The Effect of the Opioid Crisis on Maternal and Child Health in Low-Income Communities

Nicole Dye [1,3], Kendra Viloria[2,3]

Affiliations

1. Stanford University, Stanford, CA, USA
2. Oregon State University, Corvallis, OR, USA
3. Health Disparities Think Tank, Cambridge, MA, USA

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ABSTRACT

Our policy report examines opioid use disorder on maternal and child mental health while focusing on low-income populations. We observed the consequences of opioid use disorder on maternal well-being and highlighted the rates of coexisting mental health disorders being experienced by both mothers and children. Likewise, we explored the different strategies and policies that address substance use in order to promote healthier outcomes for pregnant individuals in vulnerable communities. We recommend policies that focus on preventative measures and aim to support these communities to have better access to treatments, early interventions, education on substance use, and mental health support. By emphasizing the importance of these approaches, we aim to promote healthier outcomes for pregnant people in low-income communities.

INTRODUCTION

In a national drug survey conducted in 2010, 7.4% of pregnant women aged 18-25 used some form of illicit drug during their pregnancies and 77.6% of children born with drug withdrawal as a result of maternal drug use had their medical bills charged to medicaid, indicating their families are on a low enough income to be eligible for this governmental support [20]. This is not a small-scale issue, as drug use is increasing and disproportionately affects the poorest communities, augmenting the complications of pregnancy and contributing to generational consequences. Its prevention will not only improve the quality of life of those directly suffering from opioid use disorder but will also have a widespread impact. Incarceration rates will drop, the stress on foster placement will be reduced, and local safety will improve. Most importantly, it will save lives. Drug use is currently one of the leading causes of maternal deaths [33], and with neonatal abstinence syndrome causing health complications like seizures and respiratory distress [10] with increased risk of mortality [20] the impact of this disease is devastating. In this paper, we will look at the consequences of this disorder on maternal and child health and discuss how policy has exacerbated or helped control this national health crisis.

Low-income communities are some of the most at-risk groups to developing opioid use disorder. This is mostly because poverty often occurs with the 2 leading causes for drug misuse - mental health issues and chronic pain. With over 2 million people reporting having all 3 conditions —drug misuse, mental health conditions, and chronic pain. [32], it's important to consider how low-income status exacerbates each of them. With 14% of the US population living below the poverty line [12], fears over food and housing insecurity are far from uncommon. These daily stressors combined with the stigma typically associated with being seen as ‘poor’ and the poor treatment workers often experience in low paying jobs are never ending. The lack of disposable income and longer working hours mean there is no relief. It's no surprise that a large percent of this population struggles with their mental health, yet very few have access to resources. With expensive insurance and therapy often not covered, many search for cheaper, more accessible treatment for their struggles. Unfortunately, opioids like heroin are able to do just that. Similarly, a large percentage of the low-income population also work manual labor jobs, are less likely to seek treatment for injuries and have less opportunity to exercise (due to time constraints, local safety concerns, etc.), and are therefore more susceptible to chronic pain. If they decide to self-medicate, it is often with easily accessible drugs like opioids, and even if they do decide to seek medical help, they are far more likely than their middle-income counterparts to be prescribed opioids [1]. Regardless of the route taken, the result is the same. Those below the poverty line are far more likely to become addicted to opioids in the effort of treating an illness they couldn't afford to have in the first place.

Additionally, individuals experiencing mental health disorders, such as depression, are more likely to depend on substances dependency in order to lessen the intensity of emotional stressors. Mental health disorders coexist with chronic pain, creating a relationship where chronic pain heightens mental health conditions, and mental health conditions can heighten an individual's perception of pain [18]. Mothers specifically experience feelings of shame and guilt as a result of OUD, which can cause barriers to recovery [2] and exacerbate postpartum

depression. The connection between mental health and chronic pain emphasizes the importance of addressing both mental health and substance use disorder in order to break this cycle and improve health outcomes for both mothers and children.

On the other hand, using pregnancy as an opportune time to treat addiction allows a vicious cycle to end. Treating a pregnant person with OUD does not only allow this person a real chance to get clean and change the trajectory of their life. It also reduces the chance a baby is born prematurely, which currently costs the US $26 billion annually and results in adverse outcomes in adulthood [3]. It also reduces the chances of parent-child separation, and with the number of children in foster care already surpassing the limit the government is able to support, more and more foster children aren't given the support needed to make a better life for themselves, with many ending up in poverty or incarcerated within the first 2 years of leaving the system[21]. That's to say that parent-child separation isn't always the solution the vast majority of people tend to think it is. Regardless of whether the child is in foster care or living at home with their parents, addiction finds a way to interfere, and what started as 1 person using drugs spreads to generations of poverty, crime and addiction. It is estimated that governmental organizations spend $442 billion a year on healthcare costs, legal expenses and lost productivity that are a direct result of substance use disorder[19], but even if a fraction of that funding was allocated to addressing the root of it all, the impact would be much higher.

METHODS

This paper summarizes and reviews existing literature on opioid use in pregnancy, paying particular attention to low-income communities and how these 2 factors might relate. Our methods include a systematic literature review in which papers are assessed and synthesized to be included in our results. We primarily used PubMed and Google Scholar to search for relevant scientific journals and articles, with a focus on journals published in the last 20 years to ensure our findings were relevant and up to date. We searched using keywords such as “Opioid-use disorder,” “maternal health”, “low-income,” and “pregnancy,” searching these keywords in various combinations to ensure our review was thorough and comprehensive.

We extracted data based on key themes we felt most relevant to our paper, including maternal mortality, Neonatal Abstinence syndrome, treatment options, and future life outcomes. We also paid particular attention to mentions of policy or governmental organizations to help us address these topics from a policy standpoint. This allowed us to discover recurring themes and patterns and effectively summarise the existing research. We excluded studies that weren't written in English and papers not pertaining to the United States, as well as any from sources we weren't confident were reputable. This may have introduced bias into our search and is a potential limitation. This was reduced as much as possible by examining articles across a wide variety of sources and in a relatively wide time frame.

RESULTS

There are three common themes for pregnant people suffering from OUD: high rates of untreated mental health disorders, high social stresses and minimal support, and higher risk of death outside the postpartum window[16]. Studies from the 1980s and 1990s suggest that pregnant people with opioid dependence have a 56% to 73% prevalence of mental health diagnosis[10]. Likewise, in more recent data, there were double the odds of opioid use for pregnant people with depression or anxiety [10]. That said, 45% of Americans seeking treatment for substance use disorder simultaneously experience mental health disorders, specifically anxiety and depression[25]. Children of pregnant individuals simultaneously experiencing OUD and mood disorders are more likely to have poor neonatal attachments, poor self-regulation skills, and developmental delays[25]. The data presented emphasizes the intersections between opioid use and mental health in pregnant people, highlighting the need for comprehensive care and how a mother's mental health has a profound effect on the well-being and development of their infants.

Portugal's Drug Policy Model was implemented in 2001 and decriminalized use and possession of all legal substances as long as it doesn't exceed the maximum amount for individual use within a 10-day period [24]. The goal of decriminalization is not to legalize drug use, but to decriminalize lesser severe consumption[24]. Although drug use is a legal offense, imprisonment is not imposed for possession and drug usage[13]. Countries such as Portugal approach addiction as an illness as opposed to a crime in order to reduce the stigma associated with opioid use and encourage individuals suffering from addiction to seek help. As a result of its Drug Policy Model, Portugal was able to provide recovery support and treatment for individuals who use drugs and turn them to professional care.

This is especially important when considering the role that stigmatization plays in an individual's ability to receive treatment. Stigmatization is specifically amplified towards pregnant women since they are "assigned" a maternal role in society, and engaging in drug usage violates this social construct[33]. This construct creates misconceptions with healthcare providers and further prevents mothers from seeking treatment. More often than not, mothers will need to feel assured that their healthcare providers will support them in a manner that is informed and non-judgmental even after their child is delivered[7]. Their decision to seek treatment is heavily dependent on whether or not they believe disclosing their relationships with substances will result in loss of custody over their child[7]. The decriminalization of opioid use would allow the opportunity for individuals to receive the treatment they need without losing custody of their children. That being said, a less punitive approach should be encouraged when pregnant individuals disclose their relationship with substances in order to create better public health outcomes.

POLICY DISCUSSION

In the past 20 years, policy makers have continually favored punitive approaches to this issue which goes in direct opposition to the guidance provided to them by researchers and experts[9] Here we discuss some past and current legislation that seeks to address the issue of opioid use disorder in low income communities and we will be looking specifically and those policies with direct impact on pregnant populations.

"H.R.6 - An act to provide for opioid use disorder prevention, recovery, and treatment, and for other purposes" is one of few policies that were able to take a different approach. Though it is from 2017-2018, it provides a good basis for what a bill that seeks to support those suffering from OUD could look like. One key section of the act addresses medicaid provisions and expands coverage to treatment of addiction and even covers babies suffering from neonatal abstinence syndrome. This is key in making opioid withdrawal and treatment accessible to the low-income communities that tend to be most affected by OUD. The bill even goes as far to address maternal OUD, stating, "States may also receive federal payment under Medicaid for outside services that are provided to pregnant and postpartum women who are substance-use disorder patients at institutions for mental diseases (IMDs)." While this is a great start at addressing addiction in pregnancy and using it as the perfect opportunity to end this cycle, its specificity means it's only applicable to a small percentage of those truly affected by OUD in pregnancy. As we have established, there is a large overlap between OUD misuse in pregnancy and mental health, but more than that, there is an overlap between both of these and low-income communities. This means very few of the affected population are able to access these IMDs in the first place, with the average daily cost of inpatient hospitalization being roughly $300-$600[11], and they are therefore prevented from also accessing this addiction treatment covered by Medicaid. Furthermore, these institutes are only able to support the most extreme cases of mental illness in patients and thus leave the vast majority of the population that fall just below their criteria, helpless. But the fatal flaw in this caveat is that even if someone met the criteria and could afford to go to an IMD and receive this support, many will choose not to because in order to do so, they must do the hardest thing of all - separate from their child.

The Child Abuse Prevention Treatment Act or CAPTA has several limitations that prevent mothers suffering from OUD from acquiring treatment and assistance. CAPTA itself defines child abuse and neglect as "at a minimum, any recent act or failure to act on part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse or exploitation, or an act or failure to act which presents an imminent risk of serious harm." [24]. However, states that receive funding under CAPTA can define "child abuse and neglect" differently based on their interpretations of that slightly vague definition [29], meaning what exactly classifies as "child abuse and neglect" differ in different states. For example, in seven states, caregivers using controlled substances would count for child abuse and neglect [5]. The way communities and hospitals interpret the law is also vastly different from one another, leading individuals suffering from OUD to be often denied their rights during pregnancy and postpartum [5]. Twenty-five states interpret substance use during pregnancy as child abuse and require health care professionals to notify Child Protective Services of any suspected prenatal drug exposures, which can have negative consequences for mothers suffering from OUD. This leads to the promotion of the stigmatization of substance abuse against mothers struggling with opioid usage, especially with low-income women who feel judged by individuals in healthcare settings. By not giving these individuals resources or access to treatment, CAPTA lacks the preventative measures that could assist women in accessing treatment before their substance usage becomes a bigger problem. The ability to connect

pregnant individuals with treatment services could make all the difference in improving maternal health outcomes.

POLICY RECOMMENDATIONS

We recommend that opioid use disorder (OUD) be targeted at its core and that the expansion of government funding be focused on preventative measures and addiction-focused treatments. This would include engaging in primordial interventions that target societal-level risk factors before they negatively influence the health of a population, primary interventions that aim to prevent personal health risk factors before they occur, and secondary interventions that aim to reduce the impact of said health risk that has already occurred. This can be done with the expansions of school-based prevention programs, access to behavioral healthcare, increase in behavioral, health and social supports, addressing the underlying environmental and social conditions promoting opioid use [17]. Concentrating on these measures would cater to the needs of maternal individuals affected by OUD and the ability to alleviate the societal impacts of addiction through prevention and the promotion of recovery.

Research shows that early prevention and treatment of opioid use disorder in pregnant people is the most effective point of care to treat addiction. Many pregnant women manage to quit independently when pregnant, and those who don't often report severe mental health issues, which result in their reliance on these substances [33]. This willingness, combined with the increased hospital visits due to pregnancy, make it an optimal time to have addiction treatment. The longevity of pregnancy also increases the chances of the treatment being effective and reducing the risk of relapse.

Furthermore, an investment into long-term care of pregnant people suffering from substance abuse also ends up saving governmental organizations money. Preterm births are a large expense for the US government, costing about $26 billion annually [3] those who use opioids during pregnancy are 4 times more likely to have preterm babies, so if we are able to intervene and reduce the number of women using opioids during pregnancy, the government will save money on preterm births. Furthermore, without intervention, these children often end up in foster care due to the parents' positive drug tests. This is an expense in itself, with 36% of foster kids [27] having parents with SUD and foster care costing the US government $1.3 billion annually [7]. That means separating children from parents suffering from SUD costs the government $468 million alone. To make matters worse, parents with a history of foster placement are more likely to have preterm births. Finally, rates of incarceration for both drug users and those who have a history of foster placement are very high. 41% of those in federal prison are there due to drug-related crimes, and 25% of foster kids end up in prison[11].

Current policies revolving around opioid use focus on treatment rather than prevention. Being able to implement effective prevention strategies would be able to reduce the chances of individuals at risk for OUD developing OUD [30]. Although treatment programs would be able to assist individuals already experiencing OUD, the implementation of more

both primary and primordial strategies would both tackle the social determinants exacerbating negative OUD outcomes and reduce the number of individuals needing treatment overall. Investing in prevention strategies such as community outreach and education would also be beneficial for low-income maternal populations, promoting long-term health outcomes and healthcare costs.

Current bills that support efforts focusing on OUD prevention include the Support for Patients and Communities Reauthorization Act (H.R.4531). This bill supports the reauthorization of treatment programs and OUD prevention. Prevention initiatives would revolve around evidence-based prevention activities, which are defined as being able to improve prescription drug monitoring, promoting community health or system health interventions, and interventions that can prevent controlled substance overdoses (H.R. 4531, 2023). This bill would also focus on treatment programs for pregnant and postpartum individuals. This aspect of treatment would assist individuals receiving outpatient treatment provided by these programs through allowing minor children of these individuals to reside with them if requested. Supplemental services for these individuals consist of and are not limited to counseling of mental health services, domestic abuse, HIV, the obtainment of employment, prenatal and postpartum healthcare, and comprehensive social services (H.R. 4531, 2023).

From these numbers alone, it is clear that preventing opioid use in pregnancy and supporting families with SUD history will save the government money across several sectors. We believe that even a fraction of the money saved could be invested into early prevention programs and make a huge impact.

These proposed solutions are not without fault and could be a cause for concern from stakeholders, clinicians, and politicians alike who might agree with the punitive approach. Those who suffer from opioid use disorder face extreme levels of stigma, especially when they come from a low-income background. Even clinicians, who take an oath promising respect and personal commitment, hold this stigma, with 66% viewing patients who suffer from opioid use disorder as “dangerous”[33]. The age-old “war on drugs” will also prevent politicians from viewing people with OUD as anything other than criminals, and it is well known that criminals are rarely treated with compassion or given much support.

CONCLUSION

In order to improve maternal and child health outcomes in low-income communities, OUD needs to be addressed within these populations. Targeted interventions and effective support systems need to be put in place in order to decrease birth complications and negative long-term outcomes for infants. Effective policies should also prioritize prevention and evidence-based solutions, such as increasing access to mental health services and substance abuse treatments while also opening conversations surrounding addiction. It has also been proven that prioritizing prevention and early interventions can reduce the

United States' financial burdens while also reducing the number of infants experiencing adverse outcomes. Legislative efforts have displayed both flaws and successes but continue to demonstrate the need for policies that focus on exhibiting compassion. In order to truly reduce the impacts of OUD on maternal and child health, there needs to be a focused approach on prevention, harm reduction, and rehabilitation.

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