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Health care and social justice implications of incarceration for pregnant people who use drugs

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Abstract

The experiences of and care for pregnant, incarcerated people with substance use disorders represent a convergence of numerous clinical, historical, racialized, legal, and gendered factors. Understanding how these forces shape how they became enmeshed in the criminal legal system as well as the context of the care they do or do not receive while in custody is essential for promoting equitable maternal health care. In this review, we describe the prevalence of SUD among pregnant people behind bars, the health care landscape of incarceration, access to treatment for opioid use disorder for incarcerated pregnant and postpartum people, and nuances of providing such treatment in an inherently coercive setting. Throughout, we highlight the ways that the child welfare system and mass incarceration in the U.S. have had a unique and discriminatory impact on pregnant and parenting people, and have done so in distinctly racialized ways. Situating the clinical care of incarcerated pregnant people who use drugs in this context sheds light on fundamental social justice and health care intersections.

Keywords

Incarcerated pregnant women; substance use disorder in pregnancy; correctional health care

Introduction

As the number of pregnant people with substance use disorders (SUD) continues to rise (Haight, 2018), we must understand this trend and people's lived experiences as they unfold within larger societal systems that shape their lives, including the criminal legal system. While there are many overlaps between drug use and the criminal legal system, those

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connections play out in distinctive ways for pregnant people who use drugs—through laws, policies, and other discriminatory practices that funnel them into incarceration rather than treatment. They experience three domains of stigma, which then synergistically heightens the discrimination they are likely to encounter: having SUD, being pregnant, and being incarcerated. This punitive approach has consequences not only for individuals' short-term treatment and pregnancy outcomes, but also for their and their families' long-term wellbeing.

Addressing the needs of pregnant people with SUD who are incarcerated is, thus, part of a broader strategy of improving care for all pregnant people who use drugs, and for promoting equity and justice. In this paper, we review key issues in the care of this overlooked group of peopzle; we not only discuss their health care needs and available services, but also situate these in the context of U.S. incarceration, racial inequities, and the overlapping forms of discrimination that pregnant, incarcerated people with SUD experience. Most of our review relates to pregnant incarcerated people with opioid use disorder (OUD), as there are more data about this than for pregnant incarcerated people with other SUD; in addition, the evidence base for pharmacologic therapy for OUD in pregnancy is well established, with quantifiable treatment modalities to which institutions of incarceration should be adhering. We will nonetheless attempt to flag where data are available, treatment guidelines are applicable, and outcomes are measureable for pregnant incarcerated people with other SUD.

We focus primarily on the U.S., for the U.S. system of mass incarceration, its legacy of racialized regulation of reproduction and family formation, and its highly punitive approach to drug use have created distinctive and problematic conditions for pregnant people who use drugs. Indeed, reflecting the U.S.'s notable role in global female incarceration rates, the U.S. has only 4% of the world's female population, but over 30% of the world's incarcerated women (Kajstura, 2018). While countries across the globe incarcerate pregnant people, and some with SUD, incarceration in the U.S. is an entirely different phenomenon from its instantiations in other countries; the relatively large numbers of pregnant people in general, and those with SUD in particular, behind bars arise from conditions that are particular to the U.S.'s reliance on incarceration as a means of social and racial control.

In order to improve outcomes and promote equitable care for pregnant people with SUD enmeshed in the criminal legal system, we must understand the forces that have contributed to them being within this system in the first place, what does and does not happen to them behind bars and when they return to their communities, and what strategies show promise for improving their care.

Terminology and its implications

In this paper, we acknowledge the range of genders of people who are incarcerated and who may be pregnant or parenting. We acknowledge that some people who have the physiologic ability to become pregnant and to give birth do not identify as women, and use the gender inclusive terms 'pregnant person' or 'pregnant individual.' When previously published research has reported on 'females' or 'women,' then we use those terms for consistency. We use the term 'medications for opioid use disorder' (MOUD) to denote the evidence-based,

FDA approved pharmacologic treatments for OUD—methadone, buprenorphine, and, for non-pregnant individuals, naltrexone.

We use the phrase 'criminal legal system' instead of what is commonly called the 'criminal justice system,' because there is widespread injustice in the vast network of policing, sentencing, courts, parole, probation, and institutions of incarceration. We also refer to the 'carceral system,' which denotes not only the practices and agencies that are part of the criminal legal system, but also the a broader web of policies and agencies that use a criminalizing, punitive, and often discriminatory approach to regulating individuals and communities; this expansive understanding of 'carcerality' can include the child welfare system and others that rely heavily on surveillance and control. We avoid the term 'correctional facilities,' which is commonly used to refer to prisons, jails, and detention centres in aggregate, because the word 'correctional' implies that the institution's purpose is to correct the incarcerated individual. This verbiage is disconnected from the structural conditions that are the context for people's alleged or actual criminal behaviour; it also suggests that the institutions are designed for rehabilitation, when many are far from this orientation.

The U.S. system of incarceration includes several types of institutions that confine people for allegedly criminal offences. Recognizing the variety of institutions and their characteristics is important for understanding the health and social justice implications of where pregnant people with SUD might be held. Most incarcerated adults are held in prisons and jails, which are very different types of facilities. Prisons are under state or federal jurisdiction, and confine people who have been convicted of and are serving sentences for felony level crimes. All state prisons in a particular state are under the supervision of the state's department of correction with its own administrative structure, while federal prisons are under the domain of the Federal Bureau of Prisons. As of 2018, there were roughly 20 federal prisons that housed females, and approximately 75 state prisons that did so (Gips et al., 2020). Detention facility (or center) is the term used to describe the systems that confine youths (though some youth with criminal charges may be held in adult facilities) and those in immigration detention.

Prison sentences are typically longer than 1 year, and someone's release date is known in advance (Kaeble, 2018); this planned release timing helps facilitate continuity of medical care, including continuation of SUD treatment. People are confined in a particular prison based on their felony type and security classification, not based on proximity to their home community. Many prisons are located in rural areas (Gilmore, 2007). This physical reality makes it challenging to maintain connections to one's family and children while incarcerated, including if a pregnant person gives birth while in custody.

Jails, in contrast, are high turnover, short-term confinement facilities that are under local city or county jurisdiction. The majority of people detained in U.S. jails are pre-trial, meaning that they have been arrested but not convicted of a crime, and are often there because they cannot afford their bail (American Civil Liberties Union, 2020). People may spend a few hours in jail, or over a year, though the average length of stay in jail in 2018 was 25 days (Zeng, 2020). Furthermore, the timing of someone's release from jail is often unpredictable.

People may therefore leave jail in the middle of the night, without time to plan for continuity of medical care, and often without stable housing to go to. For some people, this may make them more likely to use substances in unsafe environments. Jails, as local institutions, are physically located in the communities where people live, or at least where they are arrested.

Putting this geography in combination with the frequent turnover and high rates of return to jail, it becomes apparent that health care in jail—including pregnancy and addiction care—should not be thought of as separate from the community health care systems. People's health status when they enter jail reflects the structural conditions and access to care of their non-jail lives. Likewise, the care they receive or do not receive in jail has health implications for when they return to their communities; deficiencies and inequities in one system are intricately connected to those in the other (Sufrin, 2017). While similar connections between prisons and communities exist, they are more pronounced for jails.

These administrative, geographic, temporal, and other logistic differences between prisons and jails have implications for treatment of SUD. The majority of incarcerated females in the U.S.—52% in 2018, or 115,100 in jails compared to 104,237 in prisons—are held in jails (the opposite is true of males) (Carson, 2020; Zeng, 2020). So the institutions with the least oversight house the majority of females. Conversely, the federal system has the fewest number of females—just over 11,000 (Carson, 2020)—but has the most oversight. For example, the larger number of jails makes it harder to ensure consistent availability of MOUD compared with more centralised prisons. For SUD where the most effective treatments are psychosocial, variation in jail staffing and length of stay in jail facilities complicates provision of SUD treatment compared with prison facilities. Indeed, some states have policies and practices where they send pregnant people in jail custody to the state prison so that they can have access to treatment, even though those people may be pre-trial and not convicted of a crime.

How many pregnant people with SUD are behind bars?

To grasp the scope of how many pregnant people with SUD are impacted by incarceration, we must assemble what we know about how many women, women with SUD, and pregnant people are behind bars. The paucity of direct data around the number of pregnant, incarcerated people with SUD signals how overlooked and marginalized this group is. In 2018, there were more than 226,000 women in U.S. prisons and jails on any given day, with Black women imprisoned at twice the rate of white women (Carson, 2020; Zeng, 2020); In 2017, there were 7,700 females in immigration detention and 6,600 in youth detention (Kajstura, 2019).

While women represent only 10% of all incarcerated adults in the U.S., the rate of female incarceration has outpaced that of males over the last four decades (Sawyer, 2018; Wagner & Rabuy, 2017); moreover, even as the overall incarceration rate is falling in the U.S., this trend only applies to men: from 2008 to 2018, the number of women in jails increased by 15% (for men, it declined by 9%) (Zeng, 2020). Yet many policy-makers and criminal legal system reform advocates highlight the decline in incarceration rates, which obscures the rising trend for women. This categorical, statistical elision of incarcerated women then

makes it easier to ignore their gender-specific health care needs, as well as the distinctive impact on the children and families they leave behind.

Seventy percent of incarcerated women are classified as having a substance use diagnosis, which is ten percentage points higher than it is for incarcerated men (Bronson et al., 2020). This high prevalence of SUD among incarcerated women interconnects with the high prevalence of mental health issues (70%) and experiences of physical or sexual trauma among this group (up to 82%) (Bronson & Berzofsky, 2017; Zielinski et al., 2020); mental health, SUD, and trauma all come to bear on the ways pregnant people experience and need access to care while incarcerated. Adding to these forms of trauma are the trauma and other weathering effects of racism that affect Black and other women of colour, who are over-represented in institutions of incarceration (Krieger et al., 2011). Often times, sexual violence victimization and other forms of trauma can lead women to experience sequelae such as drug use, mental health issues, and being funnelled in to the carceral system rather than into the treatment systems they need (Zielinski et al., 2020).

Connecting these frequencies to pregnancy in carceral settings, the majority of imprisoned women in the U.S. are of childbearing age and are already mothers and primary caregivers to young children (Carson, 2020; Glaze & Maruschak, 2010). Furthermore, incarcerated women have a low prevalence of contraception use pre-incarceration, and the majority have been sexually active with men in the months prior to entering prison or jail (Clarke et al., 2006; Larochelle et al., 2012). Some women will, therefore, be pregnant at entry. National data collected by the Pregnancy in Prison Statistics (PIPS) study between 2016 and 2017 from federal prisons, 22 state prison systems, and 6 jails from 2016 to 2017 estimated that approximately 3,000 pregnant people enter prisons and 55,000 enter jails in the U.S. each year (Sufrin et al., 2019, 2020). At study sites, there were nearly 900 births to women in custody, as well as miscarriages (n = 87), abortions (n = 44), and other outcomes. While no data are available on the number of pregnant youth who are incarcerated, in 2018 there were nearly 2100 pregnant people detained in Immigration and Customs Enforcement (ICE) facilities (U. S. Government Accountability Office, 2019). There is a tremendous need for systematic and coordinated national data collection regarding incarceration during pregnancy at the federal, state, and local levels.

Given the high prevalence of SUD among incarcerated women, we can expect that many of these admitted pregnant people will also have SUD. The PIPS study also reported that 14% of pregnant people admitted to jails and 26% to state prisons had OUD. A separate study in North Carolina's prison system found that there were 179 pregnant people with OUD over 2 years, representing about half of all of their pregnant population (Knittel et al., 2020). Our clinical experiences treating pregnant people with SUD in pregnancy are consistent with reports from the community that polysubstance use among women with OUD is common and that stimulant use disorders, particularly methamphetamine, during pregnancy have increased over recent decades (Admon et al., 2019; Jarlenski et al., 2020). There has been a parallel increase in referrals for treatment from the criminal legal system of pregnant people with stimulant use disorder (Terplan et al., 2009). These statistics demonstrate that people who are incarcerated are also pregnant with SUD. Furthermore, most of them will eventually return to their communities.

Incarceration is thus a critical time to provide them with essential health care services. Pregnancy and incarceration have independently been recognized as moments when people who otherwise have limited access to care will increase their utilization of health care systems. Pregnancy and incarceration also create possibilities to engage people in treatment for SUD. There is growing evidence for this especially for OUD, recognizing that transitioning out of these states—from pregnancy to postpartum, and from incarceration to the community—are both independent times when people are at increased risk for opioid overdose. A person returning to their community after incarceration is more than 100 times more likely to die of opioid overdose compared to the general population, in part due to reduced opioid tolerance developed while their opioid dependence is untreated in custody (Binswanger et al., 2013; Merrall et al., 2010; National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division, 2019). And OUD accounts for 10% of postpartum mortality, with several studies showing increased risk of fatal overdose within 1 year of the pregnancy ending (Gemmill et al., 2018; Schiff et al., 2018; Smid et al., 2019). Returning to the community after incarceration as a pregnant or postpartum person is thus likely a synergistically high-risk time for overdose.

Mass incarceration, criminalization of pregnancy, and child welfare system intersections

To appreciate the needs of incarcerated pregnant people with SUD requires understanding the broader historical, racial, and social context of how the U.S. has come to rely on incarceration, and indeed the web of connecting carceral systems that affect pregnant and parenting people. The exponential rise in the number of people behind bars in the U.S. since the late 1970s—from just over 500,000 to 2.2 million—is neither a historical accident nor a result of increasing crime (Gottschalk, 2015; Western, 2006). Extensive analyses of policies, laws, demographic statistics have illustrated that the ballooning prison and jail population over the last four decades cannot be separated from the white supremacist structures of U.S. society that have long discriminated against Black and indigenous individuals and other people of colour (Angela, 1997). This massive rise in the number of people behind bars and the disproportionality is encompassed in the term 'mass incarceration.' (Roberts, 2004) The 'war on drugs' has contributed to mass incarceration in distinctive ways, and in ways that underscore the dire need for SUD treatment for incarcerated people. The 'war on drugs' refers broadly to laws, policies, policing and sentencing practices that purported to stem drug use and drug trade. In reality, from its intentional inception in the 1970s, it was infused with intentional strategies of racial control in the midst of the civil rights movement (Baum, 2020). The war on drugs has seen increased policing, arrests and prosecutions for low-level drug trafficking in addition to more serious charges, with documented disparities in how those are enforced for Black individuals involved with drugs than white individuals (Dumont et al., 2013). While drug related charges alone do not account for mass incarceration (Pfaff, 2017), the war on drugs has impacted women more severely than men. Since the 1980s, drug-related arrests increased nearly 200% for women, but only 34% for men; women are more likely to be arrested for small amounts of drug possession than are men (Herring, 2020).

The gendered impact of the war on drugs relates not only to the number of women behind bars, but also to the ways that reproduction, pregnancy, and parenting have been

criminalized for certain groups. There is a robust literature documenting the ways that the U.S. child welfare system has promulgated racist notions of fit and unfit mothers, punishing those who do not conform to those definitions by removing their children from their custody and, at times, incarcerating those mothers (Briggs, 2020; Paltrow & Flavin, 2013; Roberts, 2002). This punitive logic overlooks the underlying inequities that create barriers to people parenting in safe and dignified environments—such as policies that exclude them from safe and stable housing or lack of childcare that would facilitate stable employment. Notably, these surveillance and punitive practices from the child welfare and carceral systems have been heightened and harsher for Black women—exemplified by the moral panic over the now debunked myth of 'crack babies' which disproportionately harmed black mothers and children (Roberts, 2002). This also extends to the treatment of pregnant people with SUD. In our collective cultural imagination, they are often vilified for their substance use as endangering the foetus, rather than recognizing the underlying medical and mental health realities of the condition of SUD. This negative, non-medicalized judgement translates into laws and policies that incarcerate pregnant people with SUD and otherwise make it harder for them to access the health care they need. As of 2020, 23 states consider substance use during pregnancy to be child abuse, and five of these states consider it grounds for civil or criminal commitment (Substance Use During Pregnancy, 2020). Some policy-makers who create and enforce these policies describe increasing treatment of substance use in pregnancy as their intended outcome. As one study cited a District Attorney in Tennessee, 'And unfortunately encouraging [pregnant women with SUD] with a gentle word isn't enough. It's the 'velvet hammer' of prosecution that sometimes inspires them to do the right thing and get into those programs.' (Howard, 2017) Contrary to these aims, however, laws criminalizing substance use during pregnancy do not improve access to treatment and may result in decreased engagement with prenatal care.

There are more subtle ways, too, that the criminalizing approach of pregnant people with SUD has seeped into our health care and legal systems, in the discriminatory practices of urine drug screening and referrals to child welfare systems for pregnant and postpartum people; research has shown that such screening and referrals are laden with racialized bias, with disproportionate referrals of Black, indigenous, and other people of colour to these restrictive systems and with disproportionate child separation consequences than for white women (Perritt, 2020). Bail laws fail to explicitly address the misdirected protective impulse to incarcerate pregnant people for foetal benefit. People with SUD in pregnancy are under surveillance and supervision with the threat of incarceration, even as they try to access health care, because of their pregnant status and carrying a foetus (Allen et al., 2010; Perritt, 2020).

All of this is to say that the more expansive law enforcement, stricter drug sentencing laws, and increased reliance on incarceration to punish drug use has distinctly affected women, especially women of colour—both in the ways that women are more likely to serve time for drug-related offences than men, and in the unique ways that gender norms synergistically stigmatize pregnant and parenting women with SUD who are enmeshed in the criminal legal system.

Health care behind bars

It is helpful for understanding care of pregnant, incarcerated people with SUD to know more about health care service delivery and status of general pregnancy care behind bars. People who are incarcerated are the only group of people in the U.S. with a constitutionally protected right to health care. This mandate for institutions of incarceration to provide access to health care is based on the 1976 Supreme Court case Estelle v. Gamble, in which the court determined that 'the deliberate indifference to the serious medical needs' of incarcerated people amounts to cruel and unusual punishment, a violation of the eighth amendment (Estelle v. Gamble, 1976). Despite the constitutional mandate, there are no required standards for what health care services must be provided, and no requirements for accreditation or oversight (Rold, 2008). This leads to discretionary interpretation of what counts as a 'serious medical need.' Following standards of care for pregnant people defined by the American College of Obstetrics and Gynaecology (ACOG), and compliance with the voluntary health care accreditation programs designed by the National Commission on Correctional Health Care (NCCHC) and the American Correctional Association (ACA) are all optional (American College of Obstetricians & Gynecologists, 2020; APHA Task Force on Correctional Health Care Standards, 2006; Sufrin, 2018). For people who are incarcerated in facilities operated by ICE, compliance with the health and safety regulations published by the Department of Homeland Security is monitored internally (United States Immigration & Customs Enforcement, 2016).

Other factors influencing health services delivery in institutions of incarceration include whether qualified health care professionals provide health care on site or whether patients need to be transported off site for routine or referral level care, and this depends on the availability and proximity of health care near the carceral institution. Health care may be provided by health care professionals who are directly employed by the institution, or who provide care through a contract; such contracts can include community private practitioners, correctional health corporations, governmental entities such as health departments, and academic medical centres (Ferszt & Clarke, 2012; Sufrin et al., 2019; 2020).

The tremendous variation in facility resources, implementation of standards, and structure of contracts, paired with the lack of mandatory standards or oversight, translates into variable access to comprehensive, high-quality health care services during pregnancy and SUD treatment. Along with data collection about pregnancy during incarceration, mandatory and externally monitored compliance with standards of care would allow for identification of gaps in care and provide data to guide partnerships and contracts for health care provision.

Availability of and evidence for SUD treatment in carceral settings—Despite recognition that people with SUD frequently pass through our nation's prisons and jails, most institutions of incarceration do not currently provide routine access to treatment for SUD. In the most recent nationally representative assessment of SUD treatment availability in US prisons and jails (2003–2005), medical supervision of detoxification was offered by 5% of prisons and 34% of jails, and medications for treatment of SUD were offered by 6% of prisons and 32% of jails (Oser et al., 2009). Data from the Bureau of Justice Statistics from 2007 to 2009 showed that, among those who met criteria for 'substance dependence'

or 'abuse,' 28% of people in prisons and 22% of people in jails reported participation in a drug treatment program during their incarceration (Bronson et al., 2020). More recent and specific data are available regarding access to MOUD during pregnancy (Brinkley-Rubinstein et al., 2018). A 2009 study that included all 50 state prison systems found that just over half provided access to MOUD in some circumstances—most commonly only for pregnant people, but not in other situations (Nunn et al., 2009). More recently, the PIPS study reported that only 4 of 22 state prisons and 1 of 5 large jails provided MOUD to all pregnant people with OUD in custody (Sufrin et al., 2020). If medication treatment is not available while in custody, this means that even people on MOUD in the community cannot continue their medication; they, as well as people with SUD not on medication, will therefore be forced to endure acute opioid withdrawal upon entry to prison or jail—which some have suggested amounts to 'cruel and unusual punishment.' (Milloy & Wood, 2015) Not providing MOUD or treatment for other SUD in custody can also mean that people turn to covert drug trading inside in order to avoid withdrawal (Brinkley-Rubinstein et al., 2018).

There is a growing body of evidence that supports the benefits and feasible implementation of MOUD in carceral settings (Malta et al., 2019; Moore et al., 2019). The focus on MOUD in carceral settings, rather than broader treatment for SUD in pregnancy, reflects the potential for leveraging existing medical services to provide MOUD, rather than expanding access to psychosocial services that are currently lacking in mail jails and prisons. An important point of this evidence is the high risk of fatal and non-fatal overdose within the first weeks of release from prison or jail, among people who presumably were not receiving treatment in custody and then, with reduced tolerance from the period of abstinence, use opioids upon release and are then more prone to overdose (Binswanger et al., 2013; Saloner et al., 2020). Providing MOUD to people in custody has been shown to reduce this risk. In fact, continuing incarcerated people's pre-incarceration MOUD while in custody reduced overdose deaths in the state of Rhode Island by 61% (Green et al., 2018); the state now also initiates medication treatment with methadone, buprenorphine, or naltrexone for incarcerated people with OUD even if they were not in treatment before incarceration. Two systematic reviews have shown that providing MOUD to incarcerated individuals reduces illicit opioid use in and out of custody, increases engagement and retention in communitybased treatment, decreases re-incarceration rates, and reduces overdose (Malta et al., 2019; Moore et al., 2019). The benefits of implementation of evidence-based treatment of other SUD and acknowledgement of the need for comprehensive treatment for people using multiple substances would likely parallel the positive outcomes of MOUD provision during incarceration, although data are needed to identify innovative programs and document outcomes.

In addition to the scientific evidence supporting MOUD provision in custody, nearly a dozen cases have successfully challenged jails and prison that have denied people with OUD access to treatment at local, state, and federal facilities (LaBelle & Weizman, 2019). Many of the legal arguments bolstering access to MOUD in custody are based in the eighth amendment and the requirement of institutions to address incarcerated people's 'serious medical needs,' as well as an application of the Americans with Disabilities Act (LaBelle & Weizman, 2019). These cases provide important legal precedent and have mandated changes

in certain jurisdictions, but they do not yet apply universally and have not yet been applied to other SUD.

Moreover, implementation of treatment for SUD in jails and prison remains a challenge—in part due to the variability in institution and community capacity, oversight, health services systems, and funding structures for treatment in jails and prisons. Because of the potential to use existing health care structures and resources to provide MOUD, the implementation challenges have been explicated more thoroughly than for other SUD, although many of the same issues exist. Due to regulations from the Drug Enforcement Administration (DEA), a prison or jail cannot dispense methadone unless they are a licenced OTP, which very few are. This then requires institutions to arrange for an OTP staff member to come to the facility daily for 'guest dosing' of methadone, or transporting the individual off site every day to a community OTP. While a physician or nurse practitioner working in a jail or prison could obtain a DEA-X waiver to prescribe and dispense buprenorphine on site, not all facilities have an on-site health care provider in the first place; furthermore, despite the fewer regulations on buprenorphine, less than half of prisons that provided MOUD to pregnant people used buprenorphine (Sufrin et al., 2020). Thus jails and prisons that are not OTPs and that do not have a waivered provider on site, must rely on availability of MOUD in the surrounding community to arrange logistics. But some counties do not even have an MOUD provider, and this limitation likely has a greater impact on jails, which are less centralized.

In addition to the logistical and infrastructural barriers to implementing MOUD in custody, misinformation and discriminatory judgments about the lifesaving benefit of treatment leads many jail and prison administrators to be reluctant to provide access to treatment. Some have indicated a preference for 'drug-free' treatment and security concerns about increasing the availability of opioids inside the facility (Friedmann et al., 2012; Nunn et al., 2009). There is also a perception among some that it is not the jail or prison's responsibility to fill in gaps of community systems and provide new treatment to people who were not receiving it pre-incarceration, a barrier to providing MOUD as well as treatment for other SUD (Friedmann et al., 2012). Ongoing efforts to improve access to treatment are promising and thoughtful, collaborative implementation-focused studies of alternatives to incarceration and SUD treatment during incarceration are desperately needed (Green et al., 2018; Oser et al., 2009).

Availability and nuances of OUD treatment for pregnant incarcerated people—

Although pregnancy is a critical time for engagement with all SUD treatment, providing timely access to MOUD and avoiding withdrawal are cornerstones to optimal, evidence-based care for pregnant people with OUD (Terplan et al., 2018). This section focuses specifically on MOUD to highlight the data available on the treatment of SUD in pregnancy in prisons and jails. MOUD in pregnancy improves engagement in prenatal and addiction care, reduces overdose risk, and contributes overall to improved pregnancy outcomes (Terplan et al., 2018; American College of Obstetricians & Gynecologists, 2017). These parental and neonatal benefits of MOUD may be particularly pronounced in prison and jail facilities that lack the comprehensive medical and psychosocial supports needed for medication-assisted withdrawal (Jones et al., 2014). Some prisons and jails have deemed

pregnancy as an exception when it comes to MOUD, and will provide access to MOUD at their facilities only for people who are pregnant (Nunn et al., 2009; Sufrin et al., 2020). For instance, in a 2009 survey of all state and federal prison systems, of the 28 that provided any MOUD, half of them only did so for pregnant individuals (Nunn et al., 2009). However, this does not mean that MOUD is widely available to incarcerated pregnant people, even as an exception to facilities' usual policies. A 2020 survey of twenty-two state prison systems, the five largest jails, and one small jail reported that 82% of prisons and 67% of jails provided MOUD to pregnant people. While that is certainly a majority of these sites, most of them would only continue MOUD if the pregnant person was already on it when they got to the facility, and only 22% of prisons and half of the jails would initiate a pregnant person on treatment.

The default, then, when MOUD is not available, is for pregnant people with OUD to go through opioid withdrawal. Indeed, in this same study, one third of people with opioid use disorder who were incarcerated during pregnancy were managed with withdrawal, sometimes with no medication for symptomatic support (Sufrin et al., 2020). In a separate state prison facility, approximately three-quarters of pregnant people with OUD did not receive MOUD, suggesting that there may be substantial variation based on geography (Knittel et al., 2020). There is also variation in the selection of specific MOUD formulations, with methadone more commonly provided than buprenorphine for pregnant people (Sufrin et al., 2020). At sites that only offer buprenorphine, a pregnant person who is on methadone in the community and then starts on buprenorphine in prison or jail will have to go through withdrawal that may be more severe than if they had not been receiving MOUD before this; furthermore, some people respond better to methadone and others to buprenorphine, so not having access to both while incarcerated compromises their long term success.

Even when prisons and jails provide MOUD for pregnant people, the vast majority will discontinue medication when the pregnancy ends (Knittel et al., 2020; Sufrin et al., 2020). The discontinuation of MOUD after the pregnancy has ended, whether abrupt discontinuation or a taper, is troubling, and signals that the concern is for the foetus, and the value of the pregnant person as a carrier of that foetus. Not continuing MOUD post-pregnancy fails to see OUD as a chronic condition that needs long term pharmacologic treatment, regardless of someone's status as carrying a foetus. It also fails to see that the health of the newborn and the ability of the mother to parent that child both depend on the person being treated and stabilized for the long term for their OUD.

The extent to which an episode of incarceration may provide an accelerated entry into the OUD cascade of care for pregnant people with OUD is uncertain. Engagement in care, the first phase of the treatment portion of the cascade, within a carceral setting is predicated on the accurate diagnosis of both pregnancy and OUD, and referral to treatment during incarceration for pregnant people with OUD. There is a substantial discrepancy between the rates of MOUD provision from administratively reported data from prisons and jails and from data abstracted by researchers from a prison medical record, where the administrative data suggests a substantially higher rate of MOUD provision (Knittel et al., 2020; Sufrin et al., 2020). This may reflect geographic variation or different policies across facilities, but our combined clinical experiences in this setting strongly suggest that

some facilities identify patients with OUD based on those who are experiencing active withdrawal, and limit referral to treatment to this group. Pregnant people who experience withdrawal in a jail that does not offer MOUD or other substance use treatment and then return to the community or transfer to a prison that does not offer MOUD to people who are already on treatment, will fall out of the treatment cascade prior to initiating MOUD. Once pregnant people have initiated MOUD during incarceration, retention in care requires both continuation of MOUD postpartum for people who remain incarcerated during the postpartum period and also referral to community MOUD providers for people who are returning to the community.

The scant data available suggest that postpartum withdrawal presents a substantial threat to progress along the cascade; of the recently postpartum people with OUD in a state prison system, only 7% received a referral to MOUD in the community (Knittel et al., 2020). Referral to community MOUD providers is a potential key determinant of retention in care for OUD following incarceration (Knittel et al., 2020). Women with OUD are particularly vulnerable to overdose immediately post-incarceration and also in the postpartum period, raising the stakes for retention in care further (Green et al., 2018; Schiff et al., 2018). Although some programs developed in a research context report excellent post-incarceration outcomes, continuity of MOUD between jail and prison facilities and the community in the postpartum period remains an area for improvement (Knittel et al., 2020).

Incarceration represents an important point of access for pregnant people who were not on MOUD pre-incarceration to initiate this life-saving and evidence-based treatment, similar to how some people view pregnancy itself as an entry point into recovery. There are some important nuances, however, to providing treatment when someone is pregnant and in a carceral setting—both states that confer some vulnerability to coercive systems. Some pregnant people may view an episode of incarceration as a separation from substance use behaviours and a new start in parenthood (Sufrin, 2017). They may be more receptive to treatment at this time. At the same time, incarceration intentionally removes some autonomy from people and is structured by unequal, hierarchical power relationships. A qualitative study of 39 patients in a methadone maintenance program reported feeling coerced, and therefore less likely to continue treatment when started in a vulnerable crisis moment of incarceration or pregnancy (Damon et al., 2016).

Many jails and prisons will have to transport pregnant patients off-site to a community provider on a daily basis to receive their dose. Some pregnant people may experience this as humiliating, to be in public in a prison uniform and, in at least 18 states that have no laws prohibiting restraints in pregnancy, shackled (Pregnancy et al., 2020). Another factor to consider is that many incarcerated pregnant people have Child Protective Services involved in their lives, which imposes another layer of trauma on how they experience pregnancy, incarceration, and having SUD (Sufrin, 2017).

Furthermore, the logistical complexities of accessing routine care when needed while incarcerated may pose challenges for adjusting MOUD doses, which is often frequently needed for pregnant people on MOUD. Another important challenge is linking people to community treatment when the pregnant person returns to their community. Having a

community clinic from which to receive medication, having transportation to that clinic, and seamless and timely continuity of dosing are essential—but not always in place. While release dates from prisons are known in advance, making it more feasible to coordinate linkages to care, that is not always the case in jail, and sometimes people get released at late hours of the night; without an established community MOUD plan, that the pregnant person knows about and can access, they are at high risk of relapse and overdose.

Efforts to ensure that incarcerated pregnant people with OUD have timely access to MOUD while in custody and in the community must incorporate these nuances and distinct factors of incarceration. Counselling should be patient centred and provide full information to people. If a pregnant person declines MOUD, they should not be punished for this, and should still receive standard pregnancy care and behavioural substance use disorder treatment, as well as safe withdrawal. Providing MOUD and indeed any SUD treatment to pregnant people in custody requires heightened attention to the principles that recovery is a challenging, lifelong, multifactorial process; treatment should be individualized and with attentiveness to nuances in limited autonomy in the midst of addiction while incarcerated.

Pregnancy and birth experiences behind bars

The backdrop for pregnant people with SUD who are incarcerated is the overall experience and care of being confined while gestating a pregnancy. Many people first learn about a pregnancy when they become incarcerated, although pregnancy testing policies vary across facilities, and include mandatory, opt-out, opt-in, or absent testing implemented at any point between initial intake into the facility and several weeks into an episode of incarceration (Kelsey et al., 2017; Sufrin et al., 2019). Access to abortion is also variable; many institutions impose barriers or prohibit it outright, despite incarcerated people retaining their constitutional right to abortion (Roth, 2011). We would recommend universal opt-out pregnancy testing as a patient-centred approach.

Prenatal care is likewise inconsistent, with some institutions providing access to quality care and others not. One study of 19 state prison systems describes inadequate prenatal care for people incarcerated during pregnancy across a range of measures, including variable access to nursing, allied health, and physician prenatal providers, less than universal screening for trauma and substance use, limited access to childbirth and parenting classes and inadequate nutritional accommodations (Ferszt & Clarke, 2012). And a 2019 report of 50 state's policies found that 12 prison systems had no available prenatal care policy, and 24 had no pre-existing arrangements for a hospital where birthing people would be transported to should they go into labour in custody (Daniel, 2019). A study of over 50 jails across the U.S. found similar variability in existence and lack of standardization of pregnancy care (Kelsey et al., 2017). External monitoring and establishment of mandatory, national standards for pregnancy and postpartum care and/or accreditation in these settings may be an effective way to decrease disparate care across facilities. While the best operational systems, such as on-site or off-site prenatal care, may appropriately be different depending on whether it is prison or jail and geographic location, access to standard, comprehensive pregnancy care must be made available. Data on the effects of incarceration during pregnancy on neonatal and maternal outcomes have been mixed, although some literature demonstrating improved

outcomes due to incarceration may reflect the poor condition of the safety net for pregnant people outside of jails and prisons than the variable medical care they receive inside (Baker, 2019; Bell et al., 2004; Knight & Plugge, 2005). In addition, this literature on birth outcomes largely ignores the further downstream effects of incarceration during pregnancy on maternal and child welfare. While improving access to services for all pregnant people with SUD remains a critical need, the overrepresentation of the most marginalized women with SUD in the criminal legal system and the need to reduce the long-lasting harms of incarceration make it another important point for intervention.

Birth experiences during periods of incarceration highlight the constraints on patient autonomy that are embedded in the carceral system. The most obvious of these is shackling during labour. Despite the medical risks and human rights violations, only 32 states have laws prohibiting the practice; and adherence to these laws is highly variable (Pregnancy et al., 2020). Perinatal providers who care for incarcerated patients during labour are often unaware of laws and may be unwittingly complicit in shackling (Goshin et al., 2018). Legislative advocacy, accountability systems, litigation, and collaborative training of jail and prison workers as well as hospital staff encountering pregnant and postpartum incarcerated people who are incarcerated are needed to improve and enforce anti-shackling policy and practice.

Labouring parents who are incarcerated are generally policed by officers from the jail or prison, at least one of whom is inside the room, and are often prohibited from having the other parent of the infant or another family member present at the birth. Their interactions with nursing and physician staff may be coloured by the overlapping stigmas of substance use and incarceration, which have been associated with decreased intentions to provide the community standard of maternity care (Goshin et al., 2020; Vedam et al., 2019). Collaborative programs have successfully addressed some of these issues, demonstrating the feasibility and positive experiences of having doula labour support for pregnant people whose births occur during incarceration (Grassley et al., 2019; Shlafer et al., 2015).

The immediate postpartum period is a critical time for parental-infant bonding and establishment of breastfeeding, yet this is often truncated for people who give birth in custody (Franco et al., 2020). For infants exposed to opioids in utero, early separation from the birthing parent and early discontinuation of breastfeeding may exacerbate symptoms of neonatal opioid withdrawal syndrome and complicate implementation of the evidence-based 'Eat, Sleep, Console' approach to management. Despite the value of breastfeeding in general and in particular for this population, most incarcerated birthing people do not have this option. Innovative programs, such as the partnership between the Alabama Breastfeeding Committee and the Alabama Prison Project to provide pumps and supplies to pump their milk inside the prison and ship frozen milk to infant caregivers, hold tremendous potential to provide postpartum people who are incarcerated with the same infant bonding and feeding opportunities that exist in the community (Alabama Prison Birth Project, 2020).

Conclusion

This review has outlined the unique considerations for pregnant, incarcerated people with SUD—not only their pregnancy care and addiction treatment needs behind bars, but also the interrelated factors of mass incarceration, structural racism, and discrimination built into the child welfare system. Understanding what happens for this group of people is not only relevant for them or for while they are behind bars, but is part of a larger strategy of promoting equity, justice, and compassion for all pregnant and parenting people who struggle with addiction, and indeed for addressing maternal health equities in general. For the long-term health of these individuals and their families, policies should priorities alternatives to incarceration for them, paired with greater investment in community-based, person-centred SUD treatment and pregnancy care. And while we are working towards that goal of decreasing our reliance on incarceration as a means of social policy, we must ensure that these people have access to quality, evidence-based, standard of care. Reforms in our criminal legal system must also be accompanied by rethinking the child welfare system to be less discriminatory, less punitive, and reoriented towards safe and effective family-centeredness.

There remain several important but unanswered questions about the ways that involvement with prisons, jails, and community supervision during pregnancy reverberate throughout the lives of people with SUD. The effects on maternal and neonatal outcomes in custody of non-standard treatments for OUD and other SUD during pregnancy are not known. It remains unclear to what extent the benefits of initiation or continuation of MOUD during pregnancy are retained for people who experience postpartum withdrawal prior to returning to the community. In addition, while prescribers of buprenorphine are required to attest to directly providing for or referring patients to counselling as part of medication-assisted treatment, access to high quality substance use treatment programs during incarceration is limited. The ethics of providing a safe, effective, and life-saving medication during pregnancy and withdrawing it postpartum and/or of implementing a medication differently during incarceration compared with in the community are fraught. Ensuring that women who have initiated MOUD during pregnancy can continue treatment postpartum is an important step for continuity of care for OUD. Increasing access during incarceration to high quality substance use treatment programs for other SUD during pregnancy remains a persistent challenge.

Recognizing that institutions of incarceration play a critical role in addressing the opioid crisis in the U.S., there has been increasing attention to research, legislation, and development and implementation of best practices for providing MOUD in these settings. Reports from organizations as diverse as the Substance Abuse and Mental Health Administration; National Sheriffs Association; National Academies of Science, Engineering and Medicine; The National Council for Behavioural Health and Vital Strategies; the Justice-Community Opioid Innovation Network from the National Institutes of Health, to name a few, all advocate for routine MOUD in custody settings (Jail Based Medication Assisted Treatment: Promising Practices, Guidelines, and Resources for the Field, 2018; Justice Community Opioid Innovation Network. NIH HEAL Initiative, 2019; Mace et al., 2020; National Academies of Sciences, Engineering, and Medicine; Health and Medicine

Division, 2019; Substance Abuse & Mental Health Services Administration, 2019). But within these efforts, there is little to no attention to the unique considerations for pregnant and postpartum people. While some of their needs—access to MOUD and linkages to care post-release—are the same as non-pregnant, incarcerated people, as this review has highlighted, there are also specific reproductive health and equity issues that make their care needs distinct—the time sensitive need to provide MOUD, avoiding the pregnancy and foetal risks associated with withdrawal and overdose, trauma from the child welfare system, and the synergistic stigma and discrimination from being pregnant, with OUD, and incarcerated. These aspects should be factored into all the initiatives, research, and implementation strategies trying to increase access to MOUD in custody settings. Providers in the community who care for pregnant people with SUD, including OUD, should be cognizant that people in their care may have spent time in prison or jail, and understand what the realities and challenges are for them in these environments. Providers can also work to optimize continuity of care and partner with prisons and jails in their communities. Addressing the care of pregnant people with SUD who experience incarceration in a way that is informed by history, recognition of structural racism in both the criminal legal and child welfare systems, and that is patient-centred will contribute to more equitable and sustainable strategies that benefit these parents, their children, and our communities.

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