**A qualitative meta-synthesis of pregnant women’s experiences of accessing and receiving treatment for opioid use disorder**

**Running title:** *Pregnant women’s treatment experience*

**Authors:** Freya Tsuda-McCaie and Yasuhiro Kotera

**Journal:** Drug and Alcohol Review

**Conflict of Interest Statement**: there are none to declare.

**Role of Funding Sources:** This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

**Abstract**

*Issues:* Addressing opioid use disorder (OUD) among pregnant women is of growing importance, and substance use treatment positively impacts outcomes for mother and baby. Understanding substance use treatment experiences is important to improve access, and retention, and no review or synthesis of research addressing the treatment experiences of pregnant women exists.

*Approach:* Thus, a qualitative meta-synthesis (QMS) was conducted, which investigated the psychological motivators and barriers of pregnant women with OUD trying to access treatment and their perceptions of treatment.

*Key Findings:* Three thousand, eight hundred forty-four articles were retrieved from the literature search. Nine articles met eligibility criteria, were appraised, then synthesised using a comparative thematic approach.Four themes, (i) Embodied Experiences, (ii) Institutional Pressures, (iii) Social Context, and (iv) Reconstructing Selves, indicate that women with OUD are motivated to engage in treatment (a) to pursue the safety and custody of the unborn baby, and (b) to pursue and enact the changes necessary to claim ‘normal’ parenthood status. Pregnant women describe psychological and relational barriers to engaging in treatment, including anxieties about the baby’s health, fears of authorities’ involvement, stigma, and experiencing relationships with treatment providers as constrictive or invalidating.

*Implications:* Identity Theory’s concepts of identity verification, closed environments and master status identities illuminate the findings. Implications include recognising the salience of bodily experiences, providing medication assisted treatment (MAT) support groups, and promoting validating relationships in treatment using strengths-based approaches.

*Conclusions:* Pregnant women face unique psychological challenges in accessing and engaging in substance use treatment for OUD.

**Keywords:** pregnancy; opioid use disorder; medication assisted treatment; substance use treatment; meta-analysis.

**1. Introduction**

In the last decade, the number of women in the United States illicitly using opioids while pregnant has tripled, leading to an increase in associated obstetric complications (Substance Abuse and Mental Health Services Administration (SAMHSA), 2018). The estimated prevalence of perinatal opioid use rose from 1.5 to 6.5 per 1000 hospital births from 1999 to 2014 (Haight et al., 2018). Adverse obstetric effects of opioid use while pregnant include increased risk of preterm birth, placental abruption, and low birth weight (Ludlow et al., 2004; Park et al., 2012). Additionally, infants exposed in-utero to opioids may show symptoms of neonatal abstinence syndrome (NAS) (Park et al., 2012). NAS impacts the central and autonomic nervous systems, with symptoms including tremors, excessive crying, hyperirritability, difficulty sleeping, seizures, jitteriness, sweating and diarrhoea (Kocherlakota, 2014). Thus, understanding and addressing prenatal OUD is important.

Medication Assisted Therapy (MAT), in conjunction with behavioural interventions and prenatal care, is the preferred treatment for OUD in pregnancy (Johnson, 2019). In MAT, people receive regular doses of methadone or buprenorphine (opioid agonists) to relieve withdrawal symptoms and chemical imbalances caused by long-term opioid use (SAMHSA, 2018). Despite the risk of NAS associated with MAT, it is the accepted clinical practice for treating OUD in pregnant women (American College of Obstetricians and Gynaecologists (ACOG), 2012). Abrupt cessation of opioids is not recommended due to increased risk of spontaneous abortion, preterm labour and fetal distress (Jones et al., 2008a). MAT is recommended over medication-assisted withdrawal because of improved relapse prevention and treatment retention (Terplan et al., 2018; Jancaitis et al., 2020). Relative to the use of street drugs, MAT stabilises the levels of opioids in the maternal serum, thus reducing the harm that occurs because of repeated intoxication and withdrawal as well as reducing risky behaviours associated with illicit drug seeking (Terplan et al., 2018; Jancaitis et al., 2020). Typically, pregnant women receiving MAT need to increase their dose of methadone as pregnancy progresses to achieve the same effects and to prevent symptoms of withdrawal because of increased metabolism of methadone (Jones et al., 2008b). Additionally, in the third trimester, split-dosing (i.e., splitting the usual dose of methadone across two time points, once in the morning and once in the evening) is common (Jones et al., 2008b).

In the general population, MAT has reduced fatal overdoses, improved treatment retention rates, lowered illicit opioid use, decreased criminal activity, and increased social functioning (National Academies of Sciences, Engineering, and Medicine (NASEM), 2019). In pregnant women with OUD, integrated treatment programs combining substance use treatment (including MAT) and prenatal care result in improved birth weight, increased attendance of prenatal visits, and lower rates of premature delivery, illicit opioid use, and placental abruption (Johnson, 2019).

Research suggests that pregnant women’s experiences of substance use treatment are likely distinct from other groups, partially due to stigma and norms (Jones et al., 2008c; Randall & Vanderplasschen, 2012; Terplan et al., 2015). Although stigma is associated with substance use for all people, women with substance use disorders tend to be more stigmatised than their male counterparts (Brady & Randall, 1998; Kirtadze et al., 2013; Kulesza et al., 2013). Additionally, the potential for directly harming the developing fetus through opioid use (Wong et al., 2011), which is unique to pregnancy, impacts how substance use during pregnancy is perceived. In normative, idealised depictions, mothers are portrayed as naturally nurturing, protective, unconditionally loving and self-sacrificing, even in unsupportive contexts (Klee et al., 2002). Thus, substance use during pregnancy deviates from societal expectations of motherhood, calling into question suitability for motherhood (Brady & Randall, 1998; Terplan et al., 2015). Consequently, pregnant women with substance use disorders face ‘tremendous stigma’ (Jones et al., 2008c, p.1; Randall & Vanderplasschen, 2012) and ‘moral condemnation’ (Brady & Randall, 1998, p.73). Indeed, sixty per cent of pregnant or parenting women with a substance use disorder reported fear of prejudicial treatment (Poole & Isaac, 2001). Other unique barriers to accessing treatment for OUD during pregnancy, include anxiety about custody loss upon the child’s birth and legal consequences, as substance use during pregnancy has been criminalised in certain states (Stone, 2015).

Further, among substance use treatments generally, the experience of OUD and its treatment are distinctive from other substances in two ways. First, media reporting characterises people with OUD in stigmatising and criminalising terms (Webster et al., 2020), and opioid use (especially heroin) is more stigmatised than other substance use generally (Brown, 2015; Radcliffe & Stevens, 2008). Second, pharmacological treatment using agonists (MAT) is available for OUD, but not for most other substance use disorders (nicotine use disorder is an exception) (Jordan et al., 2019). In the general population, qualitative research has identified that reliance and edification of willpower can impact people’s feelings about receiving MAT and lead to internal conflict (Fox et al., 2015). Moreover, the stigma around methadone can prevent people seeking treatment (Yarborough et al., 2016). Pregnant women may have especially complex and conflicting feelings about participating in treatments which expose the fetus to opioids and heightened concern around stigma for receiving such treatment (Chandler et al., 2013; Ostrach & Leiner, 2019). Thus, exploring experiences of treatment specifically for OUD is important

Not all OUD treatment services result in the same retention rates, access, and outcomes for pregnant women. Pregnant women struggle to access substance use treatment (Prince & Ayers, 2019), and attrition from treatment for OUD is common (Kissin et al., 2004; Lester & Twomey, 2008; Nosyk et al., 2010). However, tailoring substance use treatment to individuals’ needs results in improved retention (Haller et al., 2003; Horsfall et al., 2009) and programs tailored to pregnant people demonstrate improved retention rates (Weisdorf et al., 1999) and outcomes (Milligan et al., 2010). Furthermore, given the specific and complex needs of pregnant women, research supports the importance of providing specialized treatment, such as programmes integrating obstetricians and gynaecologists, social workers and addiction specialists (Krans & Patrick, 2016; Winklbaur et al., 2018). Given the benefits of treatment (SAMHSA, 2018), a deeper understanding of pregnant women’s experiences may aid in tailoring programmes to improve experience, retention, and access. While research has identified the practical barriers to accessing and remaining in treatment for pregnant women with substance use disorders—for example, housing, insurance, and childcare (Jessup et al., 2003)—no synthesis exists on the psychological challenges and perspectives, which make access and retention challenging for pregnant women.

**1.1 Aims:** This paper aims to identify, appraise, and synthesise existing qualitative research regarding pregnant women’s experiences of accessing and receiving treatment for OUD. Three research questions are established:

1. What are the psychological facilitators, motivators, and barriers of pregnant women with OUD trying to access treatment?
2. What are pregnant women’s perceptions of substance use treatment?
3. What is the quantity and quality of evidence exploring these questions?

**2. Method**

**2.1 Design**

The researchers conducted a Qualitative Meta-Synthesis (QMS), with a thematic approach to synthesis (Thomas & Harden, 2008). Thematic approach to synthesis was appropriate as it is possible with ‘thinner’ studies, and only three of the nine included studies used ‘rich’ descriptions and in-depth analysis (Tong et al., 2012). The extended version of SPIDER (Sample, Phenomenon of Interest, Design, Evaluation and Research type) (Cooke et al., 2012) was used to develop the research questions, noted above, and ENTREQ guidelines (Tong et al., 2012) on reporting qualitative syntheses were followed.

QMS aims to synthesise qualitative research on a phenomenon and has been applied to research in related areas including nursing, health, mental health, and parenting. QMS is typically understood as operating within the interpretative paradigm and aims to collate and interpret findings to develop understanding rather than increase certainty (Noblit & Hare, 1988; Sandelowski et al., 1997; Walsh & Downe, 2005). QMS are important because without the abstraction and generalisation of findings that synthesis facilitates, qualitative research can remain isolated, marginalised and lacking in utility for policy makers and practitioners (Finlayson & Dixon, 2008; Sandelowski et al, 1997; Walsh & Downe, 2005). QMS is an appropriate method as a) our research questions concern experiences, attitudes and feelings and so are best explored with qualitative research; and b) optimizing the utility of our findings for substance use treatment providers and policy makers is a priority because of the potential beneficial impact for pregnant women with OUD. A QMS has not been conducted on this phenomenon.

**2.2 Searching**

The literature search was pre-planned and attempted to identify all relevant studies and was conducted using Science Direct, ProQuest, PubMed, PsycINFO and Google Scholar databases. Searches were conducted in June and July of 2020, and articles published before May 1st, 2020 were considered. First, a search was conducted using the terms ‘medication assisted therapy’ and ‘pregnant’ and ‘barriers’ or ‘stigma’ or ‘perspectives’, retrieving 430 results (search 1). A second search was conducted using the terms ‘methadone treatment’ and ‘maintenance therapy’ instead of ‘medication assisted treatment’ (other search terms remained the same). Search 2 yielded 591 results. Lastly, using the search criteria ‘substance use treatment’ and ‘pregnant’ and ‘opioid’ and ‘barriers’ or ‘stigma’ or ‘perspectives’, 2,823 studies were identified (search 3). This third search aimed to identify papers focused on non-medication-based treatments (e.g., talking therapy). If a paper’s title and abstract suggest relevancy, it was shortlisted for inclusion to be fully reviewed. References of the shortlisted papers were checked for relevant studies and an expert in the field (a university lecturer specialising in substance addiction) reviewed included studies for potential omissions.

*Inclusion*

The criteria for inclusion for further analysis was developed from the research questions (see Table 1).

*Table 1 near here*

From 3844 search results, 21 papers were shortlisted and read in full and nine were incorporated in the QMS. Of the 21 shortlisted papers, two were excluded because they were not full-length papers (Mullins et al., 2019; Titus-Glover & Shaya, 2018). Following the example of Campbell et al., (2003), another paper was excluded (Jackson & Shannon, 2012b) because the findings were also recorded in another paper already included (Jackson & Shannon, 2012a). Nine papers were excluded from the shortlist because they did not meet inclusion criteria. To reduce risk of bias, both authors reviewed the shortlist of papers against inclusion criteria and reached consensus. Key research details of the studies were extracted (see Table 2). To improve concision, Table 2 only includes findings relevant to this study’s research questions. Where possible, themes are reported in the original paper’s language for maximum fidelity to the original meanings (Britten et al., 2002). See PRISMA flow diagram 1 (appendix a) for an outline of the searching and extraction process.

*Table 2 near here*

**2.3 Data Synthesis**

Following the thematic approach to synthesis outlined by Thomas and Harden (2008), the results/findings sections of the papers, including participant accounts and researchers’ analyses of these accounts, were coded line-by-line with descriptive terminology by the lead researcher. Using an inductive approach, researchers identified common themes across papers from these descriptive codes. Similar concepts were then translated into a shared language, clustered, or located hierarchically generating nine descriptive themes. Descriptive themes were then rechecked against the original papers to ensure the integrity of the findings. The relationship between descriptive themes were then considered, generating four analytical themes.

**2.5 Ethics statement**

Ethical approval was not sought from our affiliated institution for this synthesis, as we used publicly available information as the data for our analysis. We have however endeavoured to represent the women included in the original studies in person-centred and non-stigmatising language and to follow best practice guidelines for qualitative meta-synthesis and reporting to ensure quality and transparency.

**3. Results**

**3.1 Quality Assessment**

The lead researcher used the Critical Appraisal Skills Program checklist (CASP, 2019) for quality assessment (Atkins et al., 2008). Six papers were assessed as high quality and three medium quality. Three papers were considered high value and six medium value. Common omissions in papers were reflexive statements, justifications of research methods, and suggested avenues for future research. Following best practice (Sandelowski et al., 1997; Walsh & Downe, 2005), studies were not excluded from the QMS based on quality, but the results of the appraisal are included for transparency in Table 3.

*Table 3 near here*

**3.2 Relationships between papers**

Papers varied in type and depth of analysis of pregnant women’s accounts. Two papers were predominantly descriptive (Frazer et al., 2019; Jackson & Shannon, 2012a) and the researchers’ analyses were understood as existing hierarchically to other more analytically driven papers. Contrastingly, the papers by Chandler et al. (2013), Radcliffe (2011) and Morris, Seibold and Webber (2012) offered analytical insights into the mechanisms and motivations underlying the data. The remaining four papers existed in a middle-ground. Findings emphasised different elements of treatment experience, and use different discourses, but were largely complimentary and some reciprocal.

**3.3 Analytical Themes**

*Table 4 near here*

*3.3.1 Embodied Experiences*

Accounts and/or analysis in eight papers described the psychological impacts arising from the embodied qualities of pregnancy and treatment. Wanting the best for the health of the unborn baby was a common motivator for starting or continuing substance use treatment (Chandler et al. 2013; Frazer et al., 2019; Jackson & Shannon, 2012a; Howard, 2016; Mattocks et al., 2017). However, Mattocks et al. (2017), Howard (2016) and Chandler et al. (2013), describe how pregnant women felt guilty and anxious about receiving MAT. They wanted to protect their baby and feared their baby would experience NAS, but also felt stuck because of the risk of miscarriage associated with withdrawal/detox. Some pregnant women felt compelled to follow medical recommendations because they ‘feared harm to their unborn baby’ (Howard, 2016 p.72). Thus, for some, treatment felt choiceless and pregnant women perceived MAT as necessary but undesirable. These findings indicate the substantial psychological impact of knowing that drug use and treatment directly impacts a vulnerable other in a way that is unique to pregnancy.

The impacts of medication, dosing and pregnancy on bodily experience were central to pregnant women’s perceptions of treatment (Chandler et al., 2013; Fallin-Bennet et al., 2020; Mattocks et al., 2017). Both pregnancy and changes in opioid use associated with treatment have numerous somatic consequences and challenges. The simultaneous occurrence of two physical transitions meant that the body was a source of confusion and anxiety for some pregnant women in treatment and distinguishing between symptoms of pregnancy and withdrawal was difficult (Mattocks et al., 2017). This confusion about symptoms in conjunction with desires to reduce the likelihood of NAS by reducing dose meant that pregnant women perceived medication dosing as a fraught issue. More broadly, physical dependence on opioid agonists was preoccupying not only because of bodily sensations associated with medications (Fallin-Bennet et al., 2020), but also because needing medication to feel well was a reminder of not being ‘normal’ more broadly (Chandler et al., 2013). Thus, bodily experiences frustrate pregnant women’s ability to encounter themselves as ‘normal’ mothers. Overall, this theme suggests that the body, especially the vulnerability of the pregnant body, is central to treatment experience and can be source of ambivalence, confusion, anxiety, and inner conflict.

*3.3.2 Institutional pressures*

Seven papers identified that participants’ motivation for and compliance with treatment was impacted by surveillance from authorities and the potential to lose or retain custody of the unborn baby.

Fear of custody loss and/or child protection services’ involvement impacted willingness to initiate or remain in treatment (Frazer et al., 2019; Jackson & Shannon, 2012a; Ostrach & Leiner, 2019) and drove compliance (Chandler et al., 2013; Howard, 2016; Radcliffe, 2011). Ostrach and Leiner (2019) identified fear of custody loss as treatment barrier—participants were nervous about drawing attention from child protection services—while Frazer et al. (2019) and Jackson and Shannon (2012a) found custody to be a motivator for some and a barrier for others. Complying with treatment regimens and abstaining from illicit drugs were perceived as evidence to authorities of capacity and commitment to parenthood (Chandler et al., 2013; Howard, 2016; Radcliffe, 2011) and perceived as necessary to obtain custody rights. Thus, institutional pressure meant that some perceived treatment as choiceless and disempowering.

Five papers described how surveillance and worries about information being passed from treatment staff to child protection services negatively impacted treatment perceptions (Chandler et al., 2013; Fallin-Bennet et al., 2020; Howard, 2016; Morris et al., 2012; Ostrach & Leiner, 2019). Surveillance, in the form of regular assessment or excessive appointments, was felt by some to indicate a lack of trust in them and their recovery—they ‘needed to be closely monitored and managed’ (Morris et al., 2012, p.168). Surveillance also generated or exacerbated anxiety about custody loss (Chandler et al., 2013; Howard, 2016). Engagement in treatment entails accepting high levels of surveillance from treatment providers and potentially from child protection agencies. Given these feelings of scrutiny and anxiety, treatment environments are not necessarily supportive, safe contexts but may be perceived as places of threat and stress. Moreover, treatment providers may be perceived as in allegiance with child protection agencies and other authorities, rather than with the women, and accounts mentioned selectively sharing information because of this.

*3.3.3 Social context*

Eight papers describe feeling or fearing stigma or judgement as a barrier to treatment or impacting treatment perceptions (Frazer et al., 2019; Howard, 2016; Jackson & Shannon, 2012a; Mattocks et al., 2017; Morris et al., 2012; Ostrach & Leiner, 2019; Radcliffe, 2011). Participants perceived heightened stigma because of their pregnancy. For example, articulating hesitancy about attending treatment, one woman described how ‘people look at you different when you come to treatment and you’ve got a big belly’ (Frazer et al., 2019, p.5). Stigma specifically around MAT during pregnancy—with its potential for NAS—was a barrier to treatment access and retention (Chandler et al., 2013; Howard, 2016; Mattocks et al., 2017; Ostrach & Leiner, 2019). Chandler et al. (2013) describe how participants receiving MAT face ‘on-going stigma’ and fear being labelled a ‘”junkie” (parent)’ (p.13). Ostrach and Leiner (2019) describe how MAT is perceived as ‘an inadequate form of recovery’ (p.269), creating ‘internalized stigma’ (p.269). Thus, women reported reluctance to be on and desire to cease MAT as soon as possible. Multiple factors—pregnancy, norms of motherhood and MAT—interact to create perceptions of stigma uniquely heightened for pregnant women receiving MAT. These perceptions are treatment barriers and contribute to feelings of inadequacy during treatment. Howard (2016) notes that treatment can impact pregnant women’s ‘internal structure […] how they felt about themselves: The bad mother, the bad woman, the bad person’ (p.79). Overall, though pregnant women are especially motivated to seek treatment (see 1.1.1), pregnancy in conjunction with stigma generates additional barriers.

This stigmatising context shapes relationships between pregnant women and treatment staff. Seven papers’ described relationships with healthcare professionals providing OUD treatment during pregnancy, including peer support specialists, midwives, perinatal social workers, methadone providers and obstetricians, impacting perceptions of treatment. Some pregnant women perceived treatment relationships as characterised by power imbalances, an authoritarian style, poor listening, discounting of experience and myopic focus on drug use (Fallin-Bennet et al., 2020; Howard, 2016; Morris et al., 2012; Radcliffe, 2011). Participants perceived it was their status as chemically dependent that drove negative interactions and exacerbated power imbalances. For example, all participants in Morris et al.’s study (2012) desired more equitable relationships with staff and felt they ‘maintained an unnecessary, authoritarian interaction style’ (p.169). Relationships were further compromised when treatment staff focused exclusively on pregnant women’s drug dependency (Fallin-Bennet et al., 2020; Morris et al., 2012; Radcliffe, 2011). Exclusive focus on drug addiction led to pregnant women feeling labelled, judged, disempowered, and marginalised in treatment, and participants were upset that their strengths, skills, and knowledge, were overlooked (Howard, 2016; Morris et al., 2012; Radcliffe, 2011). Some participants reacted to negative relationships by avoiding or withdrawing from treatment (Howard, 2016; Morris et al., 2012).

Contrastingly, supportive relationships with providers were reported, appreciated, and positively influenced accessing treatment, attendance of appointments, medication management and success in treatment (Fallin-Bennet et al., 2020; Mattocks et al., 2017; Morris et al., 2012; Ostrach & Leiner, 2019; Radcliffe, 2011). However, building supportive relationships in the context of the pressures outlined in theme two (3.3.2) is challenging; Chandler et al. (2013) describe how relationships with professionals were often ‘extremely supportive’ (p.13) but that feelings of excessive surveillance and enforced compliance negatively impacted them.

*3.3.4 Reconstructing selves*

Pregnant women perceive treatment as part of a wider project of change to position themselves as suitable, ‘normal’ mothers. Radcliffe describes how participants’ ‘narratives of change’ articulate pregnancy as a ‘turning point’ and the start of their ‘journey towards motherhood’ (Radcliffe, 2011, p.986). Narratives are accounts of events occurring across time, which attempt to find causal connection and explanation between such events and as such find meaning in these events (Vogel, 2007). Thus, narratives of change are stories that individuals use to make meaning from moments of significant change or a disruption in their previous trajectory. Narratives of change were common across many accounts and found in in seven papers: metaphors of forward motion, new starts, turning over and building were common to descriptions of motivation for and engagement with treatment. For many pregnant women, ‘becoming a mother requires that one becomes *normal*’ (Radcliffe, 2011, p.987) and treatment was perceived as facilitating normalcy to a degree. Normalcy was equated with stability and integration into social life. MAT was perceived as increasing and evidencing stability, and the attendance of appointments, following advice etc., as an ‘active engagement in preparing for or practicing for parenthood’ (Chandler et al., 2013, p.7). Thus, treatment was not solely a means to cease illicit drug use but understood by pregnant women as an important component in a wider project of change. Consequently, ‘the dominant desire of all women [in treatment] was to be treated like “normal” expectant mothers’ (Morris et al., 2012, p.671).

Despite the above, pregnant women sometimes felt that their attempts at new starts were obstructed by treatment. Pregnant women perceived the ‘tarnish’ (Howard, 2016, p.17) of institutional labels and involvement was permanent, even when consistently engaging in treatment and abstaining from illicit drugs. Ostrach and Leiner (2019) write ‘providers can unintentionally enforce ideas and expectations about pregnant women who have ever used illicit drugs’ (p.269). Enforced ideas and expectations—perhaps manifested as lack of trust, labelling or exclusive focus on drug-use—in the treatment context can limit pregnant women’s attempts to present and understand themselves as ‘normal’ or credible mothers. Frustration, resistance, or disengagement resulted when pregnant women’s presentations of themselves as credible mothers were not validated in the treatment relationship. Thus, constrictive relationships became a barrier to engagement.

**4. Discussion**

*Principal Findings:* This study aimed to identify, appraise, and synthesise qualitative research regarding pregnant women’s experiences of accessing and receiving treatment for OUD to support improving access, retention and outcomes. Taken together the themes identified that treatment is perceived as important in pursuing the safety and custody of the unborn baby, and, more broadly, pursuing motherhood. However, pregnant women experience significant barriers to accessing and engaging in treatment.

Our findings suggest that the unique aspect of pregnancy—sharing the body with the fetus—is salient and motivating but that bodily experience can also be preoccupying, confusing and difficult. Existing similar research suggests that the bodily experiences of pregnancy are salient, hard to interpret and challenging (Neiterman, 2012; Warren & Brewis, 2004). The body experience of substance using pregnant women in treatment may be unique, as they are navigating two sources of transition simultaneously: pregnancy and substance use. Future research exploring the body experience of pregnant women on MAT is needed.

In conjunction with existing research, our findings suggest that societal meanings of motherhood in conjunction with the direct impact of drug-use on another heightened perceptions of stigma among pregnant women seeking substance use treatment. Goffman describes stigma as ‘the situation of an individual disqualified from full social acceptance’ (1963, preface). Here, the stigma of OUD disqualifies a pregnant person from full acceptance as a ‘normal’ mother. Likewise, the stigma of MAT forecloses full acceptance as a person in recovery. This stigma occurs within a broader context of perinatal surveillance and public accountability (Gross & Pattison, 2007), which may exacerbate the psychological impacts. Research suggests that stigma creates barriers to treatment engagement and negatively impacts outcomes (Van Boekel et al., 2013) and, reflecting findings here, there exists stigma specifically around MAT (Madden, 2019; NASEM, 2019).

Identity Theory illuminates pregnant women’s frustration with constrictive or invalidating relationships in treatment. For women with OUD, pregnancy necessitates an identity change as the identities of ‘mother’ and ‘substance user’ are seemingly incompatible. Identity Theory describes how identity verification (correspondence between persons as to identity) is the goal of interactions. Where identity verification does not occur, negative emotion arises, resulting in individuals withdrawing from the interaction, rejecting the other person (McCall & Simmons, 1978) or asserting their identity more strongly (Stets & Serpe, 2013). It may be especially difficult for people with stigmatised identities—including that of a ‘drug user’—to have alternative identities verified as these stigmatised identities hold master status (Stets & Serpe, 2013).

Our findings indicate that pregnant women often emphasise their suitability for motherhood to have this identity verified. They experience frustration when verification was precluded by the master status of their identity as a chemically dependent woman (for example through professionals’ exclusive focus on drug use or overlooking strengths). Treatment was perceived by these women as a ‘closed’ environment—that is, one which limits choices about enacting identities (Stets & Serpe, 2013, p.34). Consequently, some withdrew from the interaction and/or from treatment.

**4.2 Strengths**

This QMS usefully integrates and situates the original studies by identifying shared findings, enabling valuable information from the original studies to contribute to the evidence base and to policy and practice (Finalyson & Dixon, 2008) and follows best practice guidelines for reporting QMS.

**4.3 Weaknesses**

A danger of concentrating on pregnant women’s experiencesof treatment is that it minimises the role of material goods (housing, income, health insurance, transport, childcare etc.) on access to and success in treatment. Locating the success or failure of pregnant women’s engagement and retention in treatment solely within the individuals or relational aspects of context is clearly incorrect and the impact of contextual factors on treatment access and outcomes is well evidenced (for example, Jessup et al., 2003). A second limitation is that a consequence of synthesis is the decontextualisation of data from demographic characteristics, which is problematic, as characteristics such as race, trauma history, and socio-economic status, impact treatment (Verissimo & Grella, 2017). Thirdly, some relevant findings may have been missed because of the exclusive focus on qualitative research. Lastly, the transferability of these findings is limited to Western, English-speaking cultures.

**4.4 Implications for Practice and/or Policy**

First, Practitioners (i.e., substance use counsellors, prenatal care providers) may benefit from recognising the salience of and focusing on bodily experience for pregnant, substance-using women in treatment to facilitate dialogue around these experiences and/or provide psychoeducation, thus supporting pregnant women’s understanding of their body’s transitions. Second, given the unique and heightened stigma surrounding MAT during pregnancy, it may be important to offer peer support groups specifically for pregnant women receiving MAT to provide a socially accepting space.

Lastly, it may be especially important that treatment environments are ‘open’ environments and professionals verify the alternative identities of pregnant women with substance use disorders—including the identity of ‘mother’. Substance use treatment clearly requires focus on substance use, and safeguarding practices, including monitoring and reporting, are important. Equally, relapse is common (Schuckit, 2016). However, these provisos do not foreclose pregnant women experiencing substance use treatment as open environments supportive of and hopeful for change. Indeed, belonging to a safe therapeutic community was effective in facilitating the creation of a new aspirational identity for people with substance use disorders (Dingle et al., 2015) and qualitative research has identified the importance of navigating a new social identity for recovery (Scorsone et la., 2020). Thus, our findings suggest the importance of empowering treatment providers to notice and validate pregnant women’s desire for and attempts at positive change. Treatment approaches that draw on strengths-based, holistic philosophies, including the recovery movement and approaches from positive psychology (Seligman & Csikszentmihalyi, 2014), tailored for pregnancy and preparation for motherhood, may facilitate the creation of alternative, aspirational identities. Future research investigating the impact of interventions grounded in these approaches is needed.

**4.5 Unanswered questions**

This QMS did not investigate the interaction of participant characteristics (demographics, number of pregnancies, time in recovery etc.) and their perceptions of treatment for OUD during pregnancy. Future qualitative research and syntheses could usefully investigate how participant characteristics shape treatment access and experience.

**5. Conclusions**

ThisQMSidentified the unique challenges of accessing and engaging in substance use treatment for pregnant women with OUD and suggests ways to improve access, retention, and experience. Given the prevalence of perinatal OUD and potential benefits of treatment engagement, the findings from this QMS provide useful information for researchers, practitioners, and policy makers to develop more effective treatment.

**References**

ACOG Committee on Health Care for Underserved Women (2012). ACOG Committee Opinion No. 524: opioid abuse, dependence, and addiction in pregnancy. *Obstetrics and gynecology*, 119(5).

Atkins, S., Lewin, S., Smith, H., Engel, M., Fretheim, A., & Volmink, J. (2008). Conducting a meta-ethnography of qualitative literature: lessons learnt. *BMC Medical Research Methodology*, 8(1).

Brady, K. T. & Randall, C., L. (1998). Gender difference in substance use disorders. *American Journal of Psychiatry,* 150, 1707-1711.

Britten, N., Campbell, R., Pope, C., Donovan, J., Morgan, M., & Pill, R. (2002). Using meta ethnography to synthesise qualitative research: a worked example. *Journal of Health Services Research & Policy*, 7(4).

Brown, S. A. (2015). Stigma towards marijuana users and heroin users. *Journal of Psychoactive Drugs*, 47(3).

Campbell, R., Pound, P., Pope, C., Britten, N., Pill, R., Morgan, M., & Donovan, J. (2003). Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care. *Social Science & Medicine*, *56*(4).

Centers for Disease Control and Prevention (2020). Retrieved on 09.07.2020 from: <https://www.cdc.gov/drugoverdose/epidemic/index.html>

Chandler, A., Whittaker, A., Cunningham-Burley, S., Williams, N., McGorm, K., & Mathews, G. (2013). Substance, structure and stigma: parents in the UK accounting for opioid substitution therapy during the antenatal and postnatal periods. *International Journal of Drug Policy*, 24(6).

Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: the SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*, 22(10).

Critical Appraisal Skills Programme (2019). CASP Qualitative Studies Checklist. Retrieved on 01.03.2020 from: <https://casp-uk.net/casp-tools-checklists/>.

Dingle, G. A., Cruwys, T., & Frings, D. (2015). Social identities as pathways into and out of addiction. *Frontiers in Psychology*, 6.

Fallin-Bennett, A., Elswick, A., & Ashford, K. (2020). Peer support specialists and perinatal opioid use disorder: Someone that’s been there, lived it, seen it. *Addictive Behaviors*, 102.

Finlayson, K. W., & Dixon, A. (2008). Qualitative meta-synthesis: a guide for the novice. *Nurse Researcher*, 15(2).

Fox, A. D., Maradiaga, J., Weiss, L., Sanchez, J., Starrels, J. L., & Cunningham, C. O. (2015). Release from incarceration, relapse to opioid use and the potential for buprenorphine maintenance treatment: a qualitative study of the perceptions of former inmates with opioid use disorder. *Addiction science & clinical practice*, *10*(1), 1-9.

Frazer, Z., McConnell, K., & Jansson, L. M. (2019). Treatment for substance use disorders in pregnant women: Motivators and barriers. *Drug and Alcohol Dependence*, 205.

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Simon and Schuster.

Gross, H., & Pattison, H. (2007). *Sanctioning pregnancy: A psychological perspective on the paradoxes and culture of research*. Routledge.

Haight, S. C., Ko, J. Y., Tong, V. T., Bohm, M. K., & Callaghan, W. M. (2018). Opioid use disorder documented at delivery hospitalization—United States, 1999–2014. *Morbidity and Mortality Weekly Report*, 67(31), 845.

Haller, D. L., Miles, D. R., & Dawson, K. S. (2003). Factors influencing treatment enrollment by pregnant substance abusers. *The American journal of drug and alcohol abuse*, *29*(1), 117-131.

Horsfall, J., Cleary, M., Hunt, G. E., & Walter, G. (2009). Psychosocial treatments for people with co-occurring severe mental illnesses and substance use disorders (dual diagnosis): A review of empirical evidence. *Harvard review of psychiatry*, *17*(1), 24-34.

Howard, H. (2016). Experiences of opioid-dependent women in their prenatal and postpartum care: Implications for social workers in health care. *Social Work in Healthcare*, 55(1).

Jackson, A., & Shannon, L. (2012a). Examining barriers to and motivations for substance abuse treatment among pregnant women: does urban-rural residence matter?. *Women & Health*, 52(6).

Jackson, A., & Shannon, L. (2012b). Barriers to receiving substance abuse treatment among rural pregnant women in Kentucky. *Maternal and child health journal*, *16*(9), 1762-1770.

Jacobs, A. A., & Cangiano, M. (2018). Medication-assisted treatment considerations for women with opiate addiction disorders. *Primary Care*, 45(4).

Jancaitis, B., Kelpin, S., Masho, S., May, J., Haug, N. A., & Svikis, D. (2020). Factors associated with treatment retention in pregnant women with opioid use disorders prescribed methadone or electing non-pharmacological treatment. *Women & health*, *60*(1), 1-11.

Jessup, M. A., Humphreys, J. C., Brindis, C. D., & Lee, K. A. (2003). Extrinsic barriers to substance abuse treatment among pregnant drug dependent women. *Journal of Drug Issues,* 33(2).

Johnson, E. (2019). Models of care for opioid dependent pregnant women. *Seminars in Perinatology* 43(3)

Jones, H. E., O'Grady, K. E., Malfi, D., & Tuten, M. (2008a). Methadone maintenance vs. methadone taper during pregnancy: maternal and neonatal outcomes. *American Journal on Addictions*, *17*(5), 372-386.

Jones, H. E., Martin, P. R., Heil, S. H., Kaltenbach, K., Selby, P., Coyle, M. G., ... & Fischer, G. (2008b). Treatment of opioid-dependent pregnant women: clinical and research issues. *Journal of substance abuse treatment*, *35*(3), 245-259.

Jones, H. E., Martin, P. R., Heil, S. H., Kaltenbach, K., Selby, P., Coyle, M. G., & Fischer, G. (2008c). Treatment of opioid-dependent pregnant women: clinical and research issues. *Journal of Substance Abuse Treatment*, 35(3).

Jordan, C. J., Cao, J., Newman, A. H., & Xi, Z. X. (2019). Progress in agonist therapy for substance use disorders: Lessons learned from methadone and buprenorphine. *Neuropharmacology*, *158*, 107609.

Kaiser Health News (2020). Retrieved on 2/18/2021 from https://khn.org/morning-breakout/more-people-died-of-drug-overdoses-last-year-than-ever-before-in-us/.

Kirtadze, I., Otiashvili, D., O'Grady, K. E., Zule, W., Krupitsky, E., Ph. D, W. M., & Jones, H. E. (2013). Twice stigmatized: provider's perspectives on drug-using women in the Republic of Georgia. *Journal of Psychoactive Drugs*, 45(1).

Kissin, W. B., Svikis, D. S., Moylan, P., Haug, N. A., & Stitzer, M. L. (2004). Identifying pregnant women at risk for early attrition from substance abuse treatment. *Journal of Substance Abuse Treatment*, 27(1).

Klee, H., Jackson, M., & Lewis, S. (Eds.). (2002). *Drug Misuse and Motherhood*. Psychology Press.

Kocherlakota, P. (2014). Neonatal abstinence syndrome. *Pediatrics*, 134(2).

Kulesza, M., Larimer, M. E., & Rao, D. (2013). Substance use related stigma: what we know and the way forward. *Journal of addictive behaviors, therapy & rehabilitation*, *2*(2).

Lester, B. M., & Twomey, J. E. (2008). Treatment of substance abuse during pregnancy. *Women’s Health*, *4*(1), 67-77.

Ludlow, J. P., Evans, S. F., & Hulse, G. (2004). Obstetric and perinatal outcomes in pregnancies associated with illicit substance abuse. *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 44(4).

Madden, E. F. (2019). Intervention stigma: How medication-assisted treatment marginalizes patients and providers. *Social Science & Medicine*, 232.

Mattocks, K. M., Clark, R., & Weinreb, L. (2017). Initiation and engagement with methadone treatment among pregnant and postpartum women. *Women's Health Issues*, 27(6).

McCall, G. J., & Simmons, J. L. (1978). *Identities and Interactions*. Free Press.

Milligan, K., Niccols, A., Sword, W., Thabane, L., Henderson, J., Smith, A., & Liu, J. (2010). Maternal substance use and integrated treatment programs for women with substance abuse issues and their children: a meta-analysis. *Substance abuse treatment, prevention, and policy*, *5*(1), 1-14.

Morris, M., Seibold, C., & Webber, R. (2012). Drugs and having babies: an exploration of how a specialist clinic meets the needs of chemically dependent pregnant women. *Midwifery*, 28(2).

Mullins, N., Ramage, M., Ostrach, B. & Leiner, C., (2019). "Addressing Patient Fears in Perinatal Substance Use Treatment." *Obstetrics & Gynecology* 134: 44S.

National Academies of Sciences, Engineering, and Medicine (2019). *Medications for Opioid Use Disorder Save Lives*. The National Academies Press.

Neiterman, E. (2012). Doing pregnancy: Pregnant embodiment as performance. *Women's Studies International Forum*, 35(5).

Noblit, G. W., & Hare, R. D. (1988). *Meta-ethnography: Synthesizing qualitative studies*. Sage.

Nosyk, B., Marsh, D. C., Sun, H., Schechter, M. T., & Anis, A. H. (2010). Trends in methadone maintenance treatment participation, retention, and compliance to dosing guidelines in British Columbia, Canada: 1996–2006. *Journal of Substance Abuse Treatment*, 39(1).

Park, E. M., Meltzer-Brody, S., & Suzuki, J. (2012). Evaluation and management of opioid dependence in pregnancy. *Psychosomatics*, *53*(5), 424-432.

Prince, M. K., & Ayers, D. (2019). *Substance use in pregnancy*. StatPearls Publishing.

Ostrach, B., & Leiner, C. (2019). “I didn’t want to be on Suboxone at first…”–Ambivalence in Perinatal Substance Use Treatment. *Journal of Addiction Medicine*, 13(4).

Poole, N., & Isaac, B. (2001). *Barriers to treatment for substance-using mothers.* British Columbia Centre of Excellence for Women's Health.

Radcliffe, P. (2011). Motherhood, pregnancy, and the negotiation of identity: The moral career of drug treatment. *Social Science & Medicine*, 72(6).

Radcliffe, P., & Stevens, A. (2008). Are drug treatment services only for ‘thieving junkie scumbags’? Drug users and the management of stigmatised identities. *Social Science & Medicine*, 67(7).

Randall, E., & Vanderplasschen, W. (2012). Gender Differences, In W. Vanderplasschen, V. Wouter, C. K. De Maeyer Jessica, C. Serge, R. Andrea, D. Geert, S. Bernard, & B. Eric (Eds.), *Poly substance use and mental health among individuals presenting for substance abuse treatment* (pp.60-77). Academia Press.

Sandelowski, M., Docherty, S., & Emden, C. (1997). Qualitative metasynthesis: Issues and techniques. *Research in Nursing & Health*, 20(4).

Schuckit, M. A. (2016). Treatment of opioid-use disorders. *New England Journal of Medicine*, 375(4).

Scorsone, K. L., Haozous, E. A., Hayes, L., & Cox, K. J. (2020). Overcoming barriers: Individual experiences obtaining medication-assisted treatment for opioid use disorder. *Qualitative health research*, *30*(13), 2103-2117.

Seligman, M. E., & Csikszentmihalyi, M. (2014). Positive psychology: An introduction. In M. Csikszentmihalyi *Flow and the foundations of positive psychology* (279-298). Springer.

Stets, J. E., & Serpe, R. T. (2013). Identity theory. In G. Lindzey (Ed.) *Handbook of social psychology* (31-60). Springer.

Stone, R. (2015). Pregnant women and substance use: fear, stigma, and barriers to care. *Health & Justice*, 3(1), 2.

SAMHSA (2018). *Clinical Guidance for Treating Pregnant and Parenting Women with Opioid Use Disorder and Their Infants*. Retrieved on 04.08.2020 from: <https://store.samhsa.gov/product/Clinical-Guidance-for-Treating-Pregnant-and-Parenting-Women-With-Opioid-Use-Disorder-and-Their-Infants/SMA18-5054>

Terplan, M., Kennedy-Hendricks, A., & Chisolm, M. S. (2015). Prenatal substance use: exploring assumptions of maternal unfitness. *Substance Abuse: Research and Treatment*, 9.

Terplan, M., Laird, H. J., Hand, D. J., Wright, T. E., Premkumar, A., Martin, C. E., ... & Krans, E. E. (2018). Opioid detoxification during pregnancy: a systematic review. *Obstetrics and gynecology*, *131*(5), 803.

Titus-Glover, D., & Shaya, F. T. (2018). The Patient Experience and Buprenorphine use Among Pregnant and Postpartum Women. *Value in Health*, *21*, S128.

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, *8*(1).

Tong, A., Flemming, K., McInnes, E., Oliver, S. & Craig, J. (2012). Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Med Res Methodology* **12,**181. https://doi.org/10.1186/1471-2288-12-181

Van Boekel, L. C., Brouwers, E. P., Van Weeghel, J., & Garretsen, H. F. (2013). Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: systematic review. *Drug and Alcohol Dependence*, 131(1-2).

Verissimo, A. D. O., & Grella, C. E. (2017). Influence of gender and race/ethnicity on perceived barriers to help-seeking for alcohol or drug problems. *Journal of Substance Abuse Treatment*, 75.

Vogel, D. (1994). Narrative perspectives in theory and therapy. *Journal of Constructivist Psychology*, *7*(4), 243-261.

Walsh, D., & Downe, S. (2005). Meta‐synthesis method for qualitative research: a literature review. *Journal of Advanced Nursing*, 50(2).

Warren, S., & Brewis, J. (2004). Matter over mind? Examining the experience of pregnancy. *Sociology*, 38(2).

Webster, F., Rice, K., & Sud, A. (2020). A critical content analysis of media reporting on opioids: The social construction of an epidemic. *Social Science & Medicine*, 244.

Weisdorf, T., Parran Jr, T. V., Graham, A., & Snyder, C. (1999). Comparison of pregnancy-specific interventions to a traditional treatment program for cocaine-addicted pregnant women. *Journal of Substance Abuse Treatment*, 16(1).

Wong, S., Ordean, A. & Kahan, M., (2011). Substance use in pregnancy. *Journal of Obstetrics and Gynecology Canada, 33*(4).

Yarborough, B. J. H., Stumbo, S. P., McCarty, D., Mertens, J., Weisner, C., & Green, C. A. (2016). Methadone, buprenorphine and preferences for opioid agonist treatment: A qualitative analysis. *Drug and alcohol dependence*, *160*, 112-118.

*Table 1: Inclusion criteria*

|  |  |  |
| --- | --- | --- |
|  | Inclusion Criteria | Exclusion Criteria |
| (S) Sample | Samples of pregnant people who received/attempted to access treatment (including MAT, therapy, specialized inpatient/outpatient, prenatal care with concurrent OUD treatment) for OUD, including OUD with polysubstance use, while pregnant. | Samples in which the majority or all of participants were treated exclusively for other substance use disorders. Attempting to access/receiving treatment postnatally only. |
| (PI) Phenomenon of interest | Psychological barriers and facilitators to accessing treatment, e.g., perceived stigma, fear, and, experiences/feelings surrounding receiving treatment, e.g., shame, disempowerment, hopefulness. | Non-psychological, extrinsic barriers to treatment e.g., cost, insurance, distance, childcare etc. Objectively defined and outwardly observable aspects of treatment, for example types of therapy, length of treatment, dose of medication etc. |
| (D) Design | Interviews, focus groups, and questionnaires conducted during or after treatment. | Reviews, discussion/theoretical articles. |
| (E) Evaluation | Perspectives, experiences and attitudes towards attempting to access and/or receiving treatment, while pregnant. | Other phenomenon including treatment outcomes and provider perspectives. Studies focusing exclusively on birth and/or the postnatal period. |
| (R)Research type | Qualitative or mixed methods | Exclusively quantitative |
| Other | Full papers published in a peer-reviewed academic journal in English, published before 31st May 2020 |  |

*Table 2: Summary of included studies*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Author (s), year. Country | Sample | Purpose | Design and approach | Findings/Themes |
| Ostrach & Leiner, 2019, USA | 29 women receiving MAT for OUD as outpatients at a high-risk OBGYN practice. | To analyse women’s feelings about, and possible ambivalence towards, MAT for OUD | Qualitative: participant observation, semi-structured interviews and a focus group. Interviews and field notes were analysed using Grounded Theory. | Participants felt ambivalent about MAT, due to societal stigma, judgment from family/friends, concerns about social service involvement and close scrutiny of their pregnancies. 1/3 of participants had planned to detox instead of receiving MAT. |
| Fallin-Bennett et al., 2019, USA | 9 women receiving MAT during pregnancy and working with peer support specialists (PSS) at an outpatient clinic providing comprehensive services. | To describe experiences of perinatal women with PSS during treatment and outline recommendations. | Qualitative: two focus groups using a semi-structured guide. Transcripts analysed using content analysis. | Themes: 1. Feeling supported by PSS; 2. Qualities of an ideal PSS; 3. Strategies to improve interactions with PSS. |
| Chandler et al., 2013, Scotland | 14 women and 5 men with OUD receiving parenting support services including MAT during pregnancy or partner’s pregnancy. Only accounts/findings pertaining to women were extracted for synthesis. | To identify ways parents account for MAT and describe its impacts during pregnancy and parenthood | Qualitative: semi-structured interviews conducted at three time points across the pre/postnatal periods. Thematic constant comparison and a sociologically informed narrative approach guided analysis. | MAT was a facilitator and barrier to normal parenthood. Participants tried to reconcile drug dependence with being a “good enough” parent. Themes: 1. The material/embodied nature of MAT and its impact on the mother and baby; 2. Wider structures surrounding MAT; 3. The stigma of being a parent ‘on drugs’. |
| Mattocks et al., 2017, USA | 14 women receiving MAT during pregnancy and attending focus groups at a large outpatient methadone clinic. | To discover perceptions, experiences, and challenges of accessing and receiving MAT and obstetrical care during pregnancy and postpartum | Qualitative: following a script, researchers facilitated focus groups. Grounded Theory guided analysis | Themes: 1. Guilt,  coupled with fear of negative outcomes for their infant, dictates  women’s substance use disorder treatment decisions; 2. Finding  obstetricians with experience treating pregnant women using  methadone can be a challenge; 3. Physicians  are instrumental in helping women find the right methadone dose during pregnancy; 4. Some women have strong preferences for methadone over buprenorphine. |
| Jackson & Shannon, 2012a, USA | 114 pregnant women, 86% with OUD. All receiving short-term, inpatient methadone-supervised detoxification. | To explore differences in treatment barriers and motivators between urban and rural pregnant women. | Mixed methods: in interviews, open-ended questions explored barriers to treatment. Meta-themes and subthemes were developed from existing literature and interviews. | 83% of women reported a barrier to treatment. The most common were acceptability (including denial, stigma, fear of losing children) and accessibility. Motivations for treatment were pregnancy, recognition of needing help, family and being tired of the lifestyle. |
| Howard, 2016, USA | 20 pregnant women with OUD receiving treatment in a variety of settings. 80% were receiving MAT. | To understand the role pregnant women with OUD occupy in participating in medical decision making regarding prenatal care and addiction treatment. | Qualitative: within a feminist framework, group and individual interviews were conducted using a flexible guide. Interpretative Phenomenological Analysis was used to identify themes. | Themes: 1. Options and Choices (subthemes: methadone, buprenorphine and detoxification); 2. Fear of Child Protective Services (CPS) (subthemes: separation from their infants and feeling under surveillance). |
| Frazer et al., 2019, USA | 20 pregnant women, 80% receiving MAT for opioid use at a comprehensive care facility providing intensive outpatient treatment and temporary shelter. | To explore factors motivating pregnant women to seek treatment and hesitations/barriers. | Qualitative: scripted interviews explored motivation and hesitations/barriers for treatment. | Themes: 1. Motivators for treatment (seeking structure, concern about the baby’s health, consideration of terminating pregnancy, homelessness, custody, ready to stop using, partner inspired); 2. Hesitations to seek treatment (misconceptions, custody, concern about judgment, stigma, or privacy). |
| Radcliffe, 2011, England | 24 women, 21 with current opiate use. All were receiving or had received substance use treatment, including MAT, including from specialist midwives and/or a hospital-based clinic. | To engage with the literature on recovery by exploring gendered identity and motherhood in accounts of pregnant or post-partum women. | Qualitative: semi-structured interviews exploring identity construction and performance around drug-use and mothering were conducted. The notions of moral career and gendered identities guided analysis. | Pregnancy spurred engagement with treatment. Participants shared normative ideals of motherhood, desired to be normal, and were frustrated when not treated as such. In reconciling the identities of drug-user and mother, participants emphasized their treatment engagement. Supportive services were vital in ceasing drug use. |
| Morris et al., 2012, Australia, | 20 women, 11 with opioids as drug of choice, receiving comprehensive outpatient treatment at a hospital-based clinic. All interviewed three times: twice prenatally and once postnatally. | To explore the degree to which a treatment centre meets the needs of chemically dependent pregnant women. | Qualitative: critical ethnographic approach, using observation with field notes, reflexive journal keeping and minimally structured interviews. A feminist reading of Foucault and grounded theory informed analysis. | Themes: 1. Incongruity between the treatment clinic staff and women’s expectations; 2. Staff’s allegiance to best practice and natal panopticonism; 3. Subjugation and acknowledgement of the women’s knowledge; 4. The influence of the physical structure; 5. Striving for ideal communication and collaboration. |

*Table 3: appraisal scores for included studies.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Scores for Qs 1-9 | | | | | | | | |  |  |  |
| Author and location | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Quality Score out of 18 | Q10: Value | Rating |
| Ostrach & Leiner, 2019 | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 1 | 2 | 14 | Medium | High |
| Fallin-Bennett, Elswick & Ashford, 2019 | 2 | 2 | 2 | 1 | 1 | 0 | 1 | 2 | 2 | 13 | Medium | High |
| Chandler et al., 2013 | 2 | 2 | 1 | 2 | 1 | 0 | 2 | 2 | 1 | 13 | High | High |
| Mattocks, Clark & Weinreb, 2017 | 2 | 2 | 1 | 1 | 2 | 0 | 1 | 1 | 2 | 12 | High | Medium |
| Jackson & Shannon, 2012 | 2 | 1 | 1 | 2 | 1 | 0 | 2 | 0 | 0 | 9 | Medium | Medium |
| Howard, 2016, | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 1 | 2 | 15 | Medium | High |
| Frazer, McConnell & Jansson, 2019 | 2 | 2 | 2 | 1 | 1 | 0 | 1 | 2 | 2 | 13 | High | High |
| Radcliffe, 2011 | 1 | 2 | 1 | 2 | 2 | 0 | 1 | 0 | 0 | 9 | Medium | Medium |
| Morris, Seibold & Webber, 2012 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 16 | Medium | High |

*Table 4: Analytical and descriptive themes*

|  |  |
| --- | --- |
| Analytical Themes | Descriptive Themes |
| Embodied experiences | Health of the baby; challenges of dose/medication |
| Institutional pressures | Custody loss; surveillance; treatment compliance |
| Social Context | Stigma; positive and negative relations with treatment staff |
| Reconstructing selves | Pursuing motherhood; barriers to doing so |

Appendix A

Database Search 3 (n=2823)

Database Search 2 (n=591)

Database Search 1 (n=430)

Full papers read against inclusion criteria (n=21)

Total (n=3844)

Papers identified from references of included papers (n=0)

titles/abstracts reviewed, duplicates and irrelevant papers excluded (n=3823)

Included in QMS (n=9)

PRISMA Flow Diagram of systematic search and qualitative synthesis

Excluded as not full-length (n=2)

Excluded due to duplication of findings (n=1)

Considered for methodological and topical comparability (n=9)

Excluded due to relevance (n=9)