emotional transitions and separations from their children.

Addressing Complex Family Dynamics

Finally, participants expressed understanding of the complex "family dynamic[s]" that impacted the emotional experience of mothers in recovery and their relationships with their children. Some participants saw benefit in the ability of EI to flexibly address those dynamics in a "real-world" environment, while others viewed family members as potential barriers to engagement. For some, a relationship-based service held promise as a catalyst to strengthen relationships between family members:

> "A lot of families they don't understand, they don't get why, what's in our brains and what makes us do this. They think it's just an easy stop… but no it's a lifelong thing we have to fight with every day… So, I feel like [EI] might even help them come to terms" (mother).

However, participants recognized that in order to strengthen family connections, one would have to address the emotional quality of the relationships. One participant described her experience as the wife of a person with a SUD, stating: *"When we were all brought together there was a lot of anger… guilt, but as we went through the counseling, we began to understand each other"* (provider). As evidenced by the varied responses regarding family inclusion, the degree of inclusion likely depends on each mother's individual situation and goals for family involvement. In addition, the provider likely needs to consider their own ability to facilitate the family interactions, support the best interest of the child, and ensure the safety and confidentiality of the mother in recovery.

Yet from the child's perspective, many participants believed that EI services would allow providers to naturally engage in the relationships between multiple caregivers in a child's life: *"You want to bring the whole family who helped raise the children together so everybody is on the same [page]"* (mother). Participants recognized that supporting mothers' transitions back into their family would impact the emotional health of mothers and their children, as well as the other caregivers:

> "If grandma was taking care of them or dad was taking care of them for 90, 100 days, whatever while you were in treatment, and now you come in and you're sober and you're ready to be a parent, and without knowing it you're trying to fit in as well as co-parent… That sober parent… could be resentful. So you want to bring the whole family who helped raise the children together" (mother).

Some participants envisioned the possibility that relationship-based services could help facilitate understanding between caregivers and smooth transitions in caregiving with the potential of strengthening the support network for mothers and infants.

Discussion

This study identified a primary theme, *'Who is the client?,'* and sub-themes that provide preliminary insight into the important factors to consider when tailoring traditionally child-focused home visiting services to relationship-based models that meet the unique needs of mothers with SUDs.

In tailoring services to mothers with SUDs, programs likely need to be explicit and intentional about how service models are being changed to meet their unique needs. Our primary finding underscores the need for programs to focus on the emotional quality of the mother-child relationship, as well as mothers' emotional experiences in other relationships. Validating the emotional quality of their experiences and relationships may help home visiting programs meet the dual goals of transforming mothers' subjective experiences and family engagement. Ultimately, mothers' thoughts and emotions impact the social-emotional development of their children and are critical determinants of health and well-being for mother-infant dyads and families as a whole (Reck et al., 2004).

Home visiting programs are poised to bridge the physical and logistical barriers that limit access to medical and social services (e.g., mental and medical health care or basic needs) for mothers in recovery from SUDs and their infants (Klaman et al., 2019; Peacock-Chambers et al., 2020; Prevatt & Desmarais, 2018; Saunders et al., 2018; Schiff et al., 2018). Given the severity of the opioid epidemic in Massachusetts and the state mandate for EI programs to serve substance-exposed infants, home visiting programs in Massachusetts offer an opportunity to explore novel approaches to engaging and supporting families affected by SUDs. Despite receiving training about parental substance use, EI providers frequently encounter real-world problems (stigma, exclusion, parental psychosocial stressors) that make delivery of tailored evidence-based dyadic services challenging. These challenges can result in a mismatch of mothers' expectations with the program objectives (Akin et al., 2016; Ammerman, 2016; Damashek et al., 2011; Finello et al., 2016; Folger et al., 2016; Gomby, 2007; Hanlon-Dearman et al., 2017; Ingoldsby, 2010; Ingoldsby et al., 2013; Korfmacher et al., 2008; McCurdy & Daro, 2004). Effective strategies are needed to assist programs in transitioning to relationship-based service models tailored to meet the needs of families affected by SUDs in order to improve engagement of these high-risk families and ensure substance-exposed infants participate in much needed developmental services.

Our findings suggest that increased access to evidence-based services through free in-home service delivery may not be enough to align a program such as EI with the needs and goals of mothers in recovery from SUDs. Ongoing struggles with retention in EI suggest that understanding mothers' subjective experiences and providing services specific to their needs is necessary to crafting future programs (Peacock-Chambers et al., 2020; Peacock-Chambers et al., 2019; Tandon et al., 2005). Prior studies have shown that maternal experiences of a home visiting program, defined as the perception of the match between a program and a mother's goals and the feeling that providers and service delivery align with her expectations, are key components of retention as described by the *Integrated Theory of Parent Involvement* (Burrell et al., 2018; Higgins et al., 2017; Ingoldsby et al., 2013; McCurdy & Daro, 2004; O'Brien et al., 2012). Additional studies show that families affected by SUDs may require tailored program modifications to meet their unique needs and make them feel more central to the program (Azzi-Lessing, 2013; Peacock-Chambers et al., 2020; Suchman et al., 2006; West et al., 2019). Our findings add to this literature by suggesting that the prioritization of maternal experiences for mothers in recovery may require services that address their unique *emotional* needs as parents. Addressing the emotional quality of relationships between mothers and their children, between mothers and their family, and between mothers and their providers may be critical in determining how well a service aligns with their goals and expectations.

While agencies such as the National Academy of Sciences and the Maternal Child Health Bureau clearly recognize the importance of supporting parents as a means of supporting the development of young children, focused training on the unique needs of families affected by SUDs is variable. Education may include the impact of SUDs on maternal–child health, the neurobiology of addiction, and learning from people with lived experience, for example. Targeted approaches to addressing the needs of SUD affected families, however, remains challenging to implement. Even within the field of mental health services, such nuanced advancements in the study of perinatal mental health are relatively recent (Robakis et al., 2017). Fortunately, several evidence-based home visiting and psychotherapeutic models exist and are specifically designed for parents with SUDs. These models emphasize the role of the parent-child relationship in fostering child development and supporting caregivers' emotional needs. Models explicitly designed for parents with significant trauma or SUDs, such as *Mothering from the Inside Out*, *Family Based Recovery*, and *Project BRIGHT* (Hanson et al., 2015; Paris et al., 2015; Suchman et al., 2017), achieve these aims by emphasizing protection of the therapeutic relationship over instruction, given the potential that parents may perceive the providers as the 'better parent' and experience decreased parental self-efficacy or a defensive response in the therapeutic relationship (Lieberman et al., 2006; Lieberman & Van Horn, 2008).

Understanding the emotional quality of mothers' relationships with their children and other key attachment figures is a particularly important nuance of service delivery for mothers in recovery and their infants. In fact, the emotional bond between mothers and infants is frequently an important motivator for recovery (Jackson & Shannon, 2012). A focus on enhancing the quality of relationships between mothers and children (as well as between the mothers and co-parents, their own parents, and even their therapists) can improve mother–child interactions, particularly when mothers feel safe to discuss their emotions around parenting and substance use openly (Suchman et al., 2006). Integrating mothers' family networks into services and improving family attitudes towards services can also boost retention and engagement in programs (Gomby, 2007; Ingoldsby, 2010; Korfmacher et al., 2008). Our findings add to previous work focused on the general population by identifying specific gaps in attending to the emotional needs of mothers in recovery, including the need to address issues of social isolation, to expand inclusion for more mothers in recovery based on consideration of emotional needs, and to provide greater support through parent-child separations and reunifications. Validating and addressing the emotional needs of mothers in recovery may be a critical step toward engaging them in services, protecting them against the high rates of relapse and overdose in the postpartum period, and promoting the optimal development of their children (Corr et al., 2020; Diop, 2018; Goldman-Mellor & Margerison, 2019; Schiff et al., 2018).

Strengths and Limitations

Our study provides valuable insight from those with lived experience as parents in recovery as well as those who work in the fields of healthcare, SUD treatment, and child development services. As a preliminary study of an emergent theme, however, it raises many new questions for future research, particularly with respect to perspectives of various sub-populations such as non-custodial parents or parents of children with developmental disabilities. While our participants provide a diverse range of perspectives, our results focus specifically on the service needs of mothers and thus do not capture how the needs of fathers may differ with respect to EI services. Additional studies are needed to identify specific needs of fathers affected by SUDs. In addition, our findings and conclusions are limited to English-speaking parents and providers in western Massachusetts. EI services vary across states, and thus our findings may not align with the priorities and regulations of EI services in other states.

Conclusions

The engagment of mothers with SUDs in traditionally child-focused home visiting programs may require explicitly addressing the emotional needs of mothers in recovery. This may be a critical step in order to increase effectiveness of these programs among this population and support the early childhood development of affected infants. Overall, home visiting programs will need to embrace the complexity of multiple dynamic processes at play in recovery, in parenting, and within families. Future research is needed to identify barriers and facilitators to implementing evidence-based strategies that help home visiting providers engage mothers in recovery with respect to their emotional experiences as parents in the context of their relationships with their children, family, and providers. Home visiting programs, and EI in particular, continue to play a powerful public health role in addressing the impact of SUDs on families and limiting intergenerational transmission of SUDs from parent to child. Ultimately, a national shift in understanding the experiences of mothers with SUDs is necessary at a systems level to enhance maternal health and caregiving capacities and improve the long-term health outcomes of their children.

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Compliance with Ethical Standards

Conflict of Interest Non-financial Interests N.B. has served on the Medscape Steering Committee on Clinical Advances in Postpartum Depression. The other authors have indicated that they have no competing interests to declare that are relevant to the content of this article.

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