Health Inequities Among People Who Use Drugs in a Post-*Dobbs* America: The Case for a Syndemic Analysis

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Abstract: Punitive policy responses to substance use and to abortion care constitute direct attacks on personal liberty and bodily autonomy. In this article, we leverage the concept of "syndemics" to anticipate how the already synergistic stigmas against people who use drugs and people who seek abortion services will be further compounded the *Dobbs* decision.

Substance use and reproductive health are deeply intertwined public health and reproductive justice concerns. These challenges compound each other: punitive responses to substance use place safe, equitable perinatal healthcare out of reach for many, and pregnancy and parenthood often coincide with structural barriers to effective treatments for substance use disorder (SUD).[1]

In this article, we propose a theoretical framework for understanding the harms that emerge from the surveillance and punishment of pregnancy and parenting: syndemic theory. Syndemic theory is characterized by an interaction of biological factors that is caused and/or exacerbated by social and structural environments. It is this complex interplay of biological processes and social constructs that distinguishes syndemic theory from intersectionality.[2]

We argue that, in the current moment shaped by *Dobbs v. Jackson Women's Health Organization*, the syndemic framework may clarify a multiplicity of interactions between negative health outcomes associated with criminalized substance use[3] and negative health outcomes associated with heavily surveilled and stigmatized pregnancy,[4] with careful attention to the biological interactions resulting from sociopolitical environments that produce explicitly punitive responses towards both.[5] Such an approach could enable a better understanding of how already synergistic harms of criminalized substance use and heavily surveilled pregnancy are exacerbated by legal restric-

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tions on abortion. Further, a syndemic analysis could identify policy levers with the potential to mediate those harms on a population level.

The Synergistic Harms of Punishing Substance Use and Pregnancy

Even before *Dobbs*, the harms of criminal interventions, child welfare interventions, and institutional surveillance imposed upon people who use drugs (PWUD) and upon people who are pregnant and/or parenting were known to compound each other.[6] The National Advocates for Pregnant Women (now Pregnancy Justice) previously documented more than 1,300 cases between 2006 and 2020 in which a woman was subject to arrest, detention, and other losses of personal liberty for alleged crimes in which pregnancy was a necessary element or "but for" condition,[7] including prenatal exposure to diverted prescription medications or illicit substances.[8] Family separation, deeply traumatic for both parents and children[9] and disproportionately used against American Indian/Alaskan Native (AI/AN) and Black families, is yet another example of this relationship in action.[10] Such punitive policies actively deter people with SUD from seeking perinatal care[11] and are significantly associated with higher rates of neonatal opioid withdrawal syndrome (NOWS, formerly called neonatal abstinence syndrome or NAS) in substance-affected births.[12]

This synergism flows both ways: pregnancy is also a known barrier to evidence-based treatment for SUDs, hindering treatment access on multiple fronts.[13] One North Carolina study found nearly half of all clinics prescribing buprenorphine — an evidence-based medication for opioid use disorder that reduces the risk of death by half — refuses[14] pregnant patients at intake, and that treatment options for pregnant people shrank even further during COVID-19.[15] Fear of child welfare involvement actively deters pregnant and parenting people from seeking SUD treatment,[16] and lack of childcare services constitutes an additional barrier for those seeking treatment.[17]

Moreover, the public health impacts of substance use and reproductive choice are both shaped by the same powerful institutional and cultural systems that have been historically produced by — and continue to perpetuate today — racism,[18] sexism,[19] classism,[20] transphobia,[21] and other drivers of harm. For example, compared to their White counterparts, AI/AN persons are more than twice as likely — and Black persons more than three times as likely — to die in childbirth in the United States.[22] Black people also experience higher rates of unintended pregnancy than any other racialized or ethnic group in the U.S. and utilize abortion services at a rate five-times higher than Whites.[23] At the same time, Black people represent approximately 13% of the population but nearly 40% of those incarcerated for drug law violations.[24] Indeed, U.S. criminal drug laws were developed for the express purpose of oppressing Black communities.[25]

The Syndemic Framework

The syndemic concept was first articulated in 1994 and later refined in 1996 by medical anthropologist Merrill Singer to describe "a closely interrelated complex of health and social crises"[26] characterized by dynamics that include but also exceed those of synergistic relationships between biological pathogens. For example, tuberculosis (TB) and HIV are synergistic pathogens. HIV is a risk factor for TB, because HIV-infection increases the risk of reactivating latent TB infection and accelerates the progression of TB disease.[27] Likewise, TB accelerates the progression of HIV disease and increases viral load by activating HIV transcription,[28] putting both diseases in a dangerous feedback cycle with each exacerbating the other.

Synergy between pathogens is not sufficient to demonstrate a syndemic interaction. The presence of population-level social, political, and/or environmental conditions that produce the synergistic interaction that exacerbates each of the synergistic health concerns to produce worse health outcomes is also necessary.[29] This focus enables us to identify institutional and policy changes that both cause and could mitigate the harms inflated by synergistic interaction.

We argue that multifaceted systems of inequality that affect both PWUD and people who are pregnant are likely best understood through a syndemic framework that accounts for the social, structural, and policy environments that produce and exacerbate them. Below, we articulate how *Dobbs* likely produces negative effects that could be best assessed using a syndemic framework.

Dobbs Exacerbates Harms Faced by Substance-Involved Pregnancies

The *Dobbs* decision and the subsequent restriction of access to abortion care in several U.S. states have seriously exacerbated the negative health consequences of pregnancy generally, but especially for substance-involved pregnancies. Many states have created — or are poised to create — legal environments in which pregnant PWUD face civil or criminal punishment for any reproductive or parenting choice they could make. Seeking to terminate a pregnancy could result in civil or criminal liability where abortion restrictions

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or bans are enacted. Carrying a pregnancy to term also presents risk of civil or criminal punishment for substance use while pregnant — punishment that could be meted out during pregnancy as well as after delivery and well into parenthood. All conceivable choices could invoke statutorily mandated punishment.

Second, abortion bans will hinder access to substance use treatment even further. The threats of loss of liberty, child removal, and other punishments for substance use during pregnancy actively deter pregnant people living with SUD from seeking evidence-based treatment.[30] Under punitive abortion policies, PWUD who have had their pregnancy documented by healthcare providers face potentially greater risk by terminating pregnancy than if they were to carry that pregnancy to term and face accusations of child neglect based on their history of substance use alone. In other words, pregnant people may feel coerced (by threat of punishment for abortion) into maintaining a pregnancy that effectively bars them from accessing substance use treatment. Importantly, homicide — often by an intimate partner — was the leading cause of death during pregnancy in the U.S. even prior to the *Dobbs* decision.[31] Abortion plays an important role in reducing intimate partner violence,[32] and the loss of abortion access may cause rates of intimate partner violence (already both associated with increased substance use and a known barrier to care[33]) during pregnancy to surge.[34]

Third, many PWUD must cross state lines in order to access evidence-based care for an SUD.[35] Imagine a visibly pregnant person needing to drive regularly across the border into a neighboring state to obtain methadone or buprenorphine — both gold-standard treatments for opioid use disorder in pregnancy,[36] and reside in a state where abortions are, in some cases, illegal. Many instances have been documented in which a pregnant person has been deprived of personal liberties and even criminally charged for taking action to end their own pregnancies.[37] Thus, a pregnant person crossing state lines might be accused of seeking abortion services, with their traveling habits constituting probable cause for the arrest. They could be taken into custody at a local jail, interrupting their substance use treatment and dramatically increasing the risk of overdose upon release.[38] Moreover, the American Society of Addiction Medicine's 2020 Practice Guidelines recommend universal pregnancy screening for all who are able to become pregnant at the time of diagnosis for opioid use disorder.[39] Such universal screening may create an evidentiary trail. In 2017, a Mississippi woman was indicted for second degree murder after seeking medical treatment for complications following the loss of a pregnancy,[40] and her medical records (including statements she made to nurses while receiving medical care) were shared with prosecutors without her permission and used to make a case against her.[41]

Fourth, due to a combination of the biophysical effects of some substances and other social determinants, PWUD are, on average, more likely to find out that they are pregnant later in a pregnancy — sometimes as late as the second trimester, or from 13-26 weeks.[42] Second-trimester abortion is more invasive with rare but serious medical complications.[43] Additionally, abortion care after the first trimester is far less available and requires greater travel, greater expense, and often multi-day appointments.[44] Today, PWUD may learn they are pregnant at a stage of pregnancy when safe, high-quality abortion care will require even greater efforts to obtain, or when an abortion is expressly criminalized.[45] This exposes pregnant PWUD to serious legal risks, health risks, and logistical challenges to overcoming both, relative to the general population.[46] Travelling for second trimester abortion care may also cause them more difficulty in accessing effective substance use treatment and reduce their access to a safe and predictable drug supply.[47] We posit this increases the risk for overdose.

> The major insight of syndemic theory is not simply that the world and the risks we face within it are complex. Rather, it invites our consideration of an undeniable truth: that although nothing (including substance use and abortion services) can ever be entirely risk free, we as a society continually conspire — through policy, practice, structure, and values — to make the world a more hazardous place for those among us who already have the most to bear.

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A Syndemic Hypothesis and Pathways for Future Research

We strongly advocate for a syndemic analysis of the harms of criminalized substance use, surveilled pregnancy, and criminalized abortion in a post-*Dobbs* landscape. In other words, we posit that social-biological-biological interactions between these elements are present and discoverable. For example, a syndemic analysis might consider that a pregnant PWUD: (1) is more likely to discover their pregnancy later, more often in the second trimester, due to biophysical effects of substance use (biological-biological interaction);[48] (2) may have more trouble accessing or be forced to travel farther to access abortion care due to abortion restrictions in their home state (social-biological interaction); (3) may be more susceptible to overdose due to many factors, including barriers to effective substance use treatment due to pregnancy and exposure to unsafe or unfamiliar drug supplies caused by travel for abortion care (social-biological interaction); and (4) may be at risk of more severe general and obstetric health outcomes should they experience an opioid overdose while pregnant (biological-biological interaction).[49] These interactions fully meet the criteria for syndemic pathways of interaction and are worthy of systematic research to assess their validity as such.

Similarly, if, as we anticipate, some pregnant PWUD hesitate to cross state lines to access their closest source of SUD treatment for fear of law enforcement scrutiny, another potential syndemic interaction emerges. In brief, a pregnant PWUD: (1) may be deterred from seeking evidence-based medication treatment for SUD across state lines by criminal abortion restrictions in some states (social-biological interaction); (2) may be most deterred from seeking perinatal care, risking worse pregnancy outcomes, by regimes that punish SUD during pregnancy or abortion (social-biological interaction); and (3) may experience even higher overdose risks from these above concerns[50] as stricter abortion bans mediate this biological-biological (pregnancy-substance use) interaction.[51] These interactions, if observed in the real world, would also meet the criteria for syndemic pathways of interaction.

Both of these hypothetical systems of interaction are important avenues of inquiry for understanding how biological-biological interactions produced by a structural environment heighten risks for negative health sequelae in pregnant and parenting PWUD.

Conclusion

Punitive responses that place criminal or civil liability on persons who have made a choice to use drugs and/or seek an abortion constitute direct attacks on personal liberty and bodily autonomy. We propose a syndemic framework for investigating the complex network of social and biological interactions that constitute the unique risk environments experienced by pregnant PWUD. This framework not only offers the benefit of wrestling theoretical order from a veritable Gordian knot of causal and mediating relationships, but it also highlights potential targets of structural or institutional intervention to make meaningful impacts on the attributable risks of these scenarios. The major insight of syndemic theory is not simply that the world and the risks we face within it are complex. Rather, it invites our consideration of an undeniable truth: that although nothing (including substance use and abortion services) can ever be entirely risk free, we as a society continually conspire — through policy, practice, structure, and values — to make the world a more hazardous place for those among us who already have the most to bear.

Note

The authors have no conflicts of interest to disclose.

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