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Racial Disparities in Cancer Care | Access to Care for Transgender Veterans | Hepatitis C Among US Veterans | Battling Tobacco Use at Home | [illegible] | How Might the Provision of Culturally Competent Services Be Enhanced for American Indian and Alaska Native Veterans? | Improving Trends in Gender Disparities | Suicidality Among Hispanic and African American Veterans Following Surgery

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COVER: Peer support worker Thomus Donaghy adjusts his protective mask outside the Molson Overdose Prevention Site. The local health unit began prescribing a "safe supply" of narcotic alternatives to combat overdoses caused by poisonous additives, and to support addicts and the homeless into practicing social distancing to help slow the spread of COVID-19 in the Downtown Eastside of Vancouver, British Columbia, Canada, April 7, 2020. Photo concept and selection by Aleisha Kropf. Photo by REUTERS/Jesse Winter, printed with permission.

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The Global Opioid Overdose Crisis

This *AJPH* supplement provides a global perspective on an ongoing public health problem, the opioid crisis. In doing so, the articles in this supplement seek to meet two objectives. First, recognizing the unreal expectations and repressive measures stemming from an abstinence-only approach, these articles call for greater investment in community-based programs developed by and for people who use substances. Second, several articles provide information on the social and political contexts that motivate and enable implementation of substance use treatment and harm reduction programs in various countries, which can provide the *AJPH* readership with valuable information on best practices from all over the world.

In addition to these two overarching aims of this supplement, we call attention to a few key points in this body of work. First, there is the double-edged sword of attaching a medical label to certain behaviors and thereby broadly identifying them as "mental disorders." On the one hand, a biomedical label designation legitimizes the addictive forms of these behaviors as health problems rather than as personal or moral failings. On the other hand, such designations can lead to a negation of the sense of agency among people who use drugs (PWUDs) and consequently to further restrictions on their ability to lead their lives as they see fit.

Second, PWUDs affected by substance use disorder face stigmatization and discrimination that is usually compounded by bigotry based on gender, race, or class and varies from place to place. This further complicates creating public health policies to address the needs of PWUDs, creating barriers to accessing appropriate social and medical services, programs, and facilities.

Third, much of the research presented in the articles is based on qualitative methodologies that rely on social theory for their design and analysis. Under the social theory umbrella lies a wide gamut of theoretical and empirical approaches, unlike quantitative methods predominantly used in most public health research. This distinction presents a different set of demands for authors and this journal. Qualitative methods are by their own nature far less standardized than their quantitative counterparts, thus requiring more detailed description of the procedures and additional efforts in contextualizing findings and results. Furthermore, the need to make theoretical choices explicit to readers further compounds the problem of fitting relevant information into a word limit intended for presenting quantitative findings.

Finally, an adequate response to the challenges of the global opioid overdose crisis can clearly benefit from the past experiences of self-organized groups that faced similar public health issues, such as activists during the early period of the HIV/AIDS epidemic. Those activists developed forms of advocacy that spearheaded governmental programs. They also led the charge for creating community-based responses that helped affected persons when no other resources were available. These responses included the buddy system, access to protected houses, and safe sex approaches, which were necessary in the early period before the availability of antiretroviral therapies and preexposure prophylaxis. The approaches finally contributed to the advancement of the research enterprise in many ways, including providing funding and helping to design and implement trials and surveys. Whatever response can be created to meet the challenges presented by the global opioid crisis, the involvement of PWUDs certainly must be prioritized. AJPH

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3 Years Ago

The Gobal Crisis in Access to Pain Relief

The poor, worldwide, have little or no access to palliative care or pain relief. Approximately 298 metric tons of morphine-equivalent opioids are distributed in the world each year. However, only 0.1 metric tons . . . are distributed to low-income countries. More than 61 million people worldwide experience serious health-related suffering annually throughout the life course that could be alleviated if they had access to palliative care. More than 80% of these individuals reside in low- and middle-income countries where palliative care is limited or nonexistent. . . . A balanced approach is necessary in designing and implementing health systems strategies to promote an understanding of medical need for and appropriate use of opioids as well as risks of nonmedical use. Two crises are under way – an opioid crisis in a few countries, including the United States, Canada, and Australia, and a global pain crisis with millions of people who have untreated pain. . . . In Western Europe . . . rational and balanced regulations on prescribing opioids have averted either crisis within this context.

From AJPH, *January 2019, pp. 58–59, passim*

3 Years Ago

Access to Pain Management as a Human Right

In light of the current opioid crisis in the United States, it is important to point out that the right to pain management does not imply an automatic right to opioid medications. A criticism leveled at the concept of human rights and pain management is that the right appears to give free rein for patients to say, "You must give me opioids—that is my right." In fact, the right to health requires "quality" of services in terms of skills and expertise in addition to availability, accessibility, and acceptability. Those skills and expertise require a conscientious assessment of pain and development of a treatment plan, guided by the best evidence available, but that plan does not include providing opioids on demand. . . . In CNCP [chronic non cancer pain] . . . opioids may play a more circumscribed role. The right to access pain treatment means that physicians should be able to make the clinical determination of the best treatment options—without inappropriate government interference—and patients should have access to them, including opioids.

From AJPH, *January 2019, p. 63*

Reducing Drug-Related Harms and Promoting Health Justice Worldwide During and After COVID-19: An *AJPH* Supplement

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More than two decades into the US overdose crisis, the overlay of the COVID-19 pandemic has created "syndemic" clusters concentrated among communities marginalized by drug criminalization, structural racism, immigration status, income inequality, and unstable housing,[1] among other structural factors. In the United States, emergency medical technicians have reported overdose death increases of 40% since the outset of the COVID-19 pandemic,[2] and in 2020, for the first time, Black and Native American overdose death rates exceeded White American overdose death rates.[3,4] Although the predominant public health approach in US health research frames both overdose and COVID-19 in terms of individual-level risk factors, these patterns are better explained by social–structural forces that produce racial/ethnic and socioeconomic inequalities in, among other things, the quality of employment and housing, the risk of imprisonment, health care, and social services.[5,6]

These phenomena highlight the need for a shift away from the individualization of risk to a focus on the pathologies of social and political systems[7,8] that ultimately drive both overdose and COVID-19. To address this significant gap in the literature, this supplemental issue of *AJPH* highlights innovative social science and ethnographic research that (1) analyzes structural influences on overdose and addiction treatment interventions, including challenges and opportunities leading to and emerging from the COVID-19 pandemic; (2) applies intersectional (i.e., gender, race, and social class) approaches, including participatory research co-led by people who have lived experience of substance use, to assess inequalities produced by drug policies and other structural drivers; and (3) considers their implications for policy and intervention. To this end, this special supplement highlights research from outside the United States focusing on the intersections of drug-related harm and inequities and innovative harm reduction responses that have been implemented to illuminate structural drivers and novel approaches that help us reimagine responses to the current crisis.

DRIVERS OF DRUG-RELATED HARMS

Social and structural factors explain the majority of variance in substance use–related outcomes,[9] yet the majority of US policy and funding investments to address the overdose crisis continues to center drug law enforcement, abstinence-based recovery, and biomedicalized-based approaches that focus only on opioid use disorder medications and addiction medicine dissemination. For example, analyses of US federal drug policy of the past decade have shown a dearth of funding for health and social service systems, an emphasis on drug law enforcement, and the development and delivery of medications[10]; there has been little focus on harm reduction and structural interventions that respond to the underlying conditions that drive harm among populations marginalized on the basis of race/ethnicity, social class, ability, gender, and sexual orientation.[11] This omission may be owing, in part, to an effort among clinician advocates to redefine substance use disorder as a chronic brain disease in an attempt to destigmatize it. In the process, however, they omit the social– and political–structural contexts of drug use, including severe marginalization and drug law enforcement, particularly in Black, Latinx, and Indigenous communities. This omission may also be attributable to the individualist, clinical treatment focus

of US health policies, which often fail to consider social and political drivers of substance-related harms.

Never has there been a more urgent time to reverse this trend. Overdose deaths have accelerated during the COVID-19 pandemic, and the rise of fentanyl, fentanyl-related analogues, and other adulterants in the street-based drug supply has created a systemic crisis. Overdose is an indicator of deepening inequalities in the United States, including racially stratified policing and drug policy; mass incarceration; and segregation in health care systems, housing, and employment; as well as the illegal status of harm reduction measures in many US states and the lack of sufficient public funding for addiction and harm reduction programs.[12] At the same time, the new US federal administration is facing rising pressure from harm reduction activists, politicians, and scientists to address social inequalities as a national priority. This presents a window of opportunity for social science and population health research to highlight the failures of drug policies based on prohibition and to inform public policy with a broader international perspective that includes the voices of people who use drugs.

The situation outside the United States has unfolded differently, and insights from global research are critical to informing the US response to these overlapping public health crises. In many countries, COVID-19 has not been accompanied by a rise in overdose deaths, especially where the street-based drug supply has not yet been transformed by fentanyl, fentanyl-related analogues, and other adulterants. Countries that had robust social safety nets, universal health care, commitments to housing first approaches, evidence-based harm reduction practices, and decriminalization policies before COVID-19 have been better able to protect people who use drugs during the pandemic.

Some countries in Europe faced difficulties in addressing the needs of people who use drugs during the first wave of COVID-19, but they also used the pandemic crisis as an opportunity to improve the conditions of people who use substances as a part of their COVID-19 containment measures by developing drug consumption rooms or access to housing.[13] In addition, lower-income countries of the Global South that have adopted public health–oriented drug policies, including Vietnam[14] and Iran,[15] have been able to limit the impact of COVID-19 containment on drug-related deaths.

Meanwhile, Canada, whose overdose crisis has worsened and similarly been driven by the intersection of inequality and the transformation of the street-based drug supply, has begun to implement novel harm reduction interventions, including providing greater access to safer alternatives to illicit drugs, with significant potential to address drivers of the crisis. Comparative analysis that accounts for the social, political, and economic contexts of each country, as well as opportunities to examine novel interventions, can instrumentally inform the reform of US health and drug policies.

This special supplement engages with social science and population health research inside and outside the United States as well as commentary from organizations engaged in drug policy reform and led by people who use drugs to (1) highlight innovative, evidence-based, and grassroots approaches (e.g., peer-led harm reduction) that have been marginalized in the United States because of previous policy barriers; (2) spotlight social–scientific, ethnographic, and community-based research that is not usually featured in mainstream clinical and health policy journals; (3) foreground the present as a historical moment when US drug and health policies are reexamined; and (4) apply an intersectional lens in considering structural inequalities and effective upstream interventions.

SUPPLEMENT THEMES

This supplement is divided into four themes. Articles addressing the first theme, operationalizing harm reduction in response to drug-related harms in different global contexts, illustrate that the definition of harm reduction varies from country to country, reflecting political and social movements to legitimize the right to survival of people who use drugs. Davidson et al. (p. S166), Houborg and Jauffret-Roustide (p. S159), and Jauffret-Roustide et al. (p. S99) analyze the process of establishing supervised consumption sites in the United States, two European countries (i.e., Denmark and France), and the United Kingdom, highlighting how the legal status and social and political entities organize risk environments of people who use drugs as well as how welfare states, activism, and the process collectivizing risks influence supervised consumption site strategies and user outcomes.

Nguyen et al. (p. S182) discuss the limitations of the methadone maintenance political strategy in Vietnam; this strategy is embedded in repressive drug policies that impede the development of a strong harm reduction approach. McNeil et al. (p. S151) explore experiences with a novel harm reduction intervention in a Canadian province. The intervention facilitates access to pharmaceutical alternatives

to the street-based drug supply, and the authors underline the urgent need to consider tectonic shifts in drug policy approaches. Boyd et al. (p. S191) explore how systems of surveillance and control of mothers who use drugs can undermine harm reduction and produce overdose risk. Lie et al. (p. S104), through a historical comparison of drug policy across Norway, the United Kingdom, and France, critically reflect on the globalization of a US National Institutes of Health–sponsored concept of addiction as a "chronic relapsing brain disease." The authors note that a biological concept of addiction is at odds with both harm reduction activism and social and economic support for marginalized people who use drugs.

In the second theme, decriminalization in global perspective—formal and informal, Carroll et al. (p. S123) and Friedman et al. (p. S199) provide lessons learned from COVID-19–related changes in drug law enforcement in Russia and at the Mexico–US border that signify the promise of decriminalization as a long-term public health measure. They also discuss the shifting, time-limited nature of COVID-19–related changes in drug law enforcement and the urgency of solidifying public health gains through durable changes in policy and practice.

The third theme of this supplement, convergence of harm reduction, recovery, and treatment, examines the potential to integrate multiple strategies to improve health outcomes—from harm reduction and peer support to opioid maintenance treatment and comprehensive social services. Suen et al. (p. S112) and Hansen et al. (p. S109) focus on the lessons learned from COVID-19 containment, substance use, and treatment in the United States for future integration of clinical care with social interventions. Farhoudian and Radfar (p. S133) and Nguemeni Tiako et al. (p. S128) expand the lens to Iran and France, countries that have had significant successes in protecting the health of people who use drugs during COVID-19 through national support for integrated services. Blanco et al. (p. 147) demonstrate how overdose deaths are multidetermined, which directs us to develop research programs that address structural and environmental factors, including social inequities.

The fourth and last theme of the supplement, racial justice and grassroots leadership in drug policy and harm reduction, foregrounds the need to support leaders who are themselves from marginalized groups or have lived experience with substance use to promote racial justice in drug policy and services. Hughes et al. (p. S136) present the thoughts of US–Mexico border–based leaders of color in harm reduction and community substance use disorder treatment as they reflect on their specific strategies for community engagement and maximizing the impact of their work on policy and practice. Lopez et al. (p. S173) provide a case study of racial inequalities in harm reduction services in Maryland to outline the policy and institutional changes that are required to redress those inequalities. Simon et al. (p. S117) describe the research and policy advocacy work of the Urban Survivors Union, the largest US national union of people who use drugs, as embodied in their "methadone manifesto." They urge changes in methadone regulation and dissemination to address systemic barriers to access, quality, and comprehensiveness of methadone treatment especially for low-income people marginalized by race, gender, parenting status, and disability. Finally, Tay Wee Teck and Baldacchino (p. 140) point to the need for enhancing the participation of grassroots social movements of people who use drugs in designing and conducting drug research.

CONCLUSIONS

This supplement presents studies from inside and outside the United States that have implications for US health policy, social policy, and drug policy during and beyond the COVID-19 pandemic. It responds to the window of opportunity for health and drug policy reform under the new US federal administration, providing social–scientific ethnographic-based findings accounting for previously overlooked social–structural drivers of overdose as well as for integration of harm reduction strategies with treatment and community-based recovery. It foregrounds the need for community leadership in social and health system redesign to address structural, upstream drivers of the unprecedented substance-related death rates and accompanying social inequalities that have been made so visible in the past year, with the goal of influencing the logic of drug policy. AJPH

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to report.

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Different Paths and Potentials to Harm Reduction in Different Welfare States: Drug Consumption Rooms in the United Kingdom, Denmark, and France

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We discuss the role of drug consumption rooms (DCRs) as a harm reduction strategy to prevent drug overdose and show that "welfare states" collectivize the management of risk and in so doing cushion the socially vulnerable from harm (Houborg and Jauffret-Roustide, "Drug Consumption Rooms: Welfare State and Diversity in Social Acceptance in Denmark and in France," p. S159). We argue that providing harm reduction services can also be viewed as a process of negotiating relationships between the state and those receiving welfare. By "state," we mean the institutions that are established by law and controlled by the government. We note that health and harm, as well as intervention and policy, are always situated effects of their risk and enabling environments.[1–3] A harm reduction response to overdose crises, as with other public health emergencies, necessitates a systematic, adaptive, and structural response.[4]

DCRs are one form of structural intervention among many that have proven effective in reducing overdose, thereby protecting the welfare of vulnerable people who use drugs.[5–7] DCRs seek to adapt the drug use and social environment to make these safer in the face of multiple risks and constraints.[8] Yet, the introduction of DCRs has become a matter of controversy, including in policy environments that historically enable harm reduction approaches, such as the United Kingdom.[9] This tells us that harm reduction interventions like DCRs can be blocked in policy environments that potentially support harm reduction as well as in environments of comparatively repressive drug policies.[10] Moreover, some progressive harm reduction tools can be implemented in the absence of extensive welfare state policies that seek to collectivize or cushion risk, as is done in Denmark and France. Indeed, crises such as the AIDS epidemic and the COVID-19 pandemic have driven change that would not be considered in normal times.

Harm reduction has emerged as a "generous constraint" of shifting policy environments that can vary in time and space as well as in relation to how policies recalibrate concerns about health, crime, and welfare. Emilie Gomart coined the term "generous constraint" in her work on harm reduction in France that she conducted at the end of the 1990s.[11] The term suggests that harm reduction interventions and environments[1,2] can enable and constrain action. Harm reduction practices regulate social behavior and empower people to choose their own consumption practices.

We caution against overly linear assumptions in the idea of welfare states enabling more progressive harm reduction interventions. We emphasize that the activism and organization of activist groups, especially people who use drugs, are critical in creating the conditions in which harm reduction interventions become possible, including in the face of restrictive policy.[12,13] In many communities, prosecution, job loss because of stigma, and punitive treatments aiming at total abstinence have cultivated a deep

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distrust of the law, officials, and state representatives. Harm reduction can be seen as a matter of adaptive potential in relation to its policy and social environment—an environment in which the welfare state actor is but one element among many that are open to adaptation. We illustrate this point by examining how harm reduction emerged in the welfare states of the United Kingdom, Denmark, and France.

UNITED KINGDOM

In the United Kingdom, harm reduction services were first developed through local action in the Merseyside area of northwest England.[14,15] The Mersey model spread, first nationally and then to receptive parts of the world. The harm reduction approach entered British national policy after the Thatcher government—which was no friend of the welfare state—accepted the 1988 recommendation of the Advisory Council on the Misuse of Drugs, which asserted that preventing HIV transmission was more important than insisting that people stop using heroin.[16] Rates of HIV and hepatitis C among people who inject drugs are still much lower in the United Kingdom than in the United States.

Since the 1990s, support for harm reduction in UK policy and funding has waxed and waned. In the 2000s, concern for limiting HIV was largely replaced by expanding opioid agonist treatment (OAT) to reduce the criminal offending of people who use heroin and crack. When the Conservative Party reentered power in 2010, it brought a new focus on abstinent recovery.[17] Harm reduction interventions, such as OAT, have become refashioned as addiction recovery interventions in a post-AIDS crisis era and relabeled "recovery-oriented treatment."[18] Maintaining harm reduction services requires health workers to work with the generous constraints of recovery-oriented interventions.[19] In this context, harm reduction is delivered as an interim strategy to those in "active addiction" to keep them alive until they achieve the primary goal of abstinence. Cuts to treatment budgets, recommissioning of treatment services, and a push for people to leave treatment drug-free were followed by annual increases in drug-related deaths starting in 2013 and a decrease in the number of people in treatment.[20]

The most recent UK government drug strategy (published in December 2021) makes little direct mention of harm reduction but does include it in the wide range of services in which GBP780 million of new funding is to be invested from 2022 to 2025 in England.[21]

The UK government is also reviving punitive rhetoric alongside its new investment in treatment services, blaming drug users rather than blanket prohibition for the harms of organized crime and ruling out DCRs on spurious legal grounds.[22] It was left to an activist with a lived experience of problematic drug use to set up the first overdose prevention service in the United Kingdom, which they did in a secondhand vehicle on the streets of Glasgow in 2020–2021. An overdose prevention service is a less formal version of a DCR that offers a narrower range of services.[23] Efforts to set up an officially sanctioned and funded DCR have so far been thwarted by government resistance, although there are signs of progress, in Scotland at least.[24] Much of the opposition to DCRs in the United Kingdom and elsewhere focuses on whether they can appropriately control the actions of their users. Once again, enabling and sustaining harm reduction in practice becomes a matter of working in the generous constraints of policy.[25] The UK approach shows how political support for drug policy approaches can change rapidly in a way that is against evidence and professional advice. Meanwhile, Scotland's desire to adopt DCRs is backed by Scottish nationalist politicians but blocked by the Westminster Conservative government.

Peer-to-peer needle and syringe programs played a significant role in the 1980s and 1990s in ensuring access to sterile injecting equipment, especially outside big cities. Internal strife compounded by national policymakers' active undermining of the funding and legitimacy of the drug user rights movement reduced the influence of self-organizations of peers in policy and practice.[26] The absence of an active drug user rights network in the United Kingdom has undermined the defense of harm reduction and the promotion of community mobilization.[27] There are now some signs, especially in Scotland, of a revived role for drug user activism.

DENMARK

Harm reduction emerged in Denmark from different roots in 1984 when "graduated goals" was introduced as the basis for Danish drug treatment. Graduated goals meant that treatment "should not only aim to 'heal' addiction, but to provide rehabilitating measures while drug abuse continues"[28(p132)] and should include basic improvement of physical health and improvement of the situation of those who use drugs, including through abstinence. The introduction of graduated goals was based on a conception of problematic drug use as a symptom of social inequality and social deprivation. Anticipating a focus on social exclusion in Danish social welfare policy that was introduced in

the late 1980s, the central idea of introducing graduated goals was to include people who could not or would not abstain from drug use in social welfare and health care systems. Harm reduction thus arose from Danish drug policy as a social welfare measure against social exclusion rather than primarily as a public health intervention. Public health became an important element of Danish harm reduction policy some years later, coinciding with the onset of the HIV/AIDS crisis.

Danish drug policy as it was developed during the 1960s and 1970s was based on the ideas that criminal sanctions should reduce the supply of drugs and that social welfare measures should reduce the demand for drugs.[29] This meant that possession of illicit drugs for personal use was depenalized from 1969 to 2004. In 2004, this policy was repealed when a zero tolerance measure was passed stipulating that all possession be sanctioned.[30] Parallel to this repressive policy, other measures aiming to improve social rights (e.g., a treatment guarantee) and new harm reduction measures have been implemented. In 2008, it became possible to use heroin as an OAT. In 2012 municipalities were permitted to open DCRs, and there has been a general trend toward establishing low-threshold social support and health services. The Danish Drug Users Union and lately also the Users Academy have actively voiced their concerns in policy deliberations.[31] Denmark is currently in the paradoxical situation of advancing progressive harm reduction interventions in the generous constraints of repressive policies on drug use.

FRANCE

Interventions enabling access to sterile syringes and OAT were implemented in 1987 and 1995, respectively, in response to the HIV/AIDS emergency but without a robust legal basis for disseminating strong harm reduction policies.[32] Not until 2004 to 2006 and 2016 did France's Ministry of Health institute a series of laws that included harm reduction in the public health code, thereby recognizing the role of the state as an instrument of harm reduction. DCRs were introduced in 2016, 30 years after Switzerland, and have been highly contested, despite strong consensus among health professionals, including through political debate and through local community resistance in gentrified areas where DCRs were planned.[10]

The difficulties in implementing harm reduction in France can be traced to the persistence of the 1970 law that punishes any drug use, thus framing repression as a dominant response. This prohibitionist law treats drug use as a moral vice.[33] In France, initial debates on harm reduction implementation (such as enabling access to syringes and OAT) through the 1980s and 1990s were tense: opponents (mainly psychoanalysts) saw harm reduction, including OAT, as a form of promoting drug use and social negligence that left patients as slave to their addictions, whereas harm reduction activists claimed that HIV/AIDS was a sanitary and humanitarian emergency that required urgent population-level risk reduction.[34] Through the 1990s, experimentation in generous constraint between dependence and freedom materialized in the OAT clinics, where the rules and practices of treatment (e.g., dose and delivery regimens) were adapted and tweaked to enable simultaneous treatment engagement and rehabilitation.[11]

Harm reduction was thus made possible by alliances between the activist networks of people who use drugs (especially ASUD [Auto-Support des usagers de drogues/Self-Support for Drug Users]), people living with HIV/AIDS (especially ACT-UP [the AIDS Coalition to Unleash Power] and AIDES [a French community-based nonprofit organization]), and humanitarian activists (especially Médecins du Monde) alongside addiction professionals. Together, they created a social movement called "Limiting the Break," which—by highlighting harm reduction's success in other countries, such as the United Kingdom in the 1990s—pushed the Ministry of Health to implement and strengthen harm reduction.[34]

In France, harm reduction has been enabled in a national policy framing of "addiction as a chronic disease," which is symbolized by abundant access to OAT. Indeed, high coverage of this medication (85% of people who inject drugs attend harm reduction facilities under OAT)[32] has been made possible by a strong welfare state model. This model allows free access to health care and sustainable financial support to harm reduction facilities and drug addiction centers that are mainly publicly funded. Nevertheless, national drug policy maintains a strong emphasis on the criminalization and biomedicalization of drug use that still neglects other areas of harm reduction (e.g., social and racial justice and inclusion).[10] The French sanitary model of harm reduction is sustainable because of public funding, but it does not enable a general environment of social freedom, inclusion, and personal choice of empowered recovery.

CONCLUSIONS

We have traced the development of harm reduction in three welfare states. Each country exemplifies one of Esping-Andersen's three "worlds of welfare

capitalism": the liberal one for the United Kingdom, the social democratic one for Denmark, and the conservative one for France.[35] In each country, harm reduction is made possible, not only because of policies—policies that are oriented to welfare, social control, or public health—but also despite policies—policies that narrow welfare opportunity, exacerbate or extend inequality, or emphasize criminalization in relation to drug use. In each country, harm reduction has emerged as a generous constraint of that country's shifting policy and social situation and has been calibrated comparatively and historically in each country's way in relation to health, crime, and welfare.

These examples suggest caution against overly simplistic assumptions related to harm reduction's emergence as an effect of state collectivization of risk or shared welfare responsibility in relation to a country's citizens. A key element in the emergence of harm reduction, and in the adaptation of conditions that enable such generous constraint, is activism, including by people who use drugs. Discourses of harm reduction have moved away from just providing people the means to make healthy choices about drugs to emphasizing social justice and antiracism.[36] It is essential to listen to the voices of people who use drugs when defining drug policies.[12,13,26,27]

It is also important to recognize different roads to harm reduction. There are some key differences between harm reduction as a civil society service and as a state service. If harm reduction exists as a civil society service based on local collective action, there is a risk of disparities in access to harm reduction. If harm reduction services become a state responsibility, it may become possible to make rights-based claims on the state. In reality, the situation may sometimes be more complicated, as in the state of DCRs in Denmark and France (Houborg and Jauffret-Roustide). In both countries, it is official policy to include DCRs in the national harm reduction policy, but it is left to local governments to decide whether to implement DCRs.[10,30] There remains a difference in principle between access to harm reduction services as a social citizen and access to harm reduction as part of a local community or—as in the case of the United Kingdom so far—being denied access to DCRs except in the legal gray zone of an unsanctioned overdose prevention service.

Drug policy plays an important role in shaping the risks that marginalized people face and their access to resources that enable them to manage these risks. Because of similarities and differences between the United Kingdom, Denmark, and France in areas of social welfare and health care policy, and differences in their drug policy, these three countries provide interesting sociological case studies for examining drug policy effects and the role of different welfare states in harm reduction implementation and sustainability. AJPH

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The authors have no conflicts of interest to declare.

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The Harms of Constructing Addiction as a Chronic, Relapsing Brain Disease

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As an international network of historians and social scientists who study approaches to the management of drugs across time and place, we have noticed the effort to redefine addiction as a chronic, relapsing brain disease (CRBD). The CRBD model is promoted as a route to destigmatize addiction and to empower individuals to access treatment that works within that model's terms.[1] CRBD usefully recognizes that brain-based neural adaptations place individual brains in chronic states of readiness to relapse. But brains are housed inside of people. Substance use is biological, social, and political; our concepts and approaches to complex questions surrounding substance use must be, too.[2,3] By overlooking the sociopolitical dynamics and inequalities bound up with substance use, the CRBD model can paradoxically further marginalize people who use drugs by positing them as neurobiologically incapable of agency or choice. We are concerned that the CRBD model paints drug users as individuals whose exclusion from social, economic, and political participation is justified by their biological flaws and damaged brains.

This view of people who use drugs has resulted in special emphasis on medications developed to limit propensity to relapse and to manage the neurophysiological elements of problem substance use. Although medications *can* be empowering to people with problem substance use and can enhance social, economic, and political participation, they do not always or necessarily do so. The social and political contexts within which a biomedical model such as the CRBD model is implemented matter, but the model is not designed to address such contexts or questions of justice. In this editorial, we explore prospects of doing better by comparing US policies with a brief historical survey of Western European countries that have adopted medications for problem substance use while remaining skeptical of or agnostic toward the CRBD model. These examples show that the CRBD model is not the only or best way to fight stigma and provide treatment. Policies in these countries provide support and push back against stigma in a range of ways, the most effective of which incorporate aspects of harm reduction. We can learn from these successes and continuing challenges as we work to achieve effective policies in the United States.

We believe that a historical and socially rooted analysis offers an especially powerful lens to reassess the CRBD model's value and implications.[4,5] Our goal is not to show that the model is wrong but that it is wrongheaded—incomplete in ways that carry risks as well as benefits.

FRAMING ADDICTION AS A CHRONIC, RELAPSING BRAIN DISEASE

The CRBD model rests on the idea that addiction is a brain disease. This idea first emerged in the United States during the late 1990s, building on a mid-20th century concept that the condition was best treated as chronic and relapsing.[6] Alan Leshner, then

the director of the National Institute on Drug Abuse, asserted that "the addicted brain is distinctly different from the nonaddicted brain."[7(p46)] The "scientific advancement" of neuroimaging, Leshner and others argued, could be used to dispel "popular and clinical myths about drug abuse and addiction and what to do about them."[8(p1)]

The supposedly new CRBD model recycles disease concepts that have mixed medical and moral concerns since the 18th century.[9] Disease models have been used to support a range of policy approaches from strict prohibition, to compulsory treatment or "civil commitment," to medical maintenance, to incarceration. In them, addiction has been both criminalized and medicalized; addicts were labeled as sick individuals yet also punished for bad behavior as deviants.

Treatment programs often contained punitive elements, including coercive detoxification. During the 1960s and 1970s, residential therapeutic communities in the United Kingdom and the United States meted out punishments, such as the shaving of heads, to members who transgressed.[10] Medication-assisted treatment was introduced to reduce crime and increase capacity for regular employment. Treatment was focused not primarily on improving the health and well-being of people who use drugs but on controlling the "contagion" of a "social disease" in "special" populations seen as vulnerable by virtue of social class, race, age, or sex.

Despite the hopes placed on the new CRBD model, this heritage has not been erased by redefining addiction as a chronic disease located in the brain.[11] On the contrary, the brutal social inequalities of US responses to drug-related harms have persisted or even worsened.

The Decade of the Brain of the 1990s shifted thinking about problem substance use to the molecular level—a shift that helped pave the way for preparing the Food and Drug Administration to believe the manufacturer's claims that the extended-release capsule of OxyContin (Purdue Pharma, Stamford, CT) rendered it minimally addictive. Regulators dismissed the social inventiveness of the capsule's users, who circumvented this technological fix by cracking open the extended-release capsule to snort or inject the contents. This oversight left White communities especially vulnerable to new hypermarketed opioids, thanks to the class- and race-segregated structure of American pharmaceutical markets.[12] As authorities began responding to the crisis, the CRBD model diverted attention away from the social inequalities that are integral to problem substance use. Market segregation provided relatively privileged White Americans with access to private office–based physicians who prescribed them buprenorphine while often excluding lower-income people of color who lacked medical access and against whom punitive drug law enforcement continued.[13] White Americans are three to four times as likely to receive private office–based buprenorphine as Black Americans.[14] Fewer resources have been devoted to reaching groups with rising overdose rates that are marginalized by race, class, sex, migration status, or sexual orientation,[15] with catastrophic results: Black and Native American overdose rates are now higher than those of White Americans.[16]

Prioritization of pharmacological treatment has also diverted attention away from the repressive drug policies fueling mass incarceration since the 1970s. Today, Black men are six times as likely to be incarcerated as White men and are more likely to be sentenced on drug-related charges; the United States has the highest percentage of its population in jails and prisons of any country in the world.[17] Meanwhile, harm reduction measures, including syringe exchange, naloxone access, and medically supervised drug consumption rooms, remain illegal in more than half of the US states.[18]

Expanding access to addiction medications without inclusive social policies and harm reduction has not been enough to prevent or stem America's opioid crisis. Opioid-related mortality has continued to rise exponentially among Americans of all races since the Decade of the Brain.[19]

ALTERNATE FRAME: HARM REDUCTION AND SOCIAL JUSTICE

There are other ways of framing and responding to substance use. The most promising of these is harm reduction, a 50-year-old social movement mounted against repressive drug policies. Rather than centering on the brain and embracing abstinence as a goal, harm reduction prioritizes the health and social inclusion of people who use drugs. Harm reduction organizations see medications as tools that can help people manage health risks without ignoring their needs for pleasure, self-worth, care, and comfort. People who use drugs navigate drug markets divided into licit "white markets" for pharmaceutical products supplied via medical gatekeepers[12] and prohibition markets supplied by illicit organizations. Prohibition markets can be deadly because they have no consumer protections, so harm reductionists advocate safe consumption rooms and safe supply policies that involve pharmacy-

based dispensing, drug regulation, and decriminalization or legalization based on local political and economic conditions.

Harm reduction centers on social justice by drawing attention to systemic problems people are asked to manage individually—including effects of poverty and inequality; unjust access to housing, medical care, and human rights; and structural violence and trauma. How can such problems be addressed without full participation of people directly affected by them? Consumers resist the coercive and often punitive ways in which medications for addiction have been deployed. Harm reduction links the biological to the social without prioritizing one over the other. This alternate framing has its passionate advocates in the United States, and some gains have been made amid rising opioid overdose deaths. Yet, compared with Europe and the United Kingdom, where public health systems absorbed this approach much earlier, harm reduction advocates in the United States have made relatively little headway against the institutional dominance of the CRBD model. It is worth surveying experiences in Europe and the United Kingdom to expand awareness of the many ways that pharmaceutical supports can be made available through approaches other than the CRBD model.

UNEVEN PROGRESS: HARM REDUCTION IN EUROPE

Opioid maintenance gained momentum in policy and practice in the United Kingdom not from a brain disease philosophy but rather as part of early harm reduction policy. Efforts to reduce harms associated with drug use in the United Kingdom can be traced back to the 1920s, when opioid maintenance prescription was permitted under certain circumstances for some users. In the 1960s and 1970s, reducing harms associated with drug use was central to establishment of voluntary organizations providing services for drug users.[20] The appearance of HIV/AIDS pushed harm reduction to the forefront when it became clear that HIV was spread through use of shared injecting equipment. Doctors and policymakers reexamined the place of opioid maintenance prescription as a harm reduction measure, embedding it into clinical care and policy. Syringe exchange and more liberal prescribing attracted users to treatment services and facilitated change away from risky practices.[21] Such measures had little to do with the CRBD model. Rather, they had a social mission of reducing harms to the wider community—more so, in fact, than reducing harm for drug users themselves. Unless driven by grassroots activism, harm reduction can be directed by motivations other than justice and liberation.

By contrast with the United Kingdom, Norway had restrictive drug policies. From the 1970s, problematic drug use was seen as socially generated and to be prevented and treated by social and pedagogical means.[22] Although dominant public discourse until the late 1990s resisted opioid maintenance as giving up on drug users,[23] physicians began in the 1980s to advocate new prescribing- and harm reduction–based programs.[24] Safe injection practices and free syringe distribution were promoted by physicians and social workers in the context of HIV prevention programs run in collaboration with active users who introduced peer education on safe drug use.[25] A small medically assisted rehabilitation pilot for people who use drugs with advanced AIDS was introduced. Confronted with an alarming increase of overdose rates in the 1990s, the first permanent opioid agonist program was introduced in 1997. The program, from 2001 called "drug assisted rehabilitation," included social, psychological, and pedagogical support as well as pharmaceuticals. Drug dependence was conceptualized as a truly biopsychosocial condition—a considerable shift in Norway's social and cultural climate. Initially, the program had strict inclusion criteria to prevent "leakage" to the illegal market. Strict control was often in tension with drug user agency in a context where harm reduction practices were implemented without social justice as a primary goal.

In France, an abstinence-based model dominated from the 1970s until the mid-1990s. There, addiction was understood in psychoanalytic terms, with psychoanalysis and abstinence as the only possible solutions.[26] But by the end of the 1980s, as in the United Kingdom and Norway, the AIDS epidemic motivated a shift toward harm reduction measures just as a neurobiological and cognitive behavioral paradigm replaced the psychoanalytic paradigm. The scientific concept of addiction soon became a political category, allowing professional and political actors to form new alliances.[27] Social acceptance of medications gradually came to France, as did harm reduction advocacy for HIV prevention. This double historical movement built alliances between addiction medicine and harm reduction activism.[28] Today France is the country with the highest medication-assisted treatment coverage in Europe because of the publicly funded system of both addiction treatment and harm reduction facilities. This situation highlights a paradox: the coexistence in

France (and elsewhere) of broadly disseminated pharmaceutical supports with repressive policy toward drug use.[28]

Each of these European countries has progressed toward harm reduction within important limits. In all 3 countries, HIV/AIDS initiated a crisis-driven embrace of harm reduction. Harm reduction initiatives across Europe and the United Kingdom were introduced as part of publicly funded institutions that often coexist with repressive drug policy systems—something shown with unusual starkness in the French example. The UK example indicates how harm reduction measures do not always center on social justice for people who use drugs but are instead introduced to protect the majority population. The Norwegian example points toward how restrictive access to harm reduction services can facilitate paternalism and reduce agency of people who use drugs.

CONCLUSION: HUMAN RIGHTS AS AN EXPANDED HARM REDUCTION FRAME

Recently, drug user activists in different European settings such as the United Kingdom, Norway, and France have shifted their language from claiming patient participation and patient rights to working for the human rights of people who use drugs.[19,29,30] During the early 2000s, drug users, activists, and advocates organized INPUD (International Network of People who Use Drugs), which promotes the idea that drug policies must be framed in consultation with people with lived experience, under the disability rights slogan, "nothing about us without us." The human rights frame counters some of the CRBD model's limitations, including the centering on brain disease pathology and insistence on judging each individual as either a patient or a criminal.

People who use drugs are themselves developing community-based harm reduction approaches that resist both criminalization and medicalization on the ground that both have been used to control drug users. Harm reduction critiques hierarchical forms of clinical and neuroscientific expertise and instead supports people who use drugs in recognizing their expertise in managing their own practices and bodies, supporting their agency, and widening their options. Abstinence can be considered part of this approach, but only if chosen by people who use drugs themselves.[31] When abstinence is imposed by external forces (medical practitioners, family, law enforcement, or other stakeholders), abstinence itself becomes a risk for overdose death. This socially embedded approach acknowledges medical reasoning and therapeutic guidance while maximizing the agency and social participation of people who use drugs as critical drivers of their health and well-being.

These diverse modalities of drug treatment and addiction policy highlight the myriad ways that biomedical knowledge may be deployed to achieve social and political goals. The CRBD model has become dominant in US public discourse despite its lack of translation into fair and equitable treatment of all. The harms of constructing addiction as a chronic, relapsing brain disease are particularly acute in contexts that rely on incarceration as drug policy. We should recognize, understand, and learn from the world's wider range of ways to make addiction sciences useful tools in the pursuit of public health through the centering of social justice. AJPH

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Lessons for the Opioid Crisis—Integrating Social Determinants of Health Into Clinical Care

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Overdose deaths accelerated with the emergence of COVID-19, and this acceleration was fastest among Black, Latinx, and Native Americans, whose overdose rates had already increased before COVID-19.[1,2] COVID-19 led to limits on access to medications for opioid use disorder and harm-reduction services, exacerbating low treatment and retention rates,[3–5] in the face of toxic drug supplies laced with high-potency synthetic opioids.[6] Disproportionate deaths from substance use disorders (SUDs) and from COVID-19 among low-income people marginalized by race, ethnicity, and migrant status have similar upstream causes of exposure, including unstable and crowded housing, high-risk employment or unemployment, and high levels of policing and incarceration, combined with low levels of access to health care and preventive measures. SUD and COVID-19 require health care systems to intervene in social determinants of health (SDOH), where the health care system itself is an intermediary social–structural determinant.[7] We examine determinants of SUDs and social–structural interventions that promise to stem SUD-related deaths accelerated by COVID-19.

SOCIAL–STRUCTURAL DETERMINANTS

Physical, sexual, and emotional trauma, including adverse childhood events, are associated with substance use,[8] as are discrimination based on race, ethnicity, LGBTQ (lesbian, gay, bisexual, transgender/-sexual, queer) status, and gender, and the intersection of trauma with discrimination further increases the risk of SUD. The stigma itself of having a SUD is a barrier to treatment and harm reduction.[9] Collective support and positive social environments, such as those fostered in cultural centers or faith organizations, can prevent and mitigate SUDs.

Punitive drug law enforcement discourages help seeking and treatment and leads to unstable drug supplies that are contaminated with fentanyl and other high-potency synthetic opioids that heighten overdose risk.[10] Incarcerated people are at an elevated risk of drug overdose in the weeks following release,[11] and communities with high incarceration rates have higher mortality.[12] Drug courts disproportionately cite low-income people of color for infractions, leading to imprisonment rather than treatment.[13]

Economic precarity and unstable housing disrupt the social networks that sustain health and prevent overdose.[14] Urban planners often displace residents of Black and Latinx neighborhoods, leaving them exposed to narcotic trade and HIV.[15] The child welfare system disproportionately removes low-income Black, Latinx, and Indigenous children from families affected by SUDs, and children raised in foster care are at high risk for SUDs.[16,17] Therefore, reducing SUD-related deaths and disability requires the redress of discriminatory public policies.

LESSONS FROM AIDS ACTIVISM

HIV and SUDs are both stigmatized in popular discourse as owing to bad choices, and those most affected are socially marginalized. Yet, today many people with HIV are living longer than ever before, with most deaths from non-HIV–related illnesses. Likely reasons include 1980s and 1990s AIDS activism that addressed SDOH, such as the AIDS Coalition to Unleash Power, a grassroots organization with many leaders who were publicly HIV positive. They addressed HIV stigma and promoted mutual aid and self-advocacy (http://tcleadership.org/act-up). This enabled community dissemination of safer sex and safer injection information, community advocate members on

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scientific review committees and policy advisory boards, and, ultimately, the federal HIV budget, which includes billions of dollars to address prevention and treatment, cash and housing assistance, research, and racial and ethnic inequality.[18]

A key component was the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act, which led to the largest federal program focused on providing HIV care and treatment services. The act requires local planning councils made up of community leaders, including those with HIV, along with providers of health and social services and focuses on SDOH.

Community-based organizations providing harm reduction—including safe syringe exchange and safe injection and safer sex supplies and education; onsite clinical testing and treatment of SUD, HIV, and hepatitis C; and social services[19]—are critical in reducing HIV transmission. Yet many forms of harm reduction are illegal or ineligible for public funds in most states.[20]

INTERVENTION EXAMPLES

Applying lessons from AIDS activism regarding the value of community mobilization, peer support, and integration of social services with systems of health care, we have outlined local initiatives that demonstrate what a SDOH approach to SUD might entail.

Criminal Justice System–Clinical Care

The Criminal Justice Continuum of Care for Opioid Users at risk for Overdose, launched in Rhode Island and grounded in the sequential intercept model, institutes the following in law enforcement interactions, courts, jails and prisons, community reentry, parole, and probation: (1) screening for OUD and overdose risk, (2) treatment and diversion, and (3) overdose prevention that includes naloxone. The intervention emphasizes medications for opioid use disorder, given that only a minority of drug courts and carceral facilities offer medications for opioid use disorder.[21]

Culturally Resonant Approaches

Native American communities in the United States have integrated traditional healing methods and incorporated Indigenous views of addiction and recovery into biomedical approaches. Studies of integration of buprenorphine maintenance with organized healing sessions, fishing, hunting, and community gardening in Canadian First Nations communities have shown high rates of treatment retention (74%) at 18 months,[22] and healing sessions combined with buprenorphine have had high levels of treatment participation, community-level reductions in criminal charges and child protection measures, increased school attendance, and increased flu vaccination.[23]

Faith-Based Organizations as Partners

Imani Breakthrough is a culturally informed approach based on a partnership of Yale University Department of Psychiatry clinicians with Black and Latinx churches. The Imani framework includes the citizenship model, based on the 5Rs—rights, roles, responsibilities, resources, and relationships—necessary to establish recovery from substances, while also addressing SDOH and emphasizing how spirituality can be a central aspect of recovery. Peer recovery coaches and spiritual facilitators work with participants to enhance dimensions of wellness identified by the Substance Abuse and Mental Health Services Administration. Imani increases referral rates for addiction treatment.[24]

Housing and Harm-Reduction Support

Atira Women's Resource Society of British Columbia offers housing with substance treatment, round-the-clock childcare services, educational enrichment, and parenting support for women regardless of their drug use status. Atira has arranged with child protective authorities to allow women to keep custody of their children without requiring abstinence from drugs. This breaks the cycle of state-sponsored child removal in which generations of poor and First Nations children have been separated from their parents because of substance use, thereby elevating their own risk of substance use and of losing custody of their children. Atira also runs women-only syringe exchange and medically supervised safe consumption sites (https://atira.bc.ca/who-we-are), 40 housing programs, two community daycares, and several support programs (https://www.housingpartnership.ca/atira).

Housing First

Housing First provides immediate housing with supports and case management, without requiring SUD treatment. The US Substance Abuse and Mental Health Services Administration and Housing and Urban Development recognize it as a best practice. Individuals served by Housing First are more likely to continue medications for

opioid use disorder for at least three years and are less likely to use substances nonmedically than are those required to have treatment as a condition of housing (https://www.pathwayshousingfirst.org).

CONCLUSIONS

Clinicians can use their symbolic capital to advocate policies that address SDOH and collaborate with community organizations and nonhealth sectors to identify and act on institutional barriers to their patients' health, such as through a structural competency approach.[25]

Health systems must engage communities, destigmatize SUD, and link to social services with locally controlled, adaptable funds akin to the Ryan White CARE Act to build community-based infrastructure: accessible, trusted services including in cultural, faith-based, and harm-reduction organizations as well as local businesses such as pharmacies. Only by addressing SDOH can health care systems stem overdose-related deaths and comorbidities, including COVID-19. AJPH

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Structural Adaptations to Methadone Maintenance Treatment and Take-Home Dosing for Opioid Use Disorder in the Era of COVID-19

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Societal disruption from the COVID-19 pandemic has accelerated the opioid overdose epidemic. Given the drastic increase in opioid overdose deaths during the pandemic, particularly within Black communities,[1] it is important to reflect on the state of opioid addiction treatment in the United States. When COVID-19 was declared a public health emergency, more than 400 000 individuals were receiving methadone maintenance treatment (MMT) for opioid use disorder (OUD) across the 50 states, the District of Columbia, and US territories including Puerto Rico.[2] Individuals receiving MMT, a gold standard for OUD treatment, have lower rates of death and nonprescribed opioid use than those not receiving treatment and exhibit better treatment retention.[3]

Despite these benefits, many structural barriers exist in accessing MMT, in large part because of decades of racist policies and political scapegoating (e.g., criminalizing those with substance use disorders and being "tough on crime" through harsh drug policies for political gain).[4] Methadone dispensing is tightly regulated, and the medication can be dispensed only at opioid treatment programs (OTPs) overseen by the Substance Abuse and Mental Health Services Administration (SAMHSA), the Drug Enforcement Administration, and state governments. When used in the treatment of OUD, no other prescription medication is as tightly regulated as methadone.

METHADONE BEFORE THE COVID-19 PANDEMIC

Before the pandemic, most patients on MMT were required to have a daily OTP visit to receive supervised dosing of methadone, usually with only one unsupervised take-home dose (THD) per week when the OTP was closed. Patients with sufficient treatment durations had to meet federal and state criteria before qualifying for additional THDs (with one additional THD allowed every 90 days), such as stable housing to allow safe methadone storage and abstinence from all illicit substances.[5] At the earliest, individuals could receive up to 14 THDs and 28 THDs after one and two years of treatment adherence, respectively. However, given the chronic, relapsing–remitting course of OUD, along with the varied individual discretion of OTP clinicians, longer periods were often required to receive higher amounts.

Individuals accessing methadone face structural and logistical challenges. Lack of treatment availability, transportation, and financial resources and inadequate insurance serve as structural barriers to care.[6] For instance, the majority of OTPs are located in urban areas, and 89% of rural counties lack sufficient OTP access.[7] The average cost of driving for individuals in rural counties is estimated to be $300 in the first month of treatment.[8] Even for insured individuals, low reimbursement and insurance

requirements are among the most common reasons OTPs do not accept new patients.[9] Individuals experiencing homelessness are excluded from receiving THDs, regardless of duration of or stability in treatment, given their lack of access to safe methadone storage.

In addition, individuals taking methadone are often drawn away from responsibilities such as child care, education, and employment, all of which promote treatment adherence and sustained recovery. Furthermore, although more than half of people who are incarcerated report a substance use disorder, only a small number of prisons provide medication treatment.[10] There is little evidence justifying guideline stringency and a growing body of evidence suggesting that decreased regulation may lead to improved treatment outcomes[11]; more research is needed.

EXEMPTIONS TO REGULATION DURING THE COVID-19 PANDEMIC

When COVID-19 reached the United States, OTPs—typically crowded, congregate settings—were identified as potential sites for severe acute respiratory syndrome coronavirus 2 (SARs-CoV-2) infection and spread. In March 2020, SAMHSA released federal guidelines allowing blanket exemptions for OTPs to dispense up to 14 THDs for "unstable" patients and up to 28 THDs for "stable" patients to reduce clinic crowding while maintaining access to the life-saving medication.[12] OTPs had discretion in defining "stable" and "unstable" patients, and the ways in which OTPs implemented these exemptions varied.[13] Public insurers including Medicaid expanded reimbursement for telemedicine, including video and telephone visits, which allowed clinicians to deliver services such as counseling remotely for the first time. Many OTPs waived urine toxicology testing, and OTPs could newly deliver medications to homes or allow trusted relatives or surrogates to pick up THDs for patients.

These broad exemptions marked the first regulatory reforms to MMT since its establishment in the 1970s, despite decades of calls to make such treatment more patient centered. Although not the stated goal, expansion of guidelines represents a giant step forward in expanding MMT access for individuals with OUD. It also establishes conditions for natural experiments to study the impact of these regulatory changes, including increased access to THDs, which was not possible prior to the pandemic. Studying the effects of these exemptions can expand our evidence base and guide future policy-making and care practice guidelines.

In early studies assessing the impact of these regulatory changes, researchers described how OTPs adapted to meet the needs of patients,[13,14] expanded telemedicine,[15] and evaluated the perspectives of both clinicians and patients.[16] These early reports indicate that OTPs nationwide have experienced few adverse events such as overdoses and diversion.[14,17] Clinicians and patients have reported improved care experiences with treatment flexibility,[16,18] although clinicians have expressed concerns about overdose risk and liability with increased take homes.[16] One OTP reported that opioid-positive drug screens increased during the pandemic, although other factors related to the pandemic (e.g., increased psychosocial stressors) may have contributed to increased drug use.[19] By expanding THD access to prioritize patient safety and protection from COVID-19, OTPs may be better able to provide patient-centered care that meets individual needs. If safety and the needs of people with OUD are prioritized and individual wellness and autonomy are promoted, THDs can be viewed as a form of harm reduction.

Few investigations have examined how structural barriers to MMT have shifted during the COVID-19 era. Elsewhere in this issue, we explore how the structural forces of financial incentives, housing, and the carceral system have played mediating roles in MMT during COVID-19 (see Wyatt et al., p. S143). We make recommendations based on this evidence to inform future methadone regulation policies.

MISALIGNED FINANCIAL INCENTIVES IN METHADONE TREATMENT

Although the pandemic has opened the door for fundamental changes to occur, it has also exacerbated the harmful and often unacknowledged ways in which existing systems disadvantage the very individuals they seek to serve. Across both for-profit and nonprofit reimbursement models, it is more financially favorable for OTPs to have patients come in multiple times per week to receive medication, regardless of clinical stability. In the for-profit model, OTPs cannot bill for the same level of in-person service they once provided if patients do not come in daily to access their medication, and some are struggling to remain financially solvent. In some states, public insurers such as Medicaid do not reimburse for patients receiving THDs.

The current billing and reimbursement model lends itself to a structure in which OTPs are incentivized to not prioritize THDs, even for patients who meet SAMHSA guidelines. Systems of

financial incentivization acting as barriers to achieving treatment stability in MMT have long warranted reevaluation, and exacerbations of these barriers during the COVID-19 pandemic further highlight the need for policy reform of incentivization structures.

COVID-19 HOUSING INTERVENTIONS AND TREATMENT PROGRESS

SAMHSA guidelines mandate that people be able to safely store medications in their home environment if they are to receive methadone THDs. This means that populations experiencing unsheltered homelessness and housing instability are excluded from consideration for THDs, posing a significant barrier for a group already facing other structural challenges. Many populations experiencing homelessness are in urban settings, and rates of homelessness have increased dramatically in the face of the significant shortages in affordable housing. More than half a million people were experiencing homelessness across the United States prior to the pandemic.

Unhoused individuals were especially vulnerable to harm during the pandemic, during which people exposed to or infected with COVID-19 or at risk for severe complications had nowhere to safely quarantine. To address this issue, California launched Project Roomkey, in which state and federal funds were used to transform hotel rooms into housing for individuals experiencing homelessness. In 2020, San Francisco used these funds to house more than 2500 individuals who met certain criteria such as needing to isolate as a result of infection with or exposure to SARs-CoV-2 or having risk factors such as older age, respiratory illnesses, compromised immunities, or severe chronic diseases.[20] Individuals isolating because of COVID-19 infection or exposure were housed at isolation and quarantine sites, whereas those vulnerable to COVID-19 were housed in shelter-in-place hotels. Individuals stably in MMT who had become housed could then safely store their methadone and were newly eligible for THDs.

The project just described is an example of how a structural intervention involving temporary housing options in response to COVID-19 intersected positively with MMT care stabilization. Despite some challenges, patients and providers have emphasized how obtaining stable housing was a vital component of successful recovery (see Wyatt et al., p. S143). Stable housing offers a pathway to receiving THDs, thereby reducing the burden of daily OTP visits and freeing up considerable time for patients to focus on other matters such as employment, education, and their health. Although unintended, these beneficial effects resulting from COVID-19 housing interventions highlight how alleviation of structural barriers can facilitate addiction recovery.

METHADONE TREATMENT IN PRISON SYSTEMS DURING COVID-19

The World Health Organization has emphasized the importance of integrating prisons into public health responses to mitigate the impact of COVID-19.[21] Prisons are fraught with barriers to social distancing, hand washing, and protection of inmates from contagion on the part of personnel, visitors, and admissions personnel. Disparities in preexisting health conditions increase the risk of severe complications and mortality from COVID-19.

Individuals with OUD are overrepresented in the carceral system. Reentering individuals with OUD are at high risk of nonfatal and fatal overdose events.[22] Despite unmet needs for care and the reductions in postrelease drug use associated with prison-based MMT, MMT is rarely provided in US correctional institutions.[10] In instances in which MMT is available, restrictions imposed to curtail COVID-19 contagion may result in treatment interruptions. A survey of OUD treatment programs in US jails revealed that half encountered challenges in maintaining adequate clinical staff and physical facilities to ensure social distancing.[23]

The SAMHSA exceptions to methadone dispensing adopted in the MMT prison we examined (see Wyatt et al., p. S143) allowed for continuity of care and a seamless transition to community treatment upon release. Our preliminary findings provide opportunities to reassess the restrictive regulations that apply to this treatment modality and to enhance its acceptability in US carceral settings.

POLICY IMPLICATIONS

Multiple structural barriers for individuals receiving MMT have shifted during the COVID-19 pandemic. The surge of opioid overdose deaths during the pandemic highlights how expanding OUD treatment is critical; evaluation of MMT structures offers one such essential avenue of addressing overdose deaths. Here we have brought together examples of methadone treatment intersecting with and being informed by financial incentive, housing, and incarceration systems. These examples highlight how substance use treatment is often

centered on the needs of institutions rather than on the needs of the individuals they serve, and they underscore the feasibility of changing previously restrictive regulations when the need to increase the availability of and access to methadone is most critical.

Several recommendations for future policy should be noted. If an individual with OUD remains in care, improves, and then stabilizes during care, then receipt of increased THDs is merited. Misaligned financial incentives should not dictate care or serve as a barrier to long-term recovery. Decreasing THDs without a clinical indication to do so (e.g., lapse in care, return to nonprescribed opioid use, co-occurring substance use) can rob individuals of their dignity and freedom to access their medication in the least restrictive manner possible. Regulatory reform is salient to ensure equitable enforcement of THD policies at OTPs that is evidence based and affirms the humanity of people with OUD.

Policy recommendations include financial restructuring to ensure that providers are reimbursed on the basis of overall provision of care as opposed to daily methadone dosing, as has already been implemented for Medicaid in New York State.[24] Furthermore, federal mandates are necessary for collection of data to better understand and address barriers to implementing the SAMHSA exemptions, including financial relief and increased reimbursement flexibility for OTPs struggling to remain financially solvent.

OTPs are witnessing how COVID-19 emergency housing interventions can interact positively with substance use treatment, adding to the evidence that housing can be a stabilizing force in addiction recovery. Emergency housing interventions during COVID-19, especially those targeting individuals with substance use disorders, have the potential to not only stabilize individuals in treatment but also reduce arrests and assaults and increase uptake of medical care. These benefits have prompted the California government to dedicate $1.3 billion to purchase hotels that will be transformed into supportive housing, and Governor Gavin Newsom has proposed an additional $1.75 billion to acquire more property for supportive housing. Yet, cities such as New York are already sundowning their COVID-19 hotel programs as they anticipate cases becoming more manageable. This approach is concerning given the incidence of more infectious COVID-19 variants.

Even more troubling is the expected nationwide increase in the number of individuals experiencing homelessness with the ending of the federal eviction moratorium. Rather than reversing early signs of progress seen during the COVID-19 pandemic, federal, state, and local governments working with populations experiencing comorbid substance use and homelessness should consider extending COVID-19 housing interventions to expand the impact and reach of these services.

Experiences to date support that uninterrupted methadone delivery in prison is possible during challenging times. Precautions instituted early by prisons can facilitate treatment stability, and we found that individuals who were provided with THDs and reentered the community transitioned seamlessly to community OTPs while adequately managing their medication (see Wyatt et al., p. S143). Such experiences suggest opportunities for research to inform models that enhance the outcomes of the treatment cascade from prison to community.

Studies of individuals receiving MMT after incarceration with longer follow-up periods are needed to identify factors contributing to community treatment retention given the variations in MMT and buprenorphine prescribing practices during COVID-19. Understanding effects on retention can inform successful implementation of MMT services for incarcerated populations during and after the pandemic to narrow the treatment gap encountered in US prisons.

As COVID-19 vaccination rates rise and the United States looks to the future in planning its recovery, it is imperative to recognize policy opportunities offered during the pandemic to reenvision methadone treatment. Centering treatment on the needs of individuals with OUD rather than on systems of surveillance, stigma, and punishment is critical. Expansion of THD exemptions during the pandemic has offered insights into MMT's potential for patient benefit, especially when structures are created to support individuals through housing, community connections, and other social elements.

US methadone policy is at a turning point. With the backdrop of surging overdose deaths, policymakers and researchers, rather than reversing progress by reverting to previous methadone policies, should continue to study and learn from the natural experiments created during the pandemic, especially as federal agencies contemplate making regulation exemptions permanent.[25] The imperative exists to develop drug treatment structures that prioritize evidence-based and patient-centered policies and clinical practices if the United States hopes to put an end to this devastating overdose crisis. AJPH

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CONFLICTS OF INTEREST

The authors report no conflicts of interest.

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The Methadone Manifesto: Treatment Experiences and Policy Recommendations From Methadone Patient Activists

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Urban Survivors Union (USU), the American national drug users union, is a coalition of drug user unions, organizations led by drug-using sex workers, and other groups affected by the drug war. Founded in 2017 by three long-standing regional unions, it includes more than 30 chapters and affiliate groups throughout the country. People who use drugs lead the union and perform all of its functions. At USU, we prioritize the leadership of people of color, low-income team members, and people from underresourced states.

Our organization uses collective decision-making and team-based systems because of philosophy and necessity. We all face death or incapacitation at any time from overdose, incarceration, poverty, illness, mental health issues, trauma, and disability. Thus, we take on projects in two-person teams, share skills, and provide mentorship. We host national weekly virtual presentations by people who use drugs on organization, skill building, and prevention tips. Topics have included harm reduction during COVID-19, domestic violence, and establishment of local drug user unions. We also hold frequent Webinars to circulate critical information quickly through our national community. We share grant calendars and training, monitor legislation, teach members how to track state and municipal politics, and build power among local organizers.

When the COVID-19 pandemic began, USU members were particularly affected because people who use drugs are at high risk for hospitalization, morbidity, and mortality from COVID-19 infection.[1] In addition, overdose[2] and hepatitis C virus rates are rising.[3]

Many USU members receive methadone maintenance treatment (MMT). MMT is heavily regulated, creating multiple barriers that restrict its efficacy,[4] although it is widely considered one of the best ways to reduce fatal overdoses and other harms of criminalized opioid use.[5] MMT regulations were relaxed during COVID-19.[6] However, we observed that many MMT programs were not relaxing policies, overdose rates were increasing among our members, and COVID-19 was altering the illegal market infrastructure and increasing our reliance on potent synthetic opioids and poisonous adulterants.[7,8]

In April 2020, USU released an open letter garnering 140 organizational signatories that advocated further opioid agonist treatment reform to protect patients from COVID-19 and overdose.[9] Next, USU focused on MMT reform. USU supports broader buprenorphine maintenance treatment (BMT) access, particularly eliminating racial and socioeconomic differences in access.[10] However, for many of us, BMT does not work but MMT does.

In our experience, buprenorphine induction can be traumatic because it requires severe withdrawal. As fentanyl analogs have replaced heroin in the opioid street supply, BMT induction has become more difficult.[11] According to one member: "Moving to bupe with fentanyl on board is almost impossible . . . it's guaranteed precipitated withdrawal."

BMT patients whose goal is moderation rather than abstinence risk precipitated withdrawal when using other opioids. One member described precipitated withdrawal as "total fucking agony . . . all the usual symptoms of opioid withdrawal but exponentially multiplied."

Even when induction succeeds, many report never feeling free from withdrawal while in BMT. In the words

of one member: "The way buprenorphine made me feel was absolutely horrible. It was just this odd, weird feeling of being halfway to where I needed to be all the time."

Thus, for many reasons, MMT is vital, especially now that fentanyl dominates the illicit opioid supply.[12] In the absence of safer, legal, short-acting opioids, as one member said, "methadone is our safe supply."

Soon after we started advocating for MMT reform during COVID-19, one member was restricted to a low dose by her methadone clinic. To avoid withdrawal, she supplemented her dose with street opioids she knew were dangerously contaminated. She said:

> The street opioids were killing me, and I was furious that [this could even happen to] someone with an enormous amount of privilege such as myself. I'm meeting with the [State Opioid Treatment Authority] every month and they are watching me die in real time.

Her struggle and anger resonated with the rest of the team. While she was hospitalized because of drug poisoning, we created the Methadone Manifesto[13] so that other MMT patients would know they were not alone. This manifesto is a living document written collaboratively by USU methadone advocacy and reform team members—current and former methadone patients, activists, patient advocates, MMT staff, and trained researchers—all affected by MMT practices during COVID-19. In the manifesto, we highlighted MMT research gaps through our experiential knowledge as patients and patient advocates, outlined how certain policy and clinic practices do not align with patient needs, and proposed solutions for treatment reform.

We developed the manifesto through literature reviews, interviews and auto-ethnographic accounts from team members, weekly two-hour meetings, and group conversations and texts based on collective lived experiences. We detailed the treatment barriers we observed as MMT patients and advocates for hundreds of patients. For example, the issue of urine drug screening video surveillance was raised by a trans team member who overheard MMT staff mocking the bodies of other trans patients viewed on camera. We disseminated the manifesto through our Web site, published excerpts in media, held a Webinar, and shared the document with progressive opioid treatment program directors, state opioid treatment authorities, and policymakers.

There is a long tradition of using experiential knowledge to advance research; many disciplines, such as critical race studies and disability studies, have recognized its importance.[14–16] Sharing our experiences is a form of exercising authorship over how drug use scholarship describes us.

In this editorial based on the manifesto, we focus on a few MMT barriers we have experienced and suggest improvements (Box 1). Specifically, we discuss issues during COVID-19, take-home doses, counseling and treatment plans, costs, and issues faced by parenting patients and patients in the sex trades.

PROBLEMS DURING COVID-19

Many of us have high COVID-19 hospitalization risks as a result of comorbidities. When the pandemic began, we also worried about exposing loved ones to infection because of our frequent clinic visits. When the Substance Abuse and Mental Health Services Administration (SAMHSA) released guidance to opioid treatment programs relaxing some of the MMT restrictions that had been in place for more than 40 years, we were initially relieved.

However, many of our clinics did not increase take-home doses or provided patients with only a few doses rather than the 14 to 28 allowed, stating that they feared diversion or believed that patients required the stability of frequent in-person dosing. Some clinics switched counseling to telehealth, but some continued mandatory in-person sessions. Others allowed crowds within buildings and did not distribute masks to patients. In some, neither staff members nor patients were required to wear masks.

In addition, many clinics revoked increased take-home doses within months.[16] Some MMT directors cited difficulty filling multiple take-home bottles, and others stated that they were acclimating patients to frequent in-person dosing in case SAMHSA reversed its relaxations.

Research subsequently showed that, as we experienced, methadone programs unevenly implemented COVID-19 take-home relaxations.[17] Yet, the relaxations implemented demonstrated that the primary reasons for restricting methadone access—to reduce diversion and decrease fatal overdose risks—may be unfounded.[18] A Connecticut study revealed that methadone-related fatal overdoses did not increase during COVID-19, and a study involving a USU chapter showed little self-reported diversion.[17,19]

In late spring 2021, some MMT programs and state addiction bureaus asserted that COVID-19 relaxations were unnecessary now that vaccination was available. Yet, many MMT patients

BOX 1— Recommendations for Improving Access to Methadone Maintenance Treatment (MMT)

Problems during COVID-19	• SAMHSA COVID-19 MMT relaxations should be extended through the duration of the pandemic, implemented fully by all opioid treatment programs, and made permanent. • MMT programs should consistently implement use of social distancing and masks in clinics.
Take-home doses	• Federal policy should allow primary care and pharmacy-based prescribing to increase MMT geographic availability. • State and federal policies should not require negative drug tests for take-home dosing eligibility. • MMT programs should eliminate take-home bottle return requirements. • MMT programs should eliminate lock box requirements for take-home dosing. • MMT programs should provide morning, afternoon, evening, and weekend dosing hours to accommodate vulnerable patients, including disabled patients and sex workers. • MMT programs should consider transportation and disability issues when determining take-home eligibility.
Counseling and treatment plans	• Policies and MMT programs should provide voluntary instead of mandatory individual and group counseling • MMT programs should adhere to state minimum counseling requirements and not impose more burdensome standards. • MMT programs should provide funding and support for voluntary patient-only support groups, including parenting support groups and support groups exclusively designed for current or former sex workers. • MMT programs should allow members of the same households and carpools to attend the same counseling groups.
Costs	• Policies should prohibit accelerated tapering schedules and financial detox.
Parenting patients	• MMT staff should be trained on the limits of mandatory child protective service reporting requirements and the potential negative outcomes of reporting. • MMT programs should allow children into the building, provide free child care on site, and support voluntary parent/child integrated treatment programs.
Patients in the sex trades	• MMT engagement and retention of sex workers should be a research and policy priority.
Broader recommendations	• MMT regulations should be supported by current research. • Additional regulations beyond the federal level should not be allowed. • Policymakers and MMT programs should give methadone patients a decision-making role in policy and program practice. • MMT programs should fast track patients through intake processes, especially more vulnerable patients such as those who are elderly or disabled. • Policies should expand and improve transportation assistance. • Disabled patients should be consulted on new facility development, and MMT facilities should be disability accessible. • MMT programs should implement cultural competency training for all staff in areas including disability, sex worker rights and health issues, family separation, and antiracism. • MMT programs should support harm reduction treatment models as fully as abstinence-based models. • Programs should individualize treatment and implement patient-centered practices. • MMT programs should serve as drug user health hubs, integrating voluntary services such as hepatitis C virus treatment and safe consumption sites. Health hubs should offer health resources and referrals for vulnerable groups (e.g., preexposure and postexposure prophylaxis, hygiene items, obstetrical/gynecological care, and culturally competent mental health treatment).

Note. SAMHSA = Substance Abuse and Mental Health Services Administration.

have low incomes or are people of color, and these groups have been harder hit by COVID-19 and vaccinated at lower rates.[20,21] Moreover, many MMT program directors and researchers believe that these relaxed guidelines should be permanent.[22]

TAKE-HOME DOSES

In our experience, in-person dosing impedes patient well-being. According to one USU member:

> The basic day-to-day functioning of life is obstructed by going daily. . . . I can't think of one positive thing about daily dosing. Maybe you'll be late for work, you'll lose your job, since you can't [predict] how long you'll be in a clinic line.

Federal guidelines stipulate that opioid treatment programs must operate during hours that meet most patients' needs, including outside the 8 AM to 5 PM Monday through Friday work schedule, and clinics with expanded hours report higher patient satisfaction[23]; however, in our experience, many clinics offer only limited morning dosing, and some change dosing hours monthly with little notice. Many patients' daily routines and employment are curtailed by limited hours.

We have also observed that many patients who must dose in person frequently and who have transportation difficulties quickly accumulate missed doses. MMT programs drastically reduce doses after two to three missed days and, after additional missed doses, may terminate treatment. Thus, many patients are at increased risk for overdose because they supplement reduced or missed doses with illicit street opioids or rely on them after treatment has been terminated.

Research has shown that in-person dosing is no more protective than take-home dosing with respect to illicit opioid use, diversion, or mortality.[24]

In addition, take-home dosing increases retention and helps patients maintain employment.[25,26]

In our experience, MMT program rules also make maintaining take-home dosing difficult. For instance, MMT program lock box requirements for take-home dosing advertise patients' MMT participation, violating their confidentiality and possibly exposing them to theft and assault. Houseless patients and street-based sex workers who store take-home doses in lock boxes often have no place to store the boxes, so they carry them and are often robbed by opportunists. No other medications, including other opioids, require lock box storage. It is also noteworthy that many clinics require patients to return empty take-home bottles or have their take-home privileges revoked or reduced. However, there is no evidence that bottle return requirements improve patient health.

COUNSELING AND TREATMENT PLANS

Weekly or biweekly counseling and group sessions are usually mandatory for MMT patients, even though there is little evidence that mandatory counseling contributes to positive outcomes.[27] In our experience, mandatory counseling is rarely therapeutic, and counselors' directive presence in group sessions is counterproductive. It is optimal to form trusting relationships with counselors, but trust is difficult to establish in mandatory treatment.

In our experience, disciplinary measures and the general course of treatment are often decided in counseling. Counselors frequently determine federally mandated patient treatment plans that outline patients' short-term goals, influence dosing decisions, and are periodically reassessed. These treatment plans rarely reflect patients' actual goals and are often written without patient input. We are usually asked to sign the finished document through an electronic signature system without warning and without adequate time to read it or an opportunity to read it at all. When we ask to review the plan, our day's dose is usually withheld until we sign. Attempts to contact counselors to make changes delay our dose. Many states allow treatment termination if patients are noncompliant with treatment plans.

Furthermore, in our experience, counselors at many clinics exclusively promote abstinence models, which have been shown by research to increase overdose risks upon termination.[28] People with other treatment goals, such as harm reduction, are often denied MMT.

COSTS

MMT can cost up to $250 a week. Uninsured patients who cannot pay that amount weekly are charged for doses daily. In our experience, if patients cannot pay for their daily dose, clinics allow them to defer payment for only a few (if any) doses. Then, if patients are still unable to pay, they are forced into financial detox, during which their dose is quickly lowered. These practices push patients toward street opioid use and increased overdose risk. According to federal guidelines, no patients should be discharged while physically dependent on MMT unless they are permitted to detox from the drug. The accelerated financial detox tapering schedule used by clinics does not allow patients to detox sufficiently, causing months-long withdrawal.

PARENTING PATIENTS

Parenting patients face treatment barriers including transportation, child care, and family court and child welfare cases.[29] In our experience, parenting patients' struggles are rarely recognized by MMT programs. Usually, their needs are addressed only during pregnancy. For example, clinics often will not discharge patients perinatally regardless of their ability to pay. Yet if the balance is not brought current postnatally, the childbearing parent will often be financially discharged postpartum.

Some MMT programs do not allow children on site, creating retention problems for parenting patients,[30] even though voluntary integrated treatment programs for parents and children have been found to increase retention and provide long-term benefits.[31] In other programs, we have observed parents being scapegoated for restless children's behavior by staff and patients.

We have often witnessed clinics violating child abuse reporting requirements. For example, one advocate heard from a poor mother of color whose clinic reported her to the state's child protective agency, not for physically harming her children but for returning a family member's bottle instead of her own. There is a long history of violation of the reproductive rights[32] of people who use drugs, especially those of color, that we feel is exacerbated by the practices of some clinics.

PATIENTS IN THE SEX TRADES

Sex work, particularly street-based work, is associated with poor MMT engagement and retention.[33] Limited dosing hours can lead to missed doses for sex workers who generally work

nights and do not have set hours. Expanded hours are critical for sex workers' access to health care, especially in the case of street-based and drug-using sex workers.[34]

Also, in our experience MMT counseling can be a hostile environment for sex workers. Some clinic counselors conflate all sex work with trafficking or understand it as a psychological problem rather than an economic survival strategy. Thus, sex-working patients may hesitate to disclose to counselors. If patients disclose, some counselors see sex work as a sign of instability, disqualifying patients from take-home dosing eligibility. Counselors may urge patients to quit sex work before they want to do so or before they have viable economic alternatives. Such stigma negatively affects sex workers' health and health care access and is associated with psychological distress.[34,35]

Mandated MMT group counseling can also be difficult for sex workers. One member reported that throughout 15 years in MMT, she has never identified as a sex worker in group counseling because of derogatory comments about sex work from group participants and counselors. In one study including MMT patients, women involved in street-based sex work reported feeling unable to disclose sex work in group drug treatment, fearing stigma and unwanted advances from male patients.[36]

CONCLUSIONS

Our experiences as MMT patients and advocates show that the MMT system has many underexamined problems, exacerbated by COVID-19 and for people with intersectional challenges. We feel that punitive high-threshold clinics make people reluctant to enter treatment and reinforce perceptions that MMT difficulties result from individual noncompliance rather than institutions misaligned to patient needs.

Ideally, MMTs would integrate harm reduction practices and person-centered care, even within the current regulatory environment. Some existing MMT programs are already moving toward this ideal, such as the Community Medical Services opioid treatment on demand clinics in Arizona, Ohio, and Wisconsin, which offer 24-hour induction and expanded dosing hours. As one USU member noted, "MMTs do not have to change much about how they operate to operate in a humane way."

For decades, drug user unions have protected the lives of people who use drugs, collecting and disseminating vital information, distributing life-saving supplies, and developing leadership among drug user organizers. Our input on affected people's experiences is invaluable to community-driven research and policy, including work on MMT reform.

We hope that our work inspires further community-driven research on MMT. Ideally, the approach described in the manifesto and this editorial, combining literature reviews and experiential observations, will be used by patients in other drug treatment systems or with stigmatized conditions (e.g., HIV or hepatitis C virus) to rapidly outline underresearched problems, especially during times of crisis such as COVID-19. AJPH

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Supporting the Health of HIV-Positive People Who Inject Drugs During COVID-19 and Beyond: Lessons for the United States from St. Petersburg, Russia

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People who use drugs have faced unique challenges during the COVID-19 pandemic. As the pandemic began, experts voiced particular concern for the welfare of people who inject drugs and are living with HIV (PWID with HIV), anticipating they would experience more severe COVID-19,[1,2] reduced access to essential health care services, and increased social isolation.[2–4]

In the United States, an estimated 13% of the total population of adults 18 years or older reported initiating or increasing substance use since the start of the pandemic,[5] and the annual incidence of fatal overdose increased more than 30% between 2019 and 2020, when an estimated 93 000 people died of this cause.[6] These troubling statistics emerged even as regulations for the provision of medications for opioid use disorder (MOUD) were relaxed in a concerted effort to improve access to this life-saving form of care during pandemic restrictions.[7] Though certain success stories have emerged from these policy changes,[8] evidence also suggests that barriers to treatment may have persisted—or emerged anew—during the pandemic.[9] Currently, we lack a comprehensive understanding of the drivers of and interactions between these many challenges faced by PWID with HIV during the pandemic. A careful consideration of how PWID with HIV living in other high-income nations have fared during the pandemic could offer much-needed insight for making sense of these seemingly contradictory substance use–related outcomes and policy changes in the United States.

The Russian Federation (Russia) faces a growing HIV epidemic historically concentrated among PWID.[10] Independent organizations estimate that as many as 2 million Russians are living with HIV,[11] of whom only 63% know their HIV status and as little as 41% are virally suppressed.[12] PWID in Russia experience poor access to essential harm reduction services,[13] no access at all to MOUD (both methadone and buprenorphine are classified as illegal substances in Russia),[14] and poor linkage to HIV care overall.[15] Furthermore, more than 7000 people died of drug overdoses in Russia in 2020, a 60% increase since 2019.[16]

Our recent research has explored the pandemic-related impacts on PWID with HIV in Russia as a comparison case with the US experience. From April to July 2021, we conducted interviews with 13 residents of St. Petersburg, Russia (purposively sampled; age range, 28–56 years; 46% female; 54% unemployed; all consented participants recruited from a randomized controlled trial[17] with ClinicalTrials.gov identifier: NCT03695393). All reported current- or past-year illicit methadone use (none reported using cathinones, or "salts," which is increasingly popular in younger populations), all were living with HIV, and all were identified through participation in local harm reduction programs. We also interviewed 11 health care and harm reduction professionals (age range, 36–54 years; 55% female; purposive sample identified via professional networks) who provide services for PWID with HIV in St. Petersburg, a high-incidence, high-prevalence hot spot of the HIV epidemic in Russia. All participants provided verbal consent and received an incentive of 2500 rubles (~34 USD at the time of the study).

Findings from these interviews suggest that PWID with HIV in St. Petersburg may be uniquely vulnerable to negative pandemic impacts; however, they may also have experienced relief from—or exacerbations of—structural harms that have long been drivers of negative health outcomes among this population. Specifically, the following pandemic impacts may have affected this population: (1) impacts on the drug market, (2) the easing of some barriers to health care, and (3) the worsening stigma and other barriers to care. We elaborate on these trends below and offer our thoughts on how insights from this study may be useful for US health care providers and policymakers seeking to mitigate negative pandemic effects and improve overall health and well-being for PWID with HIV in the United States.

IMPACTS ON THE DRUG MARKET

In the early stages of the pandemic, experts hypothesized that patterns of substance use and overdose would be affected by (1) mobility restrictions faced by those participating in drug markets, including difficulty crossing borders and moving through cities; (2) temporary reduction in and subsequent renormalization of global trade and supply chains; and (3) changes in the kind and severity of law enforcement activity at the local level.[18] Our data suggest that these impacts were observable but limited in effect.

Drug markets in cities across Eastern Europe are transitioning to dark Web sales and delivery via "dead drops."[19] In St. Petersburg, making purchases from Web site stores and then arranging anonymous "drops" of their purchased goods has become the predominant method for obtaining opioids, stimulants, and other drugs. In the first weeks of the pandemic, when St. Petersburg residents were under strict lockdown, PWID with whom we spoke reported that accessing dead drops became riskier. With few people on the streets during the early days of lockdown, at the very start of pandemic restrictions, many more police than usual patrolled the streets to enforce the quarantine. In this short period, some reported reducing the frequency of their drug use. Others reported pooling money with friends and purchasing larger quantities to reduce the frequency of excursions to dead drop locations. Within a few weeks, however, local residents increasingly left their homes, and this aspect of drug procurement renormalized.

Importantly, the PWID with whom we spoke in St. Petersburg reported no significant changes in drug availability—or in their own drug use behaviors. Most reported lower drug quality and higher drug prices, but this was generally described as a long-term market trend, not a result of the pandemic. None reported needing alternative strategies for obtaining drugs because of market disruption.

EASING OF STRUCTURAL HARMS AND REDUCED BARRIERS TO CARE

Notably, PWID with HIV in St. Petersburg experienced many positive effects of the pandemic. The most noteworthy of these was the reprieve from regular police harassment. Some experts predicted that overpolicing of PWID would increase—or have worse impacts—during the pandemic.[18] Many interview participants, however, described the opposite effect. During the first few weeks of strict lockdown, more police were out on the street to enforce the quarantine order. Yet, participants universally described this as a short-lived phenomenon; some estimated that the lockdown, for all practical purposes, lasted less than one month, at which time visible police presence across St. Petersburg decreased significantly.

Before the pandemic, PWID with HIV described police officers in Russia extorting them for bribes, making false accusations, and planting false evidence to ensure an arrest.[20,21] Many described such police stops and interactions as frequent occurrences before the pandemic. All explicitly stated they had experienced no police interaction related to substance use, and many reported no police contact at all, since the pandemic began. Some participants suggested that concerns about SARS-CoV-2 transmission reduced police officers' enthusiasm for interacting with anyone on the street.

Interview participants also reported that pandemic-related changes in the delivery of HIV care effectively transformed Russia's high-barrier HIV care system into more accessible care for those who sought treatment. This was due, in large part, to the implementation of prescription refill services by phone. In-person visits for prescription refills were no longer necessary for patients already receiving antiretroviral therapy (ART). In addition, the process of initiating ART was streamlined, and home delivery of ART became available on demand, removing the burden of long commutes to St. Petersburg's centrally located AIDS center, where many PWID with HIV receive treatment. Ending such hours-long commutes to the AIDS center was a distinctly positive outcome of the pandemic for some patients.

WORSENING IMPACTS OF STIGMA AND OTHER BARRIERS TO CARE

Participants also reported several negative impacts of the COVID-19 pandemic on PWID with HIV in St. Petersburg, including reduced access to addiction treatment and barriers to meaningful COVID-19 prevention measures because of stigma against PWID. For instance, according to providers of outpatient treatment of substance use disorders, as much as 80% of persons receiving addiction treatment had been sentenced by the courts to 3 months of mandated treatment at their facility. The remaining 20%, they reported, received outpatient treatment voluntarily. Because of the extensive face-to-face interactions required for psychotherapy, the outpatient addiction treatment facility was officially shut down during the pandemic. This left all patients in a bind: those voluntarily seeking treatment were left without (but wanting) care, whereas court-ordered patients could not make progress toward the completion of their sentences.

As has been seen elsewhere,[22] PWID with HIV experienced similarly poor access to COVID-19 prevention measures, often for reasons related to HIV and drug use stigma in outpatient care settings. Most PWID with HIV with whom we spoke were not interested in and did not voluntarily seek out COVID-19 testing. Some, however, were forced to pursue testing to access inpatient detoxification services. Although most hospital facilities can perform COVID-19 tests on-site, the addiction treatment facility was not approved to do so. Addiction treatment providers were therefore forced to refer patients seeking inpatient detoxification to COVID-19 testing centers elsewhere. That referral consisted of a written document indicating the patient's association with the addiction treatment facility, essentially outing them to other health care providers as PWID. Nearly all patients who entered the detoxification program ended up paying out of pocket for a COVID-19 test at a private clinic rather than having to disclose their substance use at the primary care facility.

PWID with HIV anticipated similar barriers to the COVID-19 vaccine. Several shared the perception that most residents of St. Petersburg believe that a person with HIV must be someone who uses drugs, which would deprioritize this group for vaccine access. Many other PWID with HIV believed that the vaccine was contraindicated by their HIV status, meaning they could not safely receive it. Thus, despite Russia's status as the first country worldwide to make a COVID-19 vaccine publicly available, most PWID with HIV did not even consider receiving one; they were so confident that they would be denied access to the vaccine for one reason or another that they all considered the question moot.

SUPPORTING DRUG USER HEALTH BEYOND THE PANDEMIC

PWID globally are at heightened risk of negative health impacts during the COVID-19 pandemic.[1–4] Efforts have been made to mitigate these harms in the United States, including the loosening of regulations regarding access to MOUD,[7] but these changes have not prevented record numbers of overdose deaths during the pandemic.[6] What pieces of the puzzle are US policymakers missing? Our qualitative research conducted in Russia's second largest urban center underscores several key features of COVID-19's impact on PWID with HIV, and PWID in general, that are not well captured in current narratives of disproportionate harm.

First, changes in both practice and policy during the pandemic produced several noteworthy improvements in the treatment access and overall quality of life enjoyed by PWID with HIV in St. Petersburg. Punitive criminal policies and aggressive policing of PWID have long hampered efforts to reduce the harms associated with substance use in Russia; in particular, extrajudicial arrests of PWID are both common and associated with nonfatal overdose and riskier substance use behaviors.[23] Yet, interviewees universally reported reduced contact or no contact with police during the pandemic. Furthermore, low-barrier options for accessing essential HIV care replaced historical systems of care with high barriers to entry, increasing treatment access and, at least anecdotally, enabling treatment initiation. Briefly, many systems that had hindered the health and well-being of PWID with HIV were themselves hindered from normal operations by the pandemic.

Second, many of the challenges faced by PWID with HIV in St. Petersburg predate the pandemic. Pervasive stigma against PWID and people living with HIV within the health care system reduced access to COVID-19 testing. Personal experiences of extreme prejudice from health care providers and wider society limited access to COVID-19 vaccines *de facto* because PWID with HIV have been taught through negative experiences that they will not be granted these public services. The Russian state's refusal to implement evidence-based treatments for opioid use disorder (specifically methadone and buprenorphine)

resulted in Russia's limited array of treatment options for substance use disorders becoming practically nonexistent under lockdown. That these challenges were exacerbated during the pandemic does not change the fact that action could have been (but was not) taken to mitigate them before.

Finally, our interviews indicate that the illicit drug market in St. Petersburg remained relatively stable even as pandemic restrictions disrupted manufacturing processes and supply chains around the world. This resilience may have reduced the risk of drug-related harms by protecting PWID's access to a predictable and familiar drug supply. At the same time, overdose rates in Russia have been rising,[16] and causal mechanisms remain poorly understood. Any fluctuations observed in the US drug market during the pandemic may or may not be attributable to the broader trade impacts of COVID-19 and may or may not be impacting overdose directly. Rather than assuming cause and effect, US policymakers and researchers should dig deeper to identify and mitigate the structural forces (such as drug policy, drug criminalization, treatment access, and systemic racism) that shape the US drug market and the harms it confers.[24]

Much US research on how COVID-19 has impacted people who use drugs has centered on population-level surveillance, such as rates of fatal and nonfatal overdose, emergency medical services or emergency department use, and treatment initiation and retention.[25] Such research is vitally important; yet, the picture it paints is incomplete. If, as seen in St. Petersburg, pandemic disruptions also disrupt structural harms or barriers to care, research is needed to identify and document the ways in which quality of life and general well-being improved for people who use drugs in the United States during the pandemic. We must capitalize on beneficial disruptions to systems that harm and oppress, working to sustain such structural changes as society renormalizes to a postpandemic world.

Furthermore, the pandemic has had direct and devastating psychosocial impacts on the individual level, with as many as 40% of US adults struggling with mental wellness in June 2020.[5] Yet, the case of St. Petersburg demonstrates the need for equal attention to the drivers of pandemic-related challenges stemming from origins that predate the pandemic. A recent systematic review of scientific literature on the impacts of the COVID-19 pandemic on people who use drugs in the United States identified evidence of reduced access to MOUD in jails and prisons, reductions in MOUD initiation by as much as 30%, difficulty accessing necessary services despite receiving buprenorphine via telehealth, and modest increases in the receipt of take-home privileges at methadone clinics (benefiting only ~25% of clinic patients),[25] all despite enormously relaxed federal regulations that reduced barriers to MOUD.[7] These disappointing outcomes suggest that more than MOUD regulation limits access to evidence-based care. People who use drugs in the United States have long faced criminalization, overincarceration, epistemic injustice, racism, stigma, and outright prejudice in their daily lives,[24] and these challenges create durable inequities that no telehealth system or naloxone access program can address.

Pandemic preparedness requires more than institutional readiness for emergency response; it requires us to meaningfully acknowledge and address the systems of structural harms that have been producing health inequities for people who use drugs and other marginalized groups all along. AJPH

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Drug Overdose Epidemic Colliding With COVID-19: What the United States Can Learn From France

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The United States has long faced a lethal drug overdose epidemic, which is now colliding with the COVID-19 pandemic. Overdose rates significantly rose in 2020 compared with 2019, and people with opioid use disorder (OUD) have contracted COVID-19 and experienced significantly greater severity and mortality compared with the general population.[1–4] These deaths are preventable and reflect misplaced policy priorities.

US advocates have long cited France as exemplary for its use of medications for opioid use disorder (MOUD). Comparing the French and American approaches to MOUD availability is intuitive, as France has not detected any big increase in overdose deaths and, before COVID-19, its drug-induced death rates were among the lowest in Europe.[5] The French approach to COVID-19 among people with OUD, and its preexisting robust addiction treatment and harm reduction system, provide examples of more salubrious responses, by combining MOUD with investments in systems of care and social supports that encourage people with OUD to engage with treatment, harm reduction practices, and community-based recovery. Fédération Addiction, a national network of medical-social addiction nongovernmental organizations (NGOs), in collaboration with other national networks of addiction medicine associations (such as Fédération Française d'Addictologie), responded to COVID-19 by partnering with government authorities and local NGOs on the ground to

1. increase naloxone access;
2. extend the refill period for buprenorphine and methadone;
3. accelerate MOUD initiation for new patients;
4. convince residential centers to accommodate substance use without evicting residents, as a harm reduction measure; and
5. provide social support for people who use drugs, including housing for those in need.[6]

This effective response was also feasible because a preexisting national network of coordinated addiction facilities had long combined harm reduction (including syringe exchange and, recently, supervised consumption sites) with MOUD and a public-funded integrated medical-social approach. These previous alliances between a national network of medical-social addiction NGOs, activists, and the French Ministry of Health can be partially explained by the fact that the system of medical and social care is centralized in France. Health policy regarding addiction is indeed decided by the central government in Paris, which makes it easier to achieve common goals between the state and the strong national networks of NGOs to protect the health and lives of people who use drugs during an emergency such as the COVID-19 pandemic. Another explanation for this quick response is that regional health agencies have rapidly increased access to MOUD and to housing for people who use drugs.

This model of government-funded integrated social services[7] has helped to keep the overdose death rate in France far lower than in the United States; the French peak was 7 per million in 1994[8] versus the US peak rate of 220 per million in 2017.[9] Even though a slight increase of opioid overdose deaths was observed in France in 2019,[10] the estimated 450 deaths for a country of 67 million inhabitants (0.67 per 100 000)[11] is still one of the lowest in Europe.[5] By comparison, in 2019, the number of opioid overdose deaths was 21.6 per 100 000 people in the United States.

In the United States, the COVID-19 pandemic is exacerbating preexisting health inequities. US COVID-19 containment measures often make OUD treatment and harm reduction difficult to access, which may trigger a return to substance use through social isolation and make the supply of illegal drugs unreliable, encouraging a shift to more dangerous products.[12]

The decentralized US public health system increases the risks of both OUD and COVID-19. Harm reduction services are separated from clinical services and are often provided by unstably funded NGOs; state and municipal governments in most states outlaw evidence-based harm reduction programs such as syringe exchange and supervised drug consumption sites.[13] The federal government has made some efforts to address OUD in response to COVID-19—for example, allowing the provision of 14- to 28-day supplies of take-home doses of methadone, as well as telemedicine initiation and refills of buprenorphine (but not methadone). Some community-based organizations offer home delivery of methadone, and some local governments have increased funding for naloxone and syringe exchange programs, but these efforts have been patchy and lack federal funding.[14]

In the two decades prior to the emergence of SARS-CoV-2 (the virus that causes COVID-19), the United States saw a paradigm shift in drug policy, from criminalization to medicalization. The recent presidential opioid commission's recommendations, the 21st Century Cures Act of 2016, and the National Institutes of Health's Helping to End Addiction Long-term (HEAL) initiative all call for the expansion of MOUD access, primarily with office-based buprenorphine. The US Food and Drug Administration (FDA) streamlined the approval process for new medications for OUD, and new government funding was made available for public–private partnerships to develop and test new drugs and delivery devices for opioid dependence.[15]

The new US focus on MOUD is a remarkable achievement in a policy landscape long dominated by the War on Drugs, which led the United States to the highest rate of incarceration in the world. However, its pharmaceutical-centered strategy is unbalanced; the bulk of funding is dedicated to drug development and dissemination, with relatively little available to improve health care infrastructure or to provide the psychosocial services essential to reaching the marginalized populations that are now dying at accelerated rates.[16] By 2017, the US opioid overdose rate was five times the rate in 2002 when buprenorphine was first approved for OUD.[9] Without investment in health and social services, medications mostly benefit those who can pay for them: White people are three to four times more likely than Black people to receive buprenorphine for OUD, and most patients pay for buprenorphine out-of-pocket or with private insurance.[1,17]

Since the COVID-19 pandemic began, the United States has seen a significant spike in overdose deaths across all racial and ethnic groups. Furthermore, the Black–White gap in overdose deaths rose significantly: in 2020, Black overdose death rates rose to 36.8 per 100 000, 16.3% higher than the rate for White individuals for the same period.[18] The implementation of pandemic-specific measures regarding access to opioid use disorder was left up to individual states and local governments, as a feature of US federalism and public health decentralization. Simultaneously, the issue of unsafe supply is plaguing US drug markets, such that many individuals who intend to consume heroin face a much higher overdose risk because of the predominance of fentanyl on the market, which also renders treatment of OUD more refractory because of its high potency. So far, two government-sanctioned safe consumption sites have been opened, both in New York City, in response to the epidemic.[19]

THE FRENCH EXAMPLE

France implemented harm reduction late compared with other European countries because, before the AIDS epidemic, a psychoanalytical model of care for people who use drugs predominated. Buprenorphine was disseminated in France in 1996 as part of public health–oriented efforts to prevent HIV infections among people who use drugs.[20,21] In contrast to the United States, French public health officials viewed buprenorphine maintenance as harm reduction and not only as a way to treat opioid use disorder; their original rationale for encouraging buprenorphine use was, first, to reduce HIV infection rates and, second, to allow people who use drugs to abstain from doing so to reintegrate themselves into working society.[20] To achieve this goal, buprenorphine was disseminated largely with the support of the specialized system for free delivery of addiction treatment and its organization of practitioner medicines, which allows patients to have MOUD free of charge.

By contrast, in the US model, buprenorphine is primarily paid for privately and prescribed only by a small percentage of providers, whereas the French system offers buprenorphine free of charge through all general

practitioners, in hospitals, and in drug treatment centers and harm reduction centers.[22,23] More than four out of five people attending addiction-specialized centers or harm reduction facilities in France are now on MOUD.[5,24]

Indeed, France can now be considered a paradox. This country makes possible a coexistence between a repressive policy toward drug use and a strong harm reduction policy focused on MOUD.[15] The French system of allotting punishment and treatment is done through the Public Health Code, which embeds people who use drugs within a health framework. All changes that introduce harm reduction policy, including access to MOUD, have been made possible through public health programmatic laws that reviewed the public health code but not the law on drugs. Despite the repressive law toward drug use, the level of social acceptance of harm reduction is very high in France: 75% of the French population agree that people should be informed about how to use drugs safely and 82% are in favor of free access to sterile syringes for people who use drugs.[25]

The overdose rate in France cannot be attributed solely to medications, but also to their integration with harm reduction and social services. Vigorous dissemination of harm reduction in France since the mid-1990s has led to fewer overdoses.[20] Although high-purity heroin reappeared in French markets in the 2000s, overdose incidence remained low at fewer than 537 cases annually.[8] The North American surge in prescription opioid use in the late 1990s, which later fed heroin and fentanyl markets (in part because of criminalization and drug law enforcement), was not seen in France.

This difference is also in part attributable to the fact that the French National Agency for the Safety of Medicines and Health Products (Agence Nationale de Sécurité du Médicament et des produits de santé, or ANSM) allows much access to buprenorphine for people with opioid dependence but at the same time strongly regulates the risks associated with opioids in the general population. The ANSM prohibits pharmaceutical companies from advertising prescription drugs. Additionally, officials who review newly patented medications for licensing are forbidden by law from interacting with pharmaceutical companies. As a consequence, in France, except for people who have a heroin dependence and who can easily access buprenorphine,[26] it is more difficult for patients with pain to have access to other opioid medicines.

By contrast, since the 1990s, the FDA has increasingly relaxed the rules on pharmaceutical marketing. This lax US regulatory milieu enabled opioid manufacturers to initially target suburban middle-class and rural White consumers in the 1990s and early 2000s.[27] As a side effect, new heroin markets (later replaced by fentanyl) were created as the drug supply underwent a rapid transformation, with effects spreading to other groups: Black men now have the fastest-growing overdose rates[9] and disproportionate exposure to fentanyl.[28]

The French model is not perfect. The national constitution prohibits the collection of racial demographics; therefore, it is difficult to ascertain the degree to which racial inequality affects racial and ethnic minorities' access to harm reduction services and MOUD. Additionally, improvements are needed for the dissemination of drug consumption sites, as they are considered less acceptable by some politicians in the context of drug prohibition. Finally, some social inclusion measures that have been implemented during the sanitary urgency of the COVID-19 pandemic need to be strengthened. Still, France can be considered as a model for the United States to follow, for its publicly funded, easy access to MOUD embedded in harm reduction efforts.[29]

On the other hand, with US overdose and COVID-19 deaths rising to unprecedented heights, the United States urgently needs universal health coverage, colocated harm reduction services, comprehensive trauma-informed mental health care, and peer support for recovery. Sites offering these services should also offer assistance in meeting social needs such as housing and employment (especially amid the eviction crisis), given that the US poverty rate is more than twice that of France, whereas its public social spending is half that of France (10.4% of US GDP vs 23.1% of French GDP).[7] The United States must legalize and carefully regulate currently illicit drugs, and simultaneously fund evidence-based harm reduction strategies—including syringe exchange and supervised drug consumption facilities—and expand social and health care support efforts.[30,31]

The "deaths of despair" analysis gaining purchase in the United States attributes soaring overdose death rates to postindustrial unemployment.[32,33] Yet many leaders overlook the need to expand the social safety net and to focus on deploying pharmaceuticals to address the drug overdose epidemic. The French example demonstrates the need to combine access to medications (and universal health care), harm reduction, and investment in social infrastructure. AJPH

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CONFLICTS OF INTEREST

None of the authors have conflicts of interest to declare.

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How Substance Use Treatment Services in Iran Survived Despite a Dual Catastrophic Situation

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Iran has the highest rate of nonmedical opium use in the world and, for four decades, has been dealing with the negative impacts of the United States' and the United Nations' sanctions, which were scaled up in 2018. Iran was one of the first countries to report COVID-19 and has had five waves of the pandemic so far.

The sanctions and the pandemic have simultaneously exacerbated a severe economic crisis in Iran in the past year. Currently, a range of modalities of treatment and harm reduction services are available in Iran through thousands of outpatient treatment centers, medium-term residential centers, and drop-in centers.

We explain the possible reasons that these services have been able to continue operating despite the dual disaster.

Substance use is a major health problem in Iran. The prevalence of opium, residual opium juice (*shireh*), crystal methamphetamine, hashish, and heroin use in Iran is 150, 660, 590, 470, and 350 per 100 000 population, respectively.[1] Substance use disorder is ranked as one of the top four health burdens in Iran.[2] Addressing this health crisis has required the legalization of a variety of treatments and harm reduction services, the domestic production of opioid medications, available and low-cost opioid medications, available opium tincture with its short induction period, using seized opium to produce opium tincture, online self-help groups, and coordination among government agencies, the private health care sector, and nongovernmental organizations.

DUAL DISASTER IN IRAN

Iran has been dealing with the sanctions the United States established after the 1979 Islamic Revolution. After the renewed and severely intensified round of sanctions in 2018, Iran's gross domestic product declined 4.8%, and the inflation rate increased from 9.6% to more than 30% in one year.[3] This economic situation was followed by an increase in the prevalence of substance use disorders[4] related to social determinants of health, such as low income and unemployment, and a lack of personal coping skills. As we will discuss further, the COVID-19 pandemic and COVID-19 containment policies, including quarantine and social distancing, further compounded these problems, and Iranians have been consuming even more prescribed opioids and sedatives[5] during the COVID-19 pandemic.

We describe the landscape of substance use and harm reduction services currently available in Iran and detail how they have been affected by a dual disaster: the COVID-19 pandemic and the impacts of the economic sanction.

HARM REDUCTION SERVICES IN IRAN

The largest number of patients are served in private outpatient clinics that offer opioid agonist treatment, although abstinence-based residential centers and therapeutic communities are available in the private sector and the government runs compulsory residential centers.[6] In 2018, an estimated 60 000 persons were under methadone maintenance treatment (MMT) while in prison, about 720 000 community residents were receiving MMT, approximately 120 000 were receiving buprenorphine, and about 93 000 were receiving opium tinctures from 1 of 196 government-run outpatient clinics or one of 7029 private outpatient clinics.[6]

Harm reduction services and facilities such as drop-in centers and outreach programs provide needle and syringe programs, low-threshold methadone treatment, condom promotion, and safer sex education. Facilities for homeless or marginalized drug users and antiretroviral therapy for people living with HIV are available free of charge. Also, government-supported women-friendly facilities for sex workers and

other vulnerable women are available in all provinces and most large cities.

IMPACT OF COVID-19 ON SUBSTANCE USE SERVICES

At the beginning of the COVID-19 pandemic, residential addiction treatment facilities were closed, but they later reopened with new rules to reduce COVID-19 transmission, including social distancing, screening, and COVID-19 testing for clients. Personal protective equipment and COVID-19 educational pamphlets were quickly distributed to harm reduction centers in large cities.[7] All 12-step anonymous groups and other self-help groups transitioned to virtual meetings. Finally, clinics were authorized to provide larger take-home supplies of methadone, buprenorphine, and opium tincture for their stable patients.[8]

Although patients did not experience any shortage of opioid maintenance medications, there were fewer psychological services available because of COVID-19 prevention policies and the lack of online services. The price of illicit drugs, including heroin and opium, increased during COVID-19 because of a reduction in supply as a result of border restrictions that affected smuggling.[5] However, the reduction in the illicit drug supply was somewhat offset by the local, legal manufacture of opium tincture for maintenance treatment.

Individuals experiencing homelessness who engaged in substance use experienced the most difficulties during the acute phase of the COVID-19 pandemic, as all parks and public places were closed, thereby restricting access to safe water for drinking and sanitation. In addition, people who injected drugs (PWID) and were in state-mandated residential treatment were released by judicial order to prevent COVID-19 outbreaks in residential care settings, adding to the homeless population. In response, a COVID-19 prevention and control working group, including harm reduction experts, nongovernmental organizations, charities, and government officials, was convened to identify approaches to coordinate services for individuals experiencing homelessness who engaged in substance use in large cities with a higher concentration of PWID.[7]

LESSONS LEARNED

Ultimately, Iran was able to maintain addiction treatment and harm reduction services through economic crisis and the COVID-19 pandemic by adopting the following key practices:

- *Providing a large network of service providers:* Iran has a large network of outpatient clinics, perhaps because there is a high demand for treatment services owing to the high prevalence of addiction combined with the large number of available general physicians and psychologists. This market also increased Iranian pharmaceutical companies' willingness to produce opioid maintenance medications domestically, including opium tincture from government-seized illegal opium supplies, which is much cheaper than imported medications.
- *Maintaining low costs for services:* Overall costs of health services in Iran are very low; in fact, Iran is ranked 130 out of 167 countries on the health care price index, with an index point of 35.59.[9] Thus, the cost of health services for substance abuse treatment services in Iran is also low, making MMT much less expensive than the illegal use of heroin or opium. Methadone is also much less expensive than buprenorphine, and there are seven times more methadone patients than buprenorphine patients in Iran.[10] Moreover, local opium tincture manufacture uses seized opium,[11] which reduces production costs.[12]
- *Reducing the need for harm reduction:* Because of the availability of opioid maintenance medications, in past years the number of PWID decreased and the impact of this is seen in the reduced prevalence of HIV among PWID in Iran.[13] This phenomenon has reduced the costs of harm reduction services because fewer harm reduction facilities are needed. Nevertheless, a high number of these PWID might have been individuals experiencing homelessness, so they need support for more essential needs.
- *Being flexible in take-home dose and opioid drug delivery:* Even before the onset of the COVID-19 pandemic in Iran, MMT patients were able to get their take-home dose from the clinics shortly after induction. After the pandemic began, health authorities allowed clinics to deliver larger supplies of opioid medications.

CONCLUSIONS

Iran's ability to meet substance use treatment and harm reduction needs despite COVID-19 and economic crisis may be instructive to other limited-resource countries. Contributing factors to successfully maintaining the operation of substance use treatment and harm reduction services during the COVID-19 pandemic include coordination among a number of public-, private- and nonprofit sector agencies. AJPH

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The Crucial Role of Black, Latinx, and Indigenous Leadership in Harm Reduction and Addiction Treatment

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In 2020, accelerated by the COVID-19 pandemic, Black Americans and Native Americans died of substance overdoses at higher rates than White Americans, and Latinx overdose deaths increased at record rates.[1,2] These deaths were closely linked to inequalities in employment, housing conditions, targeted law enforcement, and disproportionate exposure to unregulated illicit drug supplies[3–5]—making overdose prevention an urgent racial justice issue. We argue that Black, Latinx, and Native American harm reduction and substance use treatment leaders are needed to promote health justice for people who use drugs. We draw on our collective experiences as Black and Latinx directors of harm reduction and addiction treatment programs to illustrate that overdose prevention and the fostering of well-being among people who use drugs require more than technocratic health interventions: they require a community-based movement that addresses root causes of overdose by fostering inclusion, cultivating social networks of support, meeting basic needs beyond drug use, and organizing politically for health justice.

In keeping with Chandra Ford's application of critical race theory to public health,[6] we illustrate the unique contributions of Black and Latinx practitioners who (1) center the perspectives of racialized groups to inform harm reduction and substance use disorders (SUD) treatment initiatives; (2) use personal, experiential knowledge to relate and build trust with service users; and (3) inform research and practice with their own lived experiences as part of racialized populations. Following the critical race theory concepts of "centering in the margins" and drawing on "experiential knowledge," we use examples from our own practices of how the structural racism that limits mainstream SUD programs can be overcome through community engagement. Experiential knowledge is essential for redressing systemic exclusions of Black and Latinx practitioners from substance use interventions because data on the uniqueness of our approach and on the nature of our exclusion are, by definition, omitted from mainstream health research measures. We also respond to recent calls to "decolonize" health interventions by replacing Eurocentric, hierarchical approaches with community-centered models that better support the care and well-being of racialized people.[7]

Our call for health justice responds to the growing recognition of overdose inequalities as a reflection of structural racism.[8] For six decades, Black and Brown Americans have faced punitive drug policies and law enforcement, as well as demonization in the media as inner-city "junkies" and "crackheads," whereas the more recent response to opioid use in predominantly White communities has included bipartisan calls for treatment and overdose prevention.[9] We have observed that harm reduction and addiction medicine have gained significant financial and political support as a result of this recent attention to opioid use and that few of the supported efforts are led by Black or Brown practitioners. We reflect on our work as Black and Latinx practitioners with many decades of experience responding to the harms of drugs and drug policy as racial justice issues.

We reflect on how our formative experiences growing up in Black and Latinx communities led us to community

solidarity as a SUD intervention tool and enabled us to address internal resistance to harm reduction among Black and Latinx community members. Our experiential knowledge informs our approach to harm reduction not only as a public health technique but also as a participatory and equity-focused social justice intervention. Given our observation that there are few people of color leading substance use and harm reduction programs, we end with concrete steps that should be taken to foster more Black, Latinx, and Native American leadership in harm reduction and community-engaged treatment initiatives.

COMMUNITY EXPERIENCES AND EMPOWERMENT

Our formative experiences in communities and families of color have been essential in shaping individual worldviews, fostering an awareness of racial justice as imperative. This meant, for instance, a parent's involvement with the Black Panther Party and having family members affected by an SUD (A. J.) or having a pioneer Black health care worker as an ancestor and assisting her in feeding unhoused community members (H. E. T.).

Our careers as leaders of grassroots community interventions were informed by assessments of community needs and organizing alongside community members (A. J. and H. E. T.). The impact of family members' roles in providing community members with food (P. G-Z.); growing up in communities where heroin use was rampant and witnessing drug-related deaths unfold in 1970s Brownsville Brooklyn, New York (J. T.); and being influenced by the political awakening of the civil rights movement and the response to the war in Vietnam (J. T.) propelled us into harm reduction and grassroots organizing work.

Based on our unique experiences as members of the most affected communities of drug-related harms, we identify with marginalized Black and Latinx communities—our personal wellness is tied to that of our communities—and place justice and care for community members at the center of SUD interventions. This conceptualization allows socially just, inclusive ideas and interventions that empower a community from within. For example, hiring people with lived experience who reflected the community they served fostered Black community involvement in a Miami, Florida, syringe services programs, where previously 90% of individuals utilizing the program's services were White despite 90% of the community served being Black (H. E. T.).

INSTITUTIONAL SUPPORTS AND BARRIERS

A critical element to all of our work in building successful community-based efforts was receiving adequate institutional support. The experiences of working under majority White leadership of a public clinic serving a predominantly Black and Latinx population who resisted engaging community leaders to improve services and did not act on innovative proposals (A. J.) and difficulties implementing evidenced-based interventions in Mexico (P. G-Z.)—where there is much stigma surrounding HIV and substance use—are examples of inadequate institutional support.

By contrast, a supportive institution provided protected time and flexibility to a resident to pursue meaningful legislative change (H. E. T.), as a key factor in the ability to advocate legislation in Florida to allow syringe services programs in Miami and, eventually, statewide. Importantly, institutional leadership appreciated the worth of this work in community health and allowed the use of educational and training hours to work toward legal reform (H. E. T.). Currently, the University of Miami supports overhauling the SUD curriculum and reframing it through a harm reduction lens. Implementation of syringe services programs in Miami has likely decreased the morbidity and mortality associated with SUD in those communities and provides physical space for the introduction of psychosocial interventions in efforts to promote social justice. This particular experience illustrates the capacity of institutional support and collaboration to promote health equity and address community-specific needs. Institutions can and must be proactive in supporting Black and Latinx leaders who advocate policy and community interventions.

BLACK AND LATINX LEADERS

The SUD interventions we designed illustrate a key difference from mainstream services in that they draw from our personal lived experiences and from the expertise of communities most affected by SUD through the practice of building alliances with local organizations, community leaders, and key stakeholders. This allows us to design programs that are embraced by local communities and, ultimately, prove to be more efficacious than standard programs. Engaging with faith-based organizations in Black communities in designing SUD interventions has proven successful (A. J. and M. M.). This meant engaging in a listening tour with community leaders, faith leaders, individuals with lived experiences, nonprofit directors, and peer specialists, and talking to them about where the

community was in need of interventions (M. M.). In Tijuana, Mexico, this looked like reaching out to unhoused people by providing care and learning about their needs, drawing on many years of working as a general practitioner and as an HIV provider to understand the needs, barriers, and gaps in accessing care for communities in the border city (P. G-Z.). This work led to the operation of a free and mobile clinic to remove the barriers to care for unhoused patients (P. G-Z.).

This level of community engagement produces knowledge on many levels. Conversations in the community became the framework for research that expanded beyond SUD services to embrace the community's need for freedom and well-being and to address social and structural determinants of health (M. M.). By expanding the conversation to include an understanding of historical root causes of substance use, deeper trust was built with communities of color surrounding the purpose and goals of an SUD program (M. M.). Centering the voices of the community members and partnering with them on the design of interventions, we approach providing SUD services through a community-based participatory research methodology, which is modeled on community partnership and collaboration at each step of the interventional process, including formulation and implementation of the intervention and analysis of outcomes.

ADDRESSING COMMUNITY RESISTANCE

A social justice framework to SUD and harm reduction programs must address Black and Latinx community distrust of health interventions from medical institutions, which stems from current and past systemic exclusions and abuses enacted through traditional health care system approaches. Although these barriers are inherently structural in nature and rooted in deep histories of abuse against Black communities in the United States, we exemplify how powerful individual initiatives can be in changing perceptions of SUD programs. It often takes extra investment to gain the trust to reach the Black community, who were not open to participating in a syringe exchange program until inclusive hiring practices were adopted and Black providers became a regular presence in program sites (H. E. T.).

The leaders of churches and other community-based organizations have also been critical in fostering engagement in nontraditional settings. Classically, the church has been a central institution of support for Black people in the United States, along with other community organizations that are seen as safe places, trusted places. Guided by a community advisory board made up of individuals with lived experience and leadership expertise spanning domains of faith, social services, and community organizing, a team at Howard University is implementing addiction assessments and services in a local church and in partnership with a trusted social services organization (M. M.). For community support, it was essential to promote harm reduction as a social justice issue not only concerned with mitigating substance use–related harms but also meaningfully improving the overall health and well-being of marginalized communities.

RECOMMENDATIONS

The models of care for SUD and harm reduction that Black and Latinx leaders have developed, based on their own social position and experiences, are uniquely focused on social connections, community inclusion, and, ultimately, advocacy for a more just social order. US health agencies should proactively support a social justice approach to SUD and harm reduction interventions to turn back the tide of record overdose rates through community-focused and institutionally supported efforts and policies. To this end, we recommend the following:

1. Invest in educational pipeline gaps to support BIPOC (Black and Indigenous people and other people of color) trainees in harm reduction–oriented fields in medicine, law, and social work, among others.
2. Medical and research institutions should provide funding, protected time, and mentors for BIPOC students and trainees pursuing innovative work to support the health and well-being of Black and Latinx people who use substances.
3. Promote harm reduction and treatment approaches informed by social justice, structural competency,[10] and the social determinants of health in mainstream clinical education and practice, with curriculum development led by BIPOC faculty, community members, and people with lived experience.
4. Medical and research institutions should build a national network for Black and Latinx harm reduction leaders through funded training grants, fellowships, and early career stage. mentoring programs to support the development of Black and Latinx leadership in the field.
5. Health systems and research institutions should adopt a community-engaged approach as the gold standard; one that centers

community leaders, peers, and community-based participatory research in harm reduction initiatives.

Together these initiatives can shift harm reduction efforts nationally so that they are informed by the lived experiences of people in racially marginalized communities and guided by social justice as the ultimate goal of intervention. AJPH

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Why Do Different Forms of Knowledge Matter in Evidence-Based Drug Policy?

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In the introduction to this special issue, the editors introduce the reader to research methodologies and analyses not commonly presented in mainstream health policy literature. Intersectional analysis, for example, is a means of drilling down into how the multiple social categories a person occupies (e.g., gender, class, ethnicity) may influence their experience of inequality. When an intersectional framework was applied to US Behavioral Risk Factor Surveillance System data in 2018 and 2019, for example, gender minority Blacks were identified as having distinctly poor health experiences compared with cisgender Black and other non-Black gender minority populations.[1] Consequently, health policies and monitoring programs that purport to advance health equity must account for multiply marginalized populations such as these.

Looking at drug policy through an intersectional lens reinforces the importance of macrolevel social determinants as they interact with meso- and microlevel factors to influence drug harms and mediate policy and intervention effectiveness[2] as well as the role of power in excluding certain perspectives, framings, forms of knowledge, and experience.[3] Ethnographic, social–scientific, and community-based research methodologies challenge power imbalances by favoring the embodied knowledge of those with lived experience, knowledge gained by direct observation and study of the particular history and economic and political systems in a given location,[2] as opposed to forms of professional expertise favored by public authorities seeking to govern society at a distance.[4]

This special issue specifically highlights these diverse forms of research. Seven of the articles present ethnographic research, qualitative interviews, or participant observation (Boyd et al., p. S191; Davidson et al., p. S166; McNeil et al., p. S151; Nguyen et al., p. S182; Friedman et al., p. S199; Lopez et al., p. S173; Houborg and Jauffret-Roustide, p. S159), and six are based on community-based interventions (Hansen et al., p. S109; Nguemeni Tiako et al., p. S128; Hughes et al., p. S136) or forms of community action (Simon et al., p. S117; Hansen et al.; Jauffret-Roustide et al., p. S99). Why, however, do the alternate ways of knowing presented in this special issue matter? What does this body of work offer when compared with the technocratic stance associated with most mainstream research approaches? To answer these questions, we critique what Kari Lancaster refers to as the "evidence-based drug policy endeavour" and the types of knowledge this approach favors.[5]

THE KNOWLEDGE THAT WE PRIVILEGE

As with other policy areas, the drug policy field has jumped on the "evidence-based" bandwagon.[5] In keeping with a neoliberal economic and political paradigm, in which issues associated with drug use are located as "problems" or "risks" carried by individuals rather than attributed to structural inequalities, epidemiological, biomedical, and psychological perspectives have governed what evidence is and how it is produced.[2]

It is unsurprising, therefore, that gold standard evidence in drug policy is often predicated on findings from randomized controlled trials or systematic reviews in parallel with evidence-based medicine.[5]

DRUG POLICY

Drug policy is contentious, with conflicting moral positions and values,[5] and empirical research designs such as randomized controlled trials and systematic reviews are thought to neutralize stakeholder subjectivities, leading to robust and effective interventions. A more critical reading of evidence-based drug policy, however, highlights the narrow repertoire from which politicians tend to draw their interventions, heavily influenced by international drug control conventions.[6] The impact of

these so-called supply-side drug policies is the effective criminalization of people who use drugs, which Lopez et al. point out translates into policing that is intimately connected with negative health outcomes and premature death. With an unchallenged presupposition that some interventions, such as drug consumption rooms, are off the table (Jauffret-Roustide et al.; Houborg and Jauffret-Roustide; Nguyen et al.), the objectivity of evidence-based drug policy is already in question.

Furthermore, by favoring evidence-based policy that relies on research methods designed to remove bias between comparison groups, researchers run the risk of rendering invisible how racialized enforcement of drug laws has affected Black and Latinx communities. Lopez et al., for example, highlight issues such as racially charged and punitive applications of drug laws that criminalize Black and Latinx communities but medicalize White people who use drugs. The outcome, then, is a disengagement from and distrust of statutory harm reduction interventions, which are perceived to be linked to unjust drug laws, as opposed to those embedded in grassroots community action (Simon et al.).

TECHNOCRATIC APPROACHES

A technocratic approach implies an expert-led, rational, robust, and transparent policymaking process within governance structures.[5] In reality, policymakers are able to hide behind the veil of technocracy and be political–tactical in selecting evidence, use evidence to justify action or inaction on an issue, control processes of knowledge production to create policy-based evidence, or systematically exclude specific stakeholders or forms of evidence altogether.[7] In other words, technocratic drug policymaking is not immune to exercises in power to promote set agendas while claiming ideological neutrality.

For example, Jauffret-Roustide et al. take a sociological perspective on the implementation of drug consumption rooms, a robust evidence-based harm reduction intervention, by comparing its implementation in three countries with very similar social and health policies, the United Kingdom, Denmark, and France. In all three countries, the criminalization of people who use drugs, a moral standpoint thus far resistant to the supposed neutralizing effects of evidence, prevails. Yet, France and Denmark have implemented sanctioned drug consumption rooms, whereas the United Kingdom remains resistant to this intervention.

Looking through the lens of "generous constraints," a term coined by Gomart to mean constraints that act as pivot points for action or change rather than simply obstructions,[8] Jauffret-Roustide et al. show that repressive drug policies can create conditions for resistance and transformations, which activist networks of people who use drugs can capitalize on. In other words, the missing ingredient of technocracy or expert-driven approaches to the implementation of morally disputed or controversial interventions such as drug consumption rooms may well be community mobilization and drug user activism.

THE ROLE OF SCIENCE IN DRUG POLICY

Policymakers tend to prefer research data that simplify the understanding of complex realities. Being able to get a clear message across to the public helps politicians control the policy narrative, produce and set boundaries on the associated problems, and define possible solutions.[9] The range of policy solutions not only needs to have some science behind it but also must be affordable, timely, acceptable, and in keeping with the national mood, vested interests of associated policy coalitions, and legislative turnover.[9] Sound science, therefore, is at risk for becoming a sound bite to promote more easily understood and politically safe policies (e.g., investing in police and prisons to keep society safe) rather than nuanced, nonbinary, yet more equitable and effective ones (e.g., investing in structures that care for vulnerable citizens and addressing structural inequalities underpinned by racism; Carroll et al., p. S123; Suen et al., p. S112; Boyd et al.; Lopez et al.).

Consequently, science in policymaking ends up being about quantification through cost–benefit analysis or risk evaluation, narrowing the scope of an issue to a single frame.[10] Such reductionist approaches may exclude alternate framings of a policy problem, effectively disadvantaging some (e.g., Black and Latinx communities, who form the majority of the US prison population) to benefit others (e.g., the carceral economy and their lobby groups; Lopez et al.).

CONCLUSIONS

Ultimately, the issues raised here link directly to the inadequacy of the knowledge that we privilege when delivering evidence-based drug policy. For example, our notion of experts and expertise will vary depending on whether we see harm reduction as primarily a technical public health intervention or a grassroots social movement among people

who use drugs responding to the harms coming from existing legislation (Lopez et al.; Jauffret-Roustide et al.). With the former, the biomedical model dictates that we see knowledge in terms of at-risk individuals, high-risk behaviors, and disease patterns and that we see that decisions on service provision be made by epidemiological and public health experts.[11] The latter perspective, on the other hand, favors a social approach, which validates experiential and contextual accounts of reality (Lopez et al.), permitting collaborative interventions and policies to address structural inequities that underpin drug harms.

Finally, it is not simply methodological pluralism that is required to improve drug policy. Rather, researchers and policymakers must identify the questions that are meaningful in improving the health and life expectancy of people who use drugs and apply appropriate knowledge and research methods to answer those questions. The knowledge we bring in this special issue challenges drug policymakers to seek outcomes, such as community empowerment, mobilization, and development, and reductions in stigma and structural and intersectional inequalities. It focuses on alternate ways of knowing to challenge the systematic exclusion of certain knowledge traditions and to include typically marginalized worldviews and perspectives. In doing so, we hope to contribute to the disruption of unequal power relations and their undue influence on what constitutes valid knowledge in drug policy formulation. AJPH

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Federal and State Regulatory Changes to Methadone Take-Home Doses: Impact of Sociostructural Factors

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Methadone is an effective medication to treat opioid use disorder.[1] Access to methadone take-home doses (THDs) is restricted by federal and state guidelines. Before the COVID-19 pandemic, patients were obligated to attend opioid treatment programs (OTPs) daily because of concerns about the safety of THDs. Eligibility for 14- or 28-day THDs required daily visits over one or two years, respectively. Federal regulations for THDs changed during the COVID-19 pandemic, allowing OTPs to initiate or extend THDs.[2] Emerging data suggest increasing access to THDs does not increase adverse events.[3–5]

In March 2020, the Substance Abuse and Mental Health Services Administration (SAMHSA) enacted exemptions allowing increased THDs to mitigate severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection risk by decongregating OTP settings. Patients were allowed 14- or 28-day THDs, on provider discretion, regardless of treatment length. However, implementation varied across OTPs. We conducted three independent studies on the expanded THD exemptions to assess implementation and impact on patients and providers in three geographically diverse OTP settings. We report on lessons learned from the implementation of the THD exemptions in three vulnerable population groups in Tennessee, California, and Puerto Rico exposed to differing sociostructural factors that influence treatment access: OTP financial structure, housing status, and incarceration.

FINANCIAL STRUCTURE IMPACT

In a multisite, mixed methods study examining the experiences and outcomes of individuals with opioid use disorder who received increased THDs (study 1), we noted that the financial structuring of one OTP influenced the implementation of regulations during COVID-19. We provide observations from October 2020 to March 2021 and comments from a medical director of a for-profit OTP in Tennessee. Without daily dosing, some for-profit OTPs faced financial loss from decreased overall reimbursements because of reduced clinic visits.

Several months into the COVID-19 pandemic, some OTPs rolled back THD exemptions despite public health and social-distancing guidelines. One medical director stated, "They [the OTP] are rolling back the COVID-19 exemption even though the state hasn't directed OTPs to do so." The director noted that the return to pre–COVID-19 guidelines was primarily attributable to financial loss and that it negatively affected patient safety: "We weren't able to limit the volume of patients in the clinic or keep them socially distanced due to [staff] shortages and patients not being given take-homes." Many clinicians resigned, some out of frustration with the OTP leadership in limiting THDs. "They [clinicians] felt it was unconscionable to have a long line of patients

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waiting out the door, down the block, not socially distanced in the midst of a pandemic."

INCREASED AVAILABILITY OF HOUSING IMPACT

We conducted a qualitative study in California to assess the impact of COVID-19–initiated housing interventions on THD expansion with 20 patients and 10 clinicians at a single OTP in San Francisco from August to November 2020 (study 2). Patients reported previously experiencing homelessness and received housing through COVID-19 hotel placements offered by the city, affording the opportunity for THDs. One patient had been stable in methadone maintenance treatment (MMT) for 17 years but had never received THDs because of unstable housing. Another patient emphasized the importance of housing to her recovery and how COVID-19–related housing interventions were helpful.

Patients new to THDs also faced challenges. One participant described being expelled from residential treatment for not immediately notifying staff about her new THDs (Box 1). Hotel placement was available only to those who met strict eligibility criteria; those who were younger and without health conditions still could not access THDs because of lack of stable housing. Additionally, OTP providers discussed how providing THDs for those living in COVID-19 hotels offered safer storage compared with shelters (Box 1). Providers said THDs also offered patients more flexibility and autonomy in treatment. Providers reported that without housing, success in treatment was difficult; patients with stable housing were better able to engage in care. Although providers were initially concerned about potential adverse events

BOX 1—Patient and Provider Quotes on the Intersection of COVID-19 Housing Interventions and Methadone Treatment at an Opioid Treatment Program in San Francisco, CA

Patients who received housing through the shelter-in-place hotels found housing favorable. Housing allowed stability, which increased the likelihood of methadone treatment stabilization.
Participant A: "Very much [like the Shelter in Place Hotel]. If I had to pay rent I'd pay rent. . . . I leave every day, about 12:30, go dose, and then I stay outside until dark. . . . I'm even thinking of maybe going to work at Amazon."
Participant B: "[The Isolation and Quarantine Site is] very respectful and [has] no noise. The reason I like it there: it's small. The space is small but I like that I don't have to buy toilet paper. They supply the toilet paper. They give us dinner. . . . It's nice, the rooms are nice; you got your own bathroom, a sink, a closet. It's nice."
Participant C: "I think the biggest thing is housing stability. A lot of people have unstable housing. I had unstable housing at that point, so the fact that I have a place to live, that's like—I've been in it for a while, I'm gonna be in it for a while. I'm not worried about next month's rent, that kind of thing."
Patients new to methadone take-homes also faced challenges.
Participant D: "I got kicked out of the other transitional housing [because of not reporting my take-home doses], which was something that really upset me too. Because they knew that even though the pandemic was happening, I was one of the only residents there that was really making an active effort to look for a job. And I found one. . . . Like I'm actually trying to make a contribution here around the household and you're going to get rid of me because of one mistake. And it was just very heartbreaking."
Providers perceived how providing COVID-19–related housing through hotels for patients experiencing homelessness could offer new opportunities for methadone take-home doses.
Provider A: "[Patients in shelter-in-place hotels] are now in a secure location. They're not in a place where, like in the shelters, where they could get rolled for their methadone as easily. They can store methadone in their room, pull the door closed and it's locked. . . . People who are using methadone are using it to support and maintain their own opioid use disorder. And if you have it set up so that people have the opportunity to do what's best for themselves, they usually do take advantage of it, so that part's good. So we have been able to [give] people [methadone] who were placed in SIP [shelter-in-place] hotels who otherwise would never have met the criteria for take-homes."
Provider B: "These are people who maybe didn't have [take-homes] before, and so you want to just make sure it's gonna work. . . . And if they do okay, then you feel really good. Like, okay I can give you more. . . . You have empiric evidence that they have handled take-homes safely. . . . So we have felt very comfortable taking those people and then giving them [take-homes] afterwards."
Providers witnessed how COVID-19–related housing through hotels could lead to periods of treatment stabilization and increase recovery for patients.
Provider C: "They have time to reflect, stop using, and come out and really not want to go back to it. There is one client in particular who, she was drinking consistently and using [drugs]. She was COVID positive and went into a quarantine hotel. She stopped drinking [alcohol] and stopped using [drugs]. . . . It's something she wanted to do but [getting quarantined in the hotel] really forced her into it, and now she's doing really well."
Provider D: "Minus all of the sickness and death that this pandemic has caused, it has pointed out a lot of things that I think a lot of people in our field have known for a long time. Like if people don't have food and housing, they can't possibly focus on higher level needs, and it's happening now in practice."

associated with expanded access to THDs, these had not occurred.

INCARCERATION STATUS IMPACT

In a study in Puerto Rico, we examined COVID-19 methadone regulations in a prison setting (study 3). We report on MMT program adjustments to avoid pre- and postrelease disruptions in care. Before the COVID-19 pandemic, daily methadone doses were transported from the OTP to the prison MMT program. At release, participants register in the corresponding community-based OTP to receive services. In February 2020, 88 incarcerated men were enrolled in the MMT program. Because of COVID-19, admissions were postponed until October 2020. Participants were provided with guidance on COVID-19 prevention measures, and daily delivery and dispensing of methadone by the OTP staff was discontinued. One week's worth of THDs was supplied to the prison MMT programs and dispensed by a prison nurse. Other health services were sustained through telemedicine.

As of September 2020, 33 participants had been released after sentence completion. To assist with reentry, THDs were prescribed at release to facilitate service connection to community-based OTPs. All participants attended the OTP within several days. At a 30-day follow-up, participants continued to engage with community OTPs and did not experience adverse outcomes from THDs.

SUSTAINABILITY

Across all three studies, we observed how expanded access to THDs affected patient access to care. Furthermore, our notes and observations underscore the influence of structural factors in implementing exemptions across various treatment settings, geographical location, and patient populations. As we continue to face an ongoing public health crisis with both COVID-19 and increasing rates of drug overdose deaths, there is a need to maintain exemptions for THDs. Although SAMHSA recently announced a continuation of the THD exemption policy,[6] it is unclear whether these will remain indefinitely. Our three studies highlight the need for more research to assess the role of OTP financial structures on THD policies, housing as a barrier to MMT stabilization with THDs, and treatment access and transitions to community-based OTPs for persons released from incarceration.

Future research should explore financial support initiatives for private, for-profit MMT programs because of dependence on billing for patient encounters given that they constitute nearly half of OTPs in the United States. Policy recommendations include expanding coverage, addressing out-of-pocket costs, increasing provider reimbursement, and incentivizing system integration.[7,8] Housing requirements should be reconsidered, as this may challenge, instead of facilitating, treatment stabilization. Furthermore, efforts to minimize housing disruptions, including permanent extensions of housing access made available during COIVD-19 and medical–legal partnerships that prevent evictions, play critical roles in accessing THDs. Finally, further research is needed to understand the impact of varied state OTP regulations among persons released from prison on MMT. This could inform best policy recommendations to ensure treatment connection to community OTPs for THDs among an often neglected population.[9]

PUBLIC HEALTH SIGNIFICANCE

The COVID-19 pandemic allowed us to explore the impact of increasing THDs for persons with opioid use disorder. We also observed factors that influence provider decisions on THDs, such as OTP financial structures and housing. Housing requirements for THDs are a barrier to treatment stabilization for patients experiencing homelessness who may otherwise not engage in treatment.

The pandemic's unique circumstances facilitated practices enabling uninterrupted care and coordinated transition to community services for incarcerated populations. These challenges and opportunities inform a public health agenda to better understand how THD exemptions affect patient outcomes, safety from overdose, and client-centered care. AJPH

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Research Opportunities That Maximize Public Health Impact on the Opioid Overdose Epidemic

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Ending the overdose epidemic will be difficult, but it is possible. The research necessary to help end the epidemic must (1) address the underlying causes of the overdose epidemic; (2) generate solutions that are informed by the perspectives of, and responsive to the needs of, the people who are at highest risk in this epidemic; and (3) identify and engage the health systems and social agencies that can implement solutions. Research that does not reach these goals is unlikely to be sustainable or have a meaningful effect on public health.

In this editorial, we suggest that to help end the epidemic, research needs to focus on multiple determinants of the opioid epidemic, especially structural population–level factors. Research must complement the ongoing work that is focused heavily on individual-level factors. Research needs to involve a range of community stakeholders so it can be responsive and sustainable; it must assume a person-centered approach that includes an examination of harm reduction interventions and takes into account related research. We also highlight some of the initiatives developed by the National Institutes of Health (NIH), including the National Institute on Drug Abuse (NIDA), to address structural racism and its role in the opioid epidemic, substance use more broadly, and related public health challenges.

RESEARCH PRINCIPLES

As a first principle, to help with the overdose epidemic, research will need to recognize and address the multiple determinants of substance use disorders (SUDs), the evolving nature of the epidemic, the social and racial inequalities that have contributed to the acceleration of overdoses among Black, Latinx, and Native American populations, and the role of prevention. The role of structural racism in biomedical research and in the operation of the health care system will also need to be carefully examined.

At the individual level, SUDs can be conceptualized as developmental disorders in which certain risk factors contribute directly to risk but often also contribute indirectly by increasing the likelihood that an individual experiences other risk factors later in life that create a risk cascade.[1] Individual-level risk factors for SUDs are readily acceptable to clinicians, as they are easy to recognize and often amenable to clinical interventions. Yet, a growing body of research, much of it conducted by contributors to this special issue of *AJPH*, has demonstrated that a conceptualization of SUDs as a set of disorders caused by individual-level risk factors is too narrow.[2–5]

Although individuals have multiple social identities beyond their drug use (e.g., they are parents, workers, and friends), they live in communities, not in isolation, and are influenced by structural and environmental factors, such as access to education, employment opportunities, housing policies, stigma, crime, and discrimination. The different identities of individuals intersect but can all be affected by the stigmatization of drug use and its resulting discrimination. Furthermore, different communities coexist in urban spaces, and the needs and preferences of urban, suburban, and rural communities can differ, highlighting the need for a variety of approaches to be responsive to the needs and preferences of the diversity of individuals who use substances or have an SUD. The intersection of these structural factors with racial segregation and inequalities suggests a need for research employing new and wider-ranging approaches to the overdose epidemic, including a larger role for prevention of SUDs and overdose.[6]

Defeating the overdose epidemic will require addressing the range of factors that contribute to the risk of SUDs and overdose. Thus, a second principle is

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that, to be sustainable and responsive to end users, research should engage a broad range of stakeholders, as recently achieved by the National Academy of Medicine Action Collaborative on Countering the US Opioid Epidemic.[7] To date, much of the research has focused on interventions at the individual level, particularly medications for opioid use disorder (MOUDs).[8] This line of research has been successful in demonstrating the efficacy of MOUDs, but its public health impact has been constrained because fewer than a third of individuals with opioid use disorder receive MOUDs during the course of a year.[9] A natural next step in increasing research's public health impact is to identify barriers to access to MOUD and develop new, more accessible models of treatment delivery.[4–7] Beyond access, there is also a need to improve retention in MOUD treatment. Interventions that increase retention in MOUD treatment would facilitate the continued benefit from these medications as well as other services often available to individuals in care.

A third principle is that research should be person centered. Although some individuals are interested in receiving MOUDs, other help-seeking individuals may not be when they enter the health system.[9] Research that generates the necessary evidence base for alternatives to MOUDs could help expand the number of individuals who benefit from interventions for opioid use disorder. For some patients, alternative approaches, including harm reduction strategies, may serve as a transitional step as their motivation to use MOUDs increases, whereas others may see alternative approaches as a more enduring intervention for their SUD. This special issue presents some examples of these approaches, such as supervised consumption sites and syringe exchange programs, as well as approaches related to social inclusion and social justice. The legality of these models may vary by jurisdiction. This in turn may require developing and evaluating different adaptations of the models to make them acceptable across locations.

STRUCTURAL POPULATION–LEVEL FACTORS

Structural factors operate at multiple levels by modifying the risk of drug use and transition to a SUD (e.g., level of employment, drug availability, stigma and discrimination), influencing the legal treatment of individuals who use drugs (e.g., criminalization of drug use) and determining the types of treatment that are legal and available (e.g., medication treatment, contingency management, harm reduction approaches). For example, people who are unemployed, live in neighborhoods with high levels of substance use, have unstable housing, suffer stigma or discrimination, or experience other types of stress are likely to relapse into substance use regardless of the treatments they receive.[1] At the same time, whether drug use is considered predominantly a legal or a medical problem and whether harm reduction approaches are available influence care seeking and delivery.

Research on structural factors may need to address two complementary aspects at the individual patient and population levels. At the individual patient level, more systematic evidence is needed regarding the services required to maintain the health of patients and reduce their risk of relapse.[5–7] Some relevant interventions include use of peer navigators, social prescribing (so that social needs are addressed as a part of the treatment plan), and colocation of SUD services in community organizations offering support networks and services. To ensure that these services meet the needs of as many people as possible, it will be important to identify which interventions are most effective for the treatment of SUDs and which can safely be considered of lower priority.

At a population level, there is a need for research that informs social policies to eliminate structural factors that increase the risk of SUDs.[10] Many risk factors, such as access to education, childcare, and housing, act at levels outside the formal health care system.[5,6] To address these risk factors and identify relevant data, it may be necessary to engage researchers and policymakers in traditional social policies and social welfare areas. Many structural risk factors for the overdose epidemic disproportionally affect underserved minorities, such as lower educational and labor market opportunities, higher rates of food insecurity and housing precarity, greater stigma and discrimination, and lower access to treatment and preventive services. Addressing them should help decrease SUD-related health and health care inequities. Although addressing social determinants of health remains challenging in the current health care system, some promising directions have been suggested or are already being tested.[11] Making substantial progress may require a combination of approaches to improve the socioeconomic conditions of these communities, develop and test sustainable evidence-based approaches tailored for these communities, and increase their access to interventions.

Research that can help end the overdose epidemic will need to be

implemented and sustained.[4–6] Because research agencies do not have the funds to support interventions beyond the period of the grant, it is the role of other public agencies and organizations—such as public health insurance programs, state and local health departments, and social service agencies, which can be seen as end users of this research[11]—to implement research findings in a sustained manner. Involving them as early as possible in research and evaluation can increase the likelihood that new interventions will be supported in an ongoing manner.

The complex and evolving nature of the opioid epidemic suggests a need for an ongoing dialogue between researchers and the end users of research,[12] in which patients and health systems identify problems that should be prioritized for solutions and researchers help to generate systematic knowledge to solve them.[4–6,11] The concept of a learning health care system is often applied to relatively closed systems or a family of systems, such as the Justice Community Opioid Innovation Network, an NIH-funded partnership between researchers, local and state justice systems, and community-based treatment providers to test strategies to expand effective treatment and care for justice-involved individuals with opioid use disorder. This partnership ensures that research is relevant to and implementable by the communities in which it is conducted, which maximizes the likelihood that the findings will be incorporated into routine practice.

This special issue shows how this type of partnership between researchers, clinicians, and communities as well as the concept of a learning health care system can be extended to international settings. The concept of a learning health care system could also be extended to include policy research, so that programs developed to end the opioid epidemic are informed by research findings and evaluated with research methods to refine them for future iterations. This extension would allow the examination not only of what is possible now but also of what could be possible in the future.

INITIATIVES ADDRESSING STRUCTURAL RACISM

To advance many of the areas we have described, the NIDA and the NIH more broadly are taking steps to better understand and intervene in social determinants of health, conduct research on community services and harm reduction, and eliminate inequities in substance use treatment and outcomes. For example, the NIH has established the UNITE initiative "to identify and address structural racism in the NIH-supported and the greater scientific community."[13] As part of its mandate, this initiative will perform a broad, systematic self-evaluation to delineate and change elements and practices that perpetuate structural racism and lead to a lack of diversity, equity, and inclusion in the NIH and the external scientific community.

The NIDA's Racial Equity Initiative seeks to identify areas where there are known inequities based on race/ethnicity and where research has the greatest potential to reduce those disparities.[14] Consistent with these goals, the NIDA recently issued a call for administrative supplements to support research on health equity (NOT-DA-21-044).[15] The NIDA also published a funding opportunity announcement (RFA-DA-22-036)[16] for research on the impact of prevention strategies that actively address social determinants and that intervene at multiple levels to reduce the risk of opioid misuse, polysubstance use, risky substance use, and associated outcomes such as injuries and overdoses. Some other relevant funding opportunity announcements include Accelerating the Pace of Drug Abuse Research Using Existing Data (PAR-DA-19-368)[17] and Epidemiology of Drug Abuse Notice of Special Interest (NOT-DA-19-066).[18] As UNITE and the NIDA's Racial Equity Initiative continue to develop, there may be additional funding opportunities or delineations of related research priorities.

CONCLUSIONS

In summary, although the opioid epidemic is multidetermined, evidence-based interventions have tended to concentrate on a narrow set of individual clinical determinants. There is a pressing need for research to generate evidence to effectively address other aspects of the epidemic, particularly those related to structural and environmental factors, including inequities. To ensure the acceptability and sustainability of the interventions, research should be conducted in partnership with the agencies and organizations that will support them beyond their research phase. Engaging in this research will not be easy, but it holds out real hope of ending the opioid epidemic. AJPH

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CONFLICTS OF INTEREST

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Implementation of Safe Supply Alternatives During Intersecting COVID-19 and Overdose Health Emergencies in British Columbia, Canada, 2021

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Objectives. To explore the implementation and effectiveness of the British Columbia, Canada, risk mitigation guidelines among people who use drugs, focusing on how experiences with the illicit drug supply shaped motivations to seek prescription alternatives and the subsequent impacts on overdose vulnerability.

Methods. From February to July 2021, we conducted qualitative interviews with 40 people who use drugs in British Columbia, Canada, and who accessed prescription opioids or stimulants under the risk mitigation guidelines.

Results. COVID-19 disrupted British Columbia's illicit drug market. Concerns about overdose because of drug supply changes, and deepening socioeconomic marginalization, motivated participants to access no-cost prescription alternatives. Reliable access to prescription alternatives addressed overdose vulnerability by reducing engagement with the illicit drug market while allowing greater agency over drug use. Because prescriptions were primarily intended to manage withdrawal, participants supplemented with illicit drugs to experience enjoyment and manage pain.

Conclusions. Providing prescription alternatives to illicit drugs is a critical harm reduction approach that reduces exposure to an increasingly toxic drug supply, yet further optimizations are needed. (*Am J Public Health*. 2022;112(S2):S151–S158. https://doi.org/10.2105/AJPH.2021.306692)

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The United States and Canada have experienced sharp increases in fatal and nonfatal overdoses during the COVID-19 pandemic.[1,2] This escalation of the overdose crisis during the pandemic has been attributed to disruptions to addiction treatment and harm reduction services,[3] overall increases in substance use,[4] and social-distancing measures implemented to prevent the spread of COVID-19.[5,6] Consistent with the most recent waves of the overdose crisis,[7] this increase in overdose deaths has occurred alongside continued changes to the illicit drug supply that have heightened overdose vulnerability.[8,9] Beginning in the 2010s, the replacement of heroin with illicitly manufactured fentanyl and widespread adulteration with fentanyl and other substances have resulted in an increasingly unpredictable supply that has amplified the overdose crisis.[7] Preliminary drug surveillance data from during the pandemic suggest that this situation has escalated as the drug supply in settings across North America has become characterized by fluctuations in potency and adulterants (e.g., etizolam, xylazine) associated with heightened overdose risk.[10,11]

This dynamic is of particular concern in British Columbia, Canada, where overdose deaths increased from 983 in 2019 to 1767 in 2020[12] and have exceeded the total number of COVID-19 deaths

since the outset of the pandemic.[13] Since 2016, fentanyl has replaced heroin as the dominant opioid in British Columbia's illicit drug supply,[14,15] stimulant use has increased dramatically,[16] and novel psychoactive substances (NPS; e.g., etizolam) have increasingly been found in the illicit drug supply.[17–19] Even before the pandemic, British Columbia had implemented North America's most comprehensive overdose response, including the implementation and scale-up of addiction treatment and harm reduction services (e.g., oral and injectable medications for opioid use disorder, naloxone distribution, drug checking, supervised consumption sites). Yet, even though province-wide data demonstrated that this response averted thousands of overdose deaths and overdoses decreased considerably in 2019,[12,20] it has proven unable to more fully address the harms driven by what can be characterized as a toxic illicit drug supply.

Against this backdrop, drug user activists, alongside a growing contingent of researchers, health professionals, and policymakers, have called for the implementation of "safe supply" approaches, that is, approaches providing people who use drugs (PWUD) with pharmaceutical-grade alternatives to illicit drugs.[21–23] Safe supply approaches extend the logic of medication-based treatment—especially heroin-assisted treatment programs proven effective in clinical trials—to provide regulated alternatives to illicit drugs, usually opioids, outside treatment contexts.[23] Beginning in January 2019, the first safe supply pilot program was implemented in a supervised consumption site in Vancouver, distributing hydromorphone tablets for onsite use.[24] Preliminary research demonstrated the acceptability and feasibility of this approach[25] as well as reductions in illicit drug use and improvements in quality of life.[26] Similar pilot programs were subsequently scaled up elsewhere in British Columbia but were not yet operational at the outset of the COVID-19 pandemic. The only pilot program providing access to a regulated alternative to illicit stimulants (i.e., dextroamphetamine) was accessible only to polysubstance-using PWUD receiving injectable hydromorphone or diacetylmorphine as medications for opioid use disorder at 1 Vancouver-based clinic.[27]

Following the arrival of the COVID-19 pandemic, the British Columbia government, in collaboration with researchers, clinicians, and PWUD, quickly developed and, in March 2020, released new clinical guidelines—termed "risk mitigation"—to provide guidance to clinicians and facilitate access to prescription opioids (i.e., hydromorphone, sustained-release oral morphine), stimulants (i.e., dextroamphetamine, methylphenidate), and benzodiazepines (i.e., clonazepam, diazepam) for people otherwise dependent on the illicit drug market during the pandemic.[28] The risk mitigation guidelines were explicitly intended to provide pharmaceutical-grade drugs to "support a reduced risk of withdrawal, exposure to COVID-19, and exposure to a limited and toxic drug supply."[28] The guidelines are briefly summarized in Box 1. The British Columbia Ministry of Mental Health and Addictions' preliminary report revealed that opioid and stimulant medications were dispensed

BOX 1— Summary of British Columbia Government's 2020 Risk Mitigation Clinical Guidelines for People Dependent on the Illicit Drug Market

Eligibility
- **Individuals who are deemed at risk for COVID-19, COVID-19 positive (confirmed), or suspected to be COVID-19 positive.**
- **Active substance use (opioids, stimulants, benzodiazepines).**
- **Youths (<19 years) possibly eligible if they have provided informed consent and receive additional education. Referrals to health and social services should be provided.**

Screening and enrollment
- **Screening includes assessment of active substance use, substance use history, overdose history, comorbid conditions, prescribed medications, and access to prescriber.**
- **Enrollment through general practitioner, nurse practitioner, specialized rapid access addiction clinics, or opioid treatment clinics. Additional support and referrals available.**

Pharmaceutical options (opioids and stimulants)
- **Oral hydromorphone tablets: 1–3 8-mg tablets every hour as needed, up to 14 tablets daily.**
- **Sustained-release oral morphine: taken twice daily, 80–240 mg per day.**
- **dextroamphetamine SR: 10–20 mg, up to 40 mg per day.**
- **dextroamphetamine IR: 10–20 mg, up to 80 mg per day.**
- **methylphenidate SR: 20–40 mg, up to 100 mg per day.**
- **methylphenidate IR: 10–20 mg, up to 100 mg per day.**

Note. IR = instant release; SR = slow release.

to 3771 and 1220 persons, respectively, from March 27, 2020 to February 28, 2021, representing only a small percentage of the approximately 100 000 people estimated to have an opioid use disorder in British Columbia (similar estimates are unavailable for stimulant use disorder).[29]

We undertook this qualitative study to explore the implementation and effectiveness of the risk mitigation guidelines among PWUD in British Columbia, focusing on how experiences with the illicit drug supply shaped motivations to seek prescription alternatives and subsequent impacts on overdose vulnerability.

METHODS

Between February and July 2021, we conducted qualitative interviews with PWUD in British Columbia who reported accessing or trying to access prescription opioids or stimulants from a physician after the March 2020 release of the risk mitigation guidelines. We drew on rapid qualitative methods using our familiarity with the setting and relationships with community-based organizations across the province to undertake a contextually informed study of the implementation and effectiveness of the risk mitigation guidelines—an approach common amid public health emergencies.[30] Eligible participants were older than 19 years, had received (or attempted to receive) opioid (i.e., hydromorphone, sustained-release oral morphine) or stimulant (i.e., dextroamphetamine, methylphenidate) prescriptions since March 2020, and were able to participate in a telephone-based interview.

We recruited participants through research advertisements posted in community-based harm reduction services, community services, and addiction treatment settings across the province. We instructed individuals to contact us via telephone or e-mail if interested in participating in telephone-based interviews. A research assistant (M. M.) telephone-screened individuals for eligibility, explained the study, and scheduled interviews. Some participants were referred from other studies undertaken in our wider research program and were similarly screened for eligibility. A total of 40 PWUD participated in this study (Table 1).

Research team members (T. F., S. M., A. B., A. B., M. M., S. P., T. A.) conducted telephone-based qualitative interviews. Interviews were facilitated using an interview guide developed by drawing on our experience in conducting qualitative research on substance use interventions, including ongoing research on the implementation and effectiveness of safe supply interventions and policies.[21,22,25,26] The interview guide addressed topics that included (1) perceptions of COVID-19 and its impact on the drug supply and overdose crisis, (2) drug use following the implementation

TABLE 1— Demographics of People Who Use Drugs (PWUD) in Interviews About Safe Supply Alternatives: British Columbia, Canada, February–July 2021

Variable	Mean (Range) or No.
Sample size	40
Age, y	39 (19–57)
Gender	
Men	20
Women	19
Transgender, two-spirit, or nonbinary	1
Race/ethnicity	
White	29
Indigenous	7
Other	4
BC health region of residence	
Vancouver coastal	14
Fraser	2
Interior	10
Northern	3
Vancouver Island	11
Illicit drugs used (past 30 d)[a]	
Heroin[b]	25
Fentanyl	33
Methamphetamine	27
Crack cocaine	12
Cocaine	10
Overdose in past year[c]	20

[a]Possible to report use of more than 1 drug.
[b]Term "heroin" remains in use alongside regional slang "down" to refer to street-based opioids. Per provincial drug-checking data, street-based opioids most commonly contain fentanyl.
[c]Includes both opioid and stimulant-related overdoses.

of COVID-19 public health measures, (3) experiences with prescription opioids and stimulants and their impacts on health and social harms, and (4) limitations of the risk mitigation guidelines. We read the informed consent form to participants and obtained verbal consent before commencing interviews. Interviews averaged 37.5 minutes, were audio recorded, and were transcribed. Participants received a $30 honorarium via bank transfer or pickup at our research office (in Vancouver) or partnering community organization (outside Vancouver).

Analysis began at the data collection midpoint, enabling us to draw on preliminary insights to strengthen subsequent interviews. We imported interview transcripts into NVivo (QSR International, Melbourne, Australia), a qualitative data management software program, and analyzed them using deductive and inductive approaches.[31] We developed an initial coding framework that included (1) deductive codes extracted from the interview guide, and (2) inductive codes generated through team discussions following the review of the initial interview transcripts. Multiple team members coded transcripts, and we resolved discrepancies using a consensus-based approach during regular team meetings.

As themes emerged, we drew on the risk environment framework to situate findings in social–, structural–, and physical–environmental contexts. This framework conceptualizes drug-related outcomes as the product of the interplay between environmental influences (i.e., social, structural, physical) operating across micro- and macrolevels.[32] We operationalized the risk environment framework by delineating how the interplay between structural changes attributable to the COVID-19 pandemic—including public health measures, drug supply changes, and prescribing guidelines—shaped drug use and related risks. We assigned participants pseudonyms using an online pseudonym generator.

RESULTS

Although participants emphasized the role of fentanyl and emerging NPS in illicit opioid and stimulant supplies as key drivers of the overdose crisis before COVID-19, drug market changes during the pandemic had increased social–structural pressures and reshaped the risk environment in ways that exacerbated overdose vulnerability. Participants attributed severe drug shortages at the outset of the pandemic to disruptions to supply routes regionally (e.g., stay-at-home orders, suspension of ferries) and internationally (e.g., shipping disruptions, border closures). Drug shortages resulted in immediate price increases for illicit opioids and stimulants. Although the price of "down" (a regional term for street opioids) increased only modestly, the price of "side" (a regional term for methamphetamine) doubled or tripled across British Columbia. As 2 participants explained:

> The border closed and the meth went from being clean to being shitty. Then you paid an arm and a leg for shitty stuff, which you never used to before, which made people mad. (Michael, 40-year-old White man)

> It made meth more expensive, when COVID first started last year. . . . It was like $30 a point [approximately 0.1 gram] for side [from $10], then it went to $20. (Mark, 28-year-old White man)

Participants experiencing disruptions to part-time and casual work, including stigmatized and criminalized income-generating strategies (e.g., street vending, recycling, sex work, shoplifting), owing to pandemic-related public health measures (e.g., social distancing, stay-at-home orders) were particularly affected by increasing costs. As nearly all participants were ineligible for pandemic-related unemployment benefits, they struggled to manage drug dependence amid deepening poverty and subsequently experienced severe distress (e.g., anxiety, frequent withdrawal).

Participant accounts revealed how the growing unpredictability of the illicit drug supply since the outset of the pandemic had exacerbated overdose vulnerability. Participants reported that, although low-potency or fraudulent drugs (known as "bunk") were more commonly sold early in the pandemic because of supply shortages, these were quickly replaced by—or sold alongside—potent opioids containing high concentrations of fentanyl and adulterated stimulants. Among opioid-using participants, overdose vulnerability was exacerbated by this variability in the concentration of fentanyl in down—something that exposed people to drugs significantly stronger than expected. Jason, a 52-year-old White man, explained:

> Lots of time, the quality [potency] dropped and that's not been long for a couple months. . . . After that, [it was] coming back normal, even better [more potent]. . . . Lots of time, people overdose everywhere.

Participants emphasized that the increase in adulterants in the illicit opioid and stimulant supplies meant that people were often exposed to unexpected substances, particularly fentanyl-adulterated stimulants and etizolam-adulterated down. Although

participants attributed fentanyl-adulterated stimulants to accidental cross-contamination stemming from poor preparation and packaging practices, there was a common perception that etizolam was being added to the supply to mimic opioid effects "if people were short on fentanyl." Many participants reported experiencing overdoses because of these highly potent and adulterated drugs, including blackouts and memory loss in the case of etizolam-adulterated down.

Reliable Access to Regulated Drugs

The risk-mitigation prescribing guidelines were a harm reduction approach in response to the evolving risk environment during COVID-19—namely, continued drug market changes and increasing socioeconomic marginalization—that facilitated reliable access to opioids and stimulants of known contents and potency. Access to no-cost pharmaceutical alternatives enabled participants to exercise greater control over their drug use and reduced vulnerability to overdose. Participants emphasized that, although they had experienced more sporadic drug use patterns characterized by frequent periods of withdrawal and cravings at the outset of the pandemic because of supply shortages, rising prices, and reduced income, they remained uninterested in addiction treatment and yet wanted greater control over their drug use. This was often attributable to past negative experiences with medication-based treatment and recovery services. Prescription opioids and stimulants made available at no cost through the risk mitigation guidelines were positioned as a way to exercise greater agency over drug use and thereby avoid withdrawal and cravings amid deepening socioeconomic marginalization, drug market changes, and escalating overdose deaths. Shawn, a 49-year-old White man, explained:

> [People] haven't been able to, you know, make enough money to go buy it [down]. [COVID-19] has affected a lot of people's ability to make money, right? . . . They've been able to substitute with Dilaudid [hydromorphone] and actually make it through their day without getting sick or as sick.

Many participants reported that no-cost prescription drugs allowed them to "take back control" over their drug use. For some participants, this meant establishing stable drug use patterns that enabled them to avoid cycles of withdrawal and cravings, avoid bingeing and, in some cases, reduce overall drug use. For example, Andrea, a 29-year-old White woman, explained:

> It [helped] a lot because I was using a lot less because it would just kind of take away symptoms. So I wasn't craving it [down] as much, so I would buy less and use less, and it [hydromorphone] made me so I wasn't so ravenous for it [down]. And when I am ravenous for it, then I go out and do crime. So it made me do less crime as well.

Similarly, other participants highlighted that greater control meant reducing the need to engage in criminalized and stigmatized income-generating opportunities that were becoming scarce because of pandemic-related public health measures (e.g., stay-at-home orders, business and service closures). Participants also stressed that prescription opioids and stimulants were "cleaner" and "safer" than illicit drugs, that is, regulated drugs with known contents and potency. Participants described how access to pharmaceutical drugs reduced their overdose vulnerability by limiting their need to use illicit substances. Although 20 of the 40 participants had overdosed in the past year, none had experienced an overdose attributable to prescription opioids or stimulants. Participants described prescription opioids as protective against overdose because they had consistent potency—something especially important amid wide fluctuations in the concentration of fentanyl in down. Aisha, a 34-year-old Middle Eastern Woman, explained:

> The risk of overdosing, it's so high. The [hydromorphone] kept me alive—guaranteed me that I was gonna be alive because the dosage doesn't change. It's [a] stable dosage. With down, you don't know. One batch can be stronger than another and then if you get it from a different person, you don't even know if it's the same stuff.

Participants also emphasized that pharmaceutical prescriptions did not contain adulterants driving the recent increase in overdose deaths, something of concern because of more widespread etizolam and fentanyl adulteration in the opioid and stimulant supply, respectively. For example:

> I like it because it's cleaner and I know I'm not gonna just fuckin' go to the back alley, snort it, and die, right, because that could have been fuckin' fentanyl. So I know they're cleaner, so it gives me less worries. (Robert, 30-year-old White man)

Program Design–Drug Use Experience Tensions

Even as access to prescription opioids or stimulants through the risk mitigation

guidelines reduced illicit drug use among participants, 33 of 40 participants reported regular illicit drug use. These participants reported supplementing prescriptions with illicit drugs because of guideline limitations, namely that they were oriented toward keeping people from experiencing withdrawal and cravings. Although a minority of those interviewed expressed that this approach was "good enough" because they were "ready to quit" or primarily concerned with avoiding "getting sick," it was in tension with the objectives of most participants. Many participants emphasized that they wanted to continue to be able to get high, with some highlighting that the pleasurable effects of drug use were of particular importance as they managed pandemic-related stress and anxiety. These participants commonly characterized prescription opioids and stimulants as weaker and not resulting in the same rush, that is, they were qualitatively different and could not be used in the same amounts, ways, or combinations as illicit substances. Mark, a 28-year-old White man, explained how prescription opioids and stimulants were different:

> It's just fucking boring. I don't really feel the rush. . . . It's like having fucking cereal with no milk. It's just like jerking off with no busting a nut. You know what I mean? It's not the same. . . . You know what I mean? It's not the same. There's nothing there. . . . It's no comparison.

Other participants reported that the dosages prescribed to them were inadequate in meeting their needs, such as managing chronic pain and sometimes even mitigating withdrawal symptoms—something common among opioid-using participants accustomed to injecting large amounts of highly potent down. These participants explained that it was often necessary to supplement their prescriptions with illicit drugs:

> [Hydromorphone] doesn't last. It wears off by evening usually, by like, afternoon— like, middle afternoon between 3 and 5-ish. It starts to wear off so then I, you know, I would probably go pick up a point or whatever of down, and a little bit of meth would help. (Kenneth, 46-year-old Black man)

Participants were better able to manage their overdose risk because of access to prescription alternatives, as they were less likely to be purchasing and using drugs under duress. However, they remained concerned about exposure to the increasingly toxic illicit drug supply and emphasized the need to expand options to include regulated versions of illicit drugs:

> They're [PWUD] all saying what substance they want and the concept isn't, like, make it safe by making . . . giving them, like, a really lame, weaker version of that. It's, like, give them what they want. Give them a clean government-monitored version of the thing they're asking for. (Eric, 35-year-old White man)

Participants emphasized that, although the pandemic had resulted in an unprecedented public health response and the risk mitigation guidelines had reduced overdose vulnerability, the overdose crisis deserved a similar scope of action.

> The overdose crisis got a lot worse and there's still more people dying daily. . . . What we work with is just dealing with death all the time. . . . This pandemic, it's really heightened that and then they could have done the same with the overdose crisis. . . . It's millions or whatever dollars going more into the pandemic than it is for anything else. (Quincy, 28-year-old nonbinary Indigenous person)

DISCUSSION

Building on previous research on the impacts of changes to the illicit drug supply on the overdose crisis, we documented how the pandemic worsened a dire situation in a setting already characterized by fentanyl and other NPS (e.g., etizolam). Consistent with emerging reports from across North America, it is becoming increasingly apparent that the COVID-19 pandemic has catalyzed changes to illicit drug markets. Reports of fentanyl and other NPS are becoming more common,[10,11] and this phenomenon is altering the risk environment of PWUD. The COVID-19 pandemic has likely inaugurated a new wave of the overdose crisis that is marked by increased volatility of the illicit drug supply that urgently requires improvements to drug surveillance, including through drug-checking scale-up.

Whereas most harm reduction approaches (e.g., naloxone, supervised consumption sites) are best characterized as strategies that respond to—but do not prevent—overdoses, our findings demonstrate the potential of safe supply approaches to reduce overdose vulnerability by providing people with alternatives to potentially toxic drugs. Our findings demonstrate how previously documented benefits of safe supply approaches, including reductions in illicit drug use, improvements in quality of life, and reduced engagement in criminalized income generation,[25,26] can be achieved as these approaches are scaled up and extended to people who use stimulants.

Even though participants supplemented their prescriptions with illicit drugs, they reported drastic reductions in illicit drug use and overdose-related risks. Research using harm reduction–based outcomes consistent with the underlying principles of safe supply approaches is needed to more fully delineate the impacts of the risk mitigation guidelines, including epidemiological studies. However, if the public health response to COVID-19 has taught us anything, it is that there is an ethical imperative to act on the best available evidence, as well as on the demands of PWUD,[33] by scaling up safe supply approaches.

In British Columbia, a new policy directive—termed "prescribed safer supply"—has recently been announced that will extend prescribing practices outlined in the risk mitigation guidelines beyond the pandemic,[29] although the original guidelines remain in effect and have since been revised with a more explicit focus on mitigating COVID-19 risk. However, although the recent policy directive has been broadened to include fentanyl patches and sublingual fentanyl, it does not presently support stimulant prescriptions and thus raises concerns for people who have been accessing stimulants. As the overdose crisis continues, it is imperative that safe supply be extended to all PWUD while being continuously modified to maximize access, efficacy, and equity.

Finally, our findings draw attention to the tensions surrounding safe supply approaches primarily oriented toward managing withdrawal and drug cravings versus the desire of PWUD to experience enjoyment from drug use.[34] There is a need to account for pleasure in the design and implementation of safe supply approaches—something seldom examined in North American research and policy discussions on drug use. Better aligning safe supply approaches with the real-world experiences and desires of PWUD will likely necessitate expanding the options available to include regulated versions of criminalized drugs that they are accustomed to using, such as methamphetamine, cocaine, heroin, and even fentanyl. With growing support for drug decriminalization and strides being made in Oregon and elsewhere,[35,36] it is time that these discussions be broadened to also consider what a regulated drug market might look like in North America.

This study has limitations. We could not include participants who lacked telephone access. Telephone-based interviews were affected by challenges such as poor cellular reception, which affected data quality. Despite recruiting participants from across British Columbia, we were unable to fully account for dynamics in any particular setting and likely overlooked regional factors affecting the implementation of the risk mitigation guidelines. Finally, drug-using populations disproportionately affected by structural oppression (e.g., Indigenous persons, persons of color) were underrepresented.

Our findings demonstrate the critical role of prescription drug access through implementing risk mitigation guidelines in reducing PWUD's exposure to the illicit drug supply during the COVID-19 pandemic. Our findings underscore the urgent need to optimize and scale up these approaches as the overdose crisis evolves. AJPH

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R. McNeil drafted the article. R. McNeil, A. Ivsins, and J. Boyd designed the study. T. Fleming, S. Mayer, A. Barker, M. Mansoor, A. Betsos, T. Austin, and S. Parusel collected study data. M. Mansoor and S. Parusel coordinated study activities. All authors contributed to data analysis and provided critical feedback.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

HUMAN PARTICIPANT PROTECTION

This study was approved by the University of British Columbia/Providence Healthcare research ethics board.

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Drug Consumption Rooms: Welfare State and Diversity in Social Acceptance in Denmark and in France

Esben Houborg, PhD, and Marie Jauffret-Roustide, PhD

Drug consumption rooms (DCRs) have the potential to have a positive impact on the opioid overdose crisis. DCRs could also potentially change the political environment for public health because they can affect the distribution of responsibility for harm reduction between the individual and society by collectivizing responsibility for harm reduction through welfare regimes.

The methodology is based on 2 case studies—1 in Copenhagen, Denmark, and 1 in Paris, France—about residents, people who inject drugs (PWID), and politicians' experiences of DCRs involving semidirective interviews. Denmark has a long history of harm-reduction policy, and the implementation of DCRs in Copenhagen has happened through close collaboration between local authorities and the local community. France is far more centralized and paternalistic in terms of the distribution of authority and decision-making in welfare and drug policy.

Difficulties in cohabitation between local residents and PWID happened in both countries and can sometimes make public authorities hesitate to implement DCRs because of the NIMBY ("not in my backyard") phenomenon. However, the Danish and French case studies show that DCRs have the potential to become an instrument for civic cohabitation as well as to contribute to the destigmatization and health of PWID. (*Am J Public Health*. 2022;112(S2):S159–S165. https://doi.org/10.2105/AJPH.2022.306808)

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Drug consumption rooms (DCRs) are a proven efficacious public health approach to reducing HIV[1] and hepatitis infection via decreased syringe sharing and discarded syringes in public space[2,3] as well as to prevent overdose.[4–6] Thus, DCRs may be a suitable tool for fighting the dramatic opioid overdose crisis in North America. DCRs are already part of a comprehensive harm-reduction policy and, since the mid-1980s, have been widely implemented in Europe, Canada, and Australia in the context of the AIDS epidemic.[7]

Harm reduction is often reduced to technological and biomedical tools, such as opioid-agonist treatments, syringe access, naloxone, or drug-safety testing. However, harm reduction can also be considered as part of a broader social and political movement originating in "new public health," part of a society-wide call to restructure social, political, and economic systems by actively involving affected individuals, in this case people who inject drugs (PWID).[8] Furthermore, DCRs may also be understood as a political attempt to transform the risk environment[9–11] in which PWID use substances by creating more favorable social environments[12–14] and serving as refuges from drug-related street violence.[15,16] DCRs also provide a gateway to social and health services[7] by facilitating dialogue, based on mutual trust, between care professionals and PWID regarding injection practices and harms.[17]

At a structural level, DCR implementation was made possible by implementation of policies that allow for approaches beyond repression.[18] Therefore, DCRs are a preferred humanitarian approach in combination with welfare state projects.[19] This implementation requires making DCRs compatible with national policies and for political representatives to be willing to promote harm reduction at local levels. In 2012 and 2016, respectively, Denmark and France followed the lead of other European countries and implemented DCRs to improve the social and political risk environments related to injection practices by

addressing both social vulnerability of PWID and public order concerns of residents who reside in areas where injection drug use may occur in public spaces.

In welfare states, drug policies can differ by the degree to which such states collectivize versus individualize drug-related risks.[20,21] This in turn depends on whether drug-related harms are understood to be caused by individual behaviors or more fundamental societal problems, such as social inequality. Replacing individual responsibility for risk (in part) with collective responsibility for providing public health services to at-risk individuals is effective in improving both the health of PWID and the community[21,22] and might also be effective in addressing the opioid crisis affecting much of North America.[23]

Denmark and France are 2 European welfare states with long histories of collectivizing risk. We present how this conceptual framework of collectivizing risk has influenced the decision-making process of implementation at local and national levels and has had an impact on the social acceptance of DCRs and cohabitation between residents and PWID in the different political and cultural contexts of Copenhagen, Denmark, and Paris, France. We use Benoit's framework, which shows that how governments address drug-related risks is connected to how they address other forms of socioeconomic risks, such as illness or social precarity.[21] We show how this conceptual framework of collectivizing risk has influenced the decision-making process of implementation at local and national levels, and how it has affected the social acceptance of DCRs and cohabitation between residents and PWIDs in 2 different political and cultural contexts.

METHODS

Between 2014 and 2021, researchers from Copenhagen and Paris collected data on the implementation of DCRs by using ethnographic observations of open drug scenes—defined as situations where citizens are publicly confronted with drug use and drug dealing[24,25]—and urban environments around DCRs, as well as semidirective interviews with stakeholders. In France, 156 semistructured interviews were conducted with the following stakeholders: residents (n = 53), addiction care or harm-reduction professionals (n = 20), police officers or security agents (n = 29), street cleaning professionals (n = 13), local politicians (n = 11), and PWID (n = 30). In Copenhagen, researchers conducted a quantitative survey among residents (n = 567), n = 33 semistructured interviews with residents, n = 10 semistructured interviews with professionals (social workers and police officers), and n = 24 semistructured interviews with PWID. PWID were recruited according to gender, age, social status, and living conditions. In both countries, residents were recruited according to the streets where they lived, with a focus on those most exposed to the drug scene, including diverse ages, genders, and having children or not. All interviews, in both Paris and Copenhagen, were conducted by one of the authors of this article or a trained research assistant. PWID received financial incentive for their participation.

Data Collection

For residents, interviews explored exposure to drug scenes (including syringes, drug use, and drug dealing) and the extent to which such exposure was considered a nuisance. Among local politicians, interviews explored the political decision-making process at local, national, and international levels and how they built alliances with different stakeholders. For PWID, interviews explored their experience with street-drug scenes including interactions with residents and police officers and their use and experience with DCRs.

We reviewed data from historical archives such as those of the Ministry of Health, city reports on processes that allowed the creation of DCRs, legal documents, and notes from meetings with residents and other stakeholders organized at the city level, which we systematically collected through searches of legislation databases and local and national governmental Web sites, for the 1990–2021 period for France and for the 1998–2020 period in Denmark.

Analysis

We coded all data (i.e., interviews, open-ended survey question responses, and archival materials) by using thematic analysis approach. We organized the data into themes for analysis based on both a priori themes (e.g., participants' exposure to drug-related activities in their neighborhood, their experiences with the drug scene and the DCR, the coexistence of PWID and residents, the policy-making process for DCR creation) and those that emerged from the data (e.g., feeling abandoned by the state, social consciousness, ambivalence in relation to living near a drug scene). For semistructured interview data, we categorized full-text responses on attitudes toward the drug scene and DCRs into "positive," "negative," "neutral," and "ambivalent." Interviews were audio-recorded, transcribed, and analyzed

with NVivo12 software (QSR International, Melbourne, Australia). Comparison between the French and Danish databases was made possible through the use of a similar interview guide and coding framework.

RESULTS

DCRs have been the subject of debate in Denmark since the early 1990s when Denmark experienced a dramatic increase in drug-related deaths, which remain high.[26] Despite an advisory committee recommending DCRs in 1998, the idea was repeatedly rejected by successive governments. In 2011, activists in Copenhagen established a mobile DCR to provide services to PWID and test at the courts whether DCRs could be illegal under Danish law as claimed by the government. However, before the legality of the mobile DCR could be tested, a newly elected center-left national government proposed legislation to establish DCRs as an inclusive harm-reduction policy in 2012 noting:

> The government wants to put an end to marginalization, exclusion and unworthy living conditions and its ambition is to reduce the high mortality rate among addicts on the streets, among other places in Copenhagen, as well as the harms, problems and nuisance associated with drug abuse in the streets.[27]

Confident in the findings from research studies demonstrating the efficacy of DCRs, Danish legislators approved DCRs as a permanent component of Danish drug policy without requesting any additional trials be conducted in Denmark. The City of Copenhagen took over the mobile DCR and established a permanent DCR in 2012 in a homeless shelter; another larger DCR was established in 2016 (Supplement 1, available as a supplement to the online version of this article at http://www.ajph.org). The city council determined the site for the DCR would be in the area of Vesterbro, which is the location of the largest open drug scene in Denmark and across the Nordic countries.[28] Furthermore, DCR legislation states that local police and the municipalities must define an area "in the immediate vicinity" of the DCR where police will neither enforce drug legislation on drug possession for personal use nor confiscate drugs from DCR users. This established the entire area of Inner Vesterbro, where the open drug scene is located, as a decriminalized area for users of the DCRs.[29]

In France, the debate about DCRs began in 2010 when harm-reduction activists, local politicians, and drug user activist groups developed alliances advocating "safer environments for PWIDs" as a "public issue."[30] That same year, the French National Institutes of Health and Medical Research published an expert consensus report highlighting the benefits of DCRs and recommending government support for testing their efficacy in France.[31] The French Prime Minister during this period, from the right-conservative party, refused to implement DCRs, arguing that "they are neither useful nor desirable."[32] However, the mayor of Paris's 10th *arrondissement* (district) highlighted his willingness to create one:

> For its part, the municipal team of the 10th arrondissement is also committed to the opening of a DCR in the district, in the Gare du Nord area, convinced that this facility might provide solutions to the safety and public health problems that arise there.[33]

Despite national opposition, the mayor of the 10th *arrondissement* of Paris sought a pragmatic solution to open drug scenes (Supplement 2, available as a supplement to the online version of this article at http://www.ajph.org, quote 1) and envisioned DCRs as a possible effective "answer." With a new left-social-democrat government elected in 2012, a lengthy legislative process was initiated to establish DCRs by creating a "tolerance zone" that would allow PWID to use such facilities and, importantly, to protect professionals working in DCRs from criminal prosecution. In 2016, after meeting national and local regulations, the French government agreed to the establishment of DCRs but stipulated that they would be a 6-year experiment in 2 cities: Paris and Strasbourg[30] (Supplement 1). The decision to categorize this as an experiment rather than a permanent measure is indicative of the French government's dual goals at a national level: on the one hand to protect vulnerable PWID but on the other hand to not appear to favor decriminalization of drug use.[34] Contrary to the Danish experience, the French government was not convinced that existing scientific literature was sufficient to implement DCRs as a permanent measure. Rather, the government requested a specific French survey that lasts 6 years (from 2014 to 2021) to assess DCRs in the French context, with a specific focus on social acceptance among Parisian residents in the neighborhood of the DCR.

Immediately after the official creation of a DCR in Paris, a social movement of residents initially called "Against a shooting room in a residential area"

and later known as "*Lariboisière Gare du Nord Residents*," was created, gaining high visibility in the public debate because of press coverage.[30] Indeed, these residents were critical of the impact of DCRs, despite not being publicly opposed to DCRs as a public health measure or harm-reduction approach. They specified that they were only opposed to it being located in a residential area. Their discourse nevertheless reveals their reluctance to share urban spaces with PWID, as well as their fears and rejection of this social group (Supplement 2, quote 2).

Interactions between PWID and residents can be violent. Some residents expressed feelings of insecurity, attributing them to PWID behaviors. But, as several PWID reported during the interviews, violence can also stem from the residents themselves triggered by the DCR's presence. Some users stated that they experience emotional violence from the residents' stigmatizing words toward them on a daily basis. They also argued that it was crucial to deconstruct the stereotypes associated with drug use and to show that the "drug addicts" could have been their "children or grandchildren" (Supplement 2, quote 3).

Indeed, stigmatizing terms such as "psychopath," "delirium," or "ravaged" are often used by some residents opposed to DCRs who belong to the *Lariboisière Gare du Nord Residents* collective to describe and stigmatize PWID. The emphasis on arguments such as "they don't respect the rules" places the responsibility for the degradation of the neighborhood on PWID, and some residents vocally demanded some form of compensation from the state. Indeed, residents who opposed DCRs also claimed that they felt abandoned by city and state authorities and that they lived in a neglected and deteriorating area. They stated that the welfare state needed to prioritize residents instead of "favoring" the protection of PWID, in the name of "democracy" (Supplement 2, quote 4).

After the Parisian DCR opened, another social movement, which brought together 3 different residents' groups (*Action Barbès*, Parents DCR75, and Stalingrad Free Area),[30] supported the idea that implementation of the DCR was a way to collectivize the management of risks that improved the health and well-being of PWID as well as the daily lives as residents. Interviews with members of this social movement point to the belief that implementation of DCRs in this residential area also protected residents by enhancing the sense of security in their neighborhood. People from the Parents DCR75 movement felt protected because they could call harm-reduction providers who work at the DCRs when a problem with PWID occurred in their district (Supplement 2, quotes 5 and 6).

PWID also described how DCRs served as a safe space for them to "relax" when they were otherwise in "emotional distress." The narratives of PWID also show how DCRs serve as a safe space for "socializing" where "the staff can manage tensions between users" (Supplement 2, quote 7). It is interesting to note that public health literature always describes DCRs as "safe" places in the "hygiene" sense, while PWID have a broader view of safe that includes social, psychological, and emotional aspects of safety.

Creating a safe space for PWID is also considered beneficial to residents from this second social movement because it reduces occurrence of injection practices in public spaces and the number of syringes discarded in the streets.[3] These residents employed both sanitary and moral reasoning to argue that DCRs are not only safe places for injecting but also humanitarian areas safe from the judgment and stigmatization of PWID (Supplement 2, quote 8). These residents were also sensitive to the importance of "cohabitating" with PWID in urban areas. The coexistence of various social groups (residents mixing with marginalized and vulnerable people) that share the same geographical space is a crucial argument in the advocacy for DCR dissemination (Supplement 2, quote 9).

Ethnographic data indicate that residents on both sides have expectations that the welfare state will create safer environments for them. For DCR opponents, there is the perception that the welfare state should focus primarily on residents who are contributing to society and who "pay (their) taxes just like everyone else" instead of focusing on marginalized people "who don't respect the rules" (Supplement 2, quotes 2 and 4). For DCR advocates, intervention by the welfare state that allows DCR implementation is beneficial both for residents and for PWID (Supplement 2, quotes 5 and 6). The COVID-19 pandemic exacerbated these tensions, with DCR opponents expressing anger that PWID were allowed to be in public spaces while residents were under lockdown (Supplement 2, quote 10). Conversely, some residents were concerned that, during lockdown, homeless PWID would have no safe spaces for sheltering (Supplement 2, quote 11).

In Copenhagen, although there was little opposition to DCRs, opinions differed as to what would be the suitable location. The minority who opposed to DCRs argued that it should be located away from residential areas. Others,

specifically social workers, health professionals, and activists, believed that the DCR needed to be located in or close to the drug scene, meaning that it needed to be in a densely populated neighborhood. A survey of PWID in the area found that the average distance PWID were willing to travel away from the drug scene to use a DCR was 500 meters. Based on the totality of the evidence, DCRs were established in locales close to residential buildings as well as commercial areas.[29]

Upon implementation, residents of Vesterbro expressed different attitudes, including supportive, ambivalent, negative, and neutral, toward these facilities.[35,36] Some reasons for supporting DCRs included reduction in drug dealing, drug use, and drug-related paraphernalia in the area (Supplement 3, available as a supplement to the online version of this article at http://www.ajph.org, quotes 1 and 2). In addition, some residents who lived in buildings located on the streets closest to the DCRs experienced these issues more acutely (Supplement 3, quotes 3 and 4). This is an indication of how DCRs have changed the geography of the drug scene, with DCRs and surrounding areas becoming new places for drug dealing and drug use when DCRs were closed or there was a queue.[35] Among the minority opposed to DCRs, a common sentiment was that people who were part of the drug scene did not live in Vesterbro, and DCRs should therefore be located where PWID live (Vesterbro, a former working-class neighborhood, has been thoroughly gentrified since the 1990s, and most of today's residents are middle or upper-middle class[37]; Supplement 3, quote 5).

Those expressing ambivalence, on the one hand, wanted PWID to have access to harm-reduction services, but, on the other hand, they were concerned about the increased exposure to drug dealing, drug use, and discarded syringes, even though many also acknowledged that the DCR had reduced exposure. These residents represent a central dilemma in the creation of effective drug use–related policy: how to negotiate the relationship between public health aims and perceived issues of public order (Supplement 3, quote 6). When experiencing this ambivalence, most of the residents wanted to prioritize public health for PWID, but they also wanted the authorities to develop solutions to the different forms of nuisance they experienced.

In interviews with residents and PWID, it was clear that, despite the physical proximity, there was a large social gap between PWID and residents.[36] Social interactions between PWID and residents were limited and only occurred as a consequence of being in the same location (Supplement 3, quotes 7 and 8). Strategies residents employed to avoid interacting with PWID included using back entrances to buildings, crossing the street, and avoiding eye contact with people they suspected of belonging to the drug scene. These tactics contributed to reproducing a social distance between PWID and residents. Several of the residents expressed annoyance about having to behave in these ways, but others were more pragmatic about it.

Although many residents encountered aspects of the drug scene on a daily basis, only a small minority advocated removing PWID or DCRs from the area. Negative attitudes toward PWID and DCRs were again related to PWID not living in the area or that PWID were attracted to the area because of the availability of services (Supplement 3, quote 5). The majority of the residents, however, even though they demonstrated greater reluctance in engaging in informal inclusion by interacting with PWID, argued that the need for vulnerable PWID to be protected and to have access to DCRs took precedence over their unease (Supplement 3, quote 9).

PWID were particularly concerned about children witnessing drug use in public spaces, feeling that the DCRs provided a legal place to use drugs without any risk of exposing the public to their activity (Supplement 3, quote 10). Because it was away from the public eye, the DCR provided a less stressful and, therefore, safer place to use drugs (Supplement 3, quote 11). From the perspective of at least some PWID, a DCR is an opportunity to avoid being a nuisance to other people and to avoid feelings of stigmatization when using drugs in public.

DISCUSSION

Denmark and France have both implemented DCRs within welfare regimes that share commonalities and differences in their approaches to distributing social rights and benefits for PWID. Drug policy, and harm-reduction policy in particular, should also be seen as matters of local policy.[38] Specific drug policies are framed not just by national policy but also by local drug issues and how they are articulated by local stakeholders. For example, the establishment of DCRs in Copenhagen was the result of a commitment to and involvement of both public and private stakeholders at the local level, with an emphasis on the social rehabilitation of PWID and their rights.[39] In France, DCRs were first envisioned as a public health approach to protecting PWID from infectious diseases with less

attention being paid to their social rehabilitation[34] because of a prohibitionist model that still considers PWID as deviants. Local mobilization efforts provided the starting point for implementing DCRs through strong alliances between Parisian politicians and harm-reduction activists.

In Denmark, responsibility for welfare and health policy, including harm-reduction policy, is delegated to local authorities. This means that an institutional framework exists for involving local stakeholders in the drafting of local harm-reduction policies, such as the creation of DCRs. However, France is a much more a centralized state, which means that few institutional structures and traditions exist for involving local stakeholders even in the implementation of local harm-reduction policy. Finally, Danish drug policy is often described as "liberal" with regard to drug policy implementation, whereas French drug policy is considered to be more paternalistic and repressive.

With the introduction of DCRs through public initiative in both Denmark and France, the state is partially taking responsibility for managing risks associated with drug use in public spaces. In both countries, DCRs should be considered not only a public health approach to prevent drug use–associated harms but also an approach that defines a particular relationship between PWID, residents, and the state. As we have seen, the involvement of local stakeholders can play an important role in the acceptability and legitimacy of DCRs. This comparative study shows that harm-reduction policies are influenced by the political and institutional history of the particular contexts in which they are developed and implemented. The involvement of local stakeholders is likely to play an important role in this. The willingness of welfare states to implement DCRs is a complex process that is not only embedded with a humanitarian approach but is also a decision based on public order imperatives.

Because of political resistance, and despite the scientific evidence, some countries are still reluctant to implement DCRs at a federal level. The French and Danish examples show that DCRs can be created in very different drug policy contexts ranging from tolerance to repression, as long as the state is considered to be responsible for the protection of all citizens, including PWID. Difficulties in colocation with local residents can sometimes make public authorities hesitate to implement DCRs because of the NIMBY phenomenon.[40] However, our comparative research demonstrates that DCRs have the potential to become an instrument for civic collaboration, for the destigmatization of PWID, and for improving the well-being of PWID and residents in urban areas. AJPH

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

HUMAN PARTICIPANT PROTECTION

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Establishment and Enforcement of Operational Rules at an Unsanctioned Safe Drug Consumption Site in the United States, 2014–2020

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Objectives. To examine how operational rules are established and enforced at an unsanctioned safe consumption site (SCS) operating in the United States.

Methods. We conducted 44 qualitative interviews with people who use drugs, staff members, and volunteers at an unsanctioned SCS and analyzed them using an inductive thematic approach.

Results. Rule-making processes were largely driven by concerns raised by service users rather than driven by external pressures, and iterated rapidly in response to changing needs. The unsanctioned nature of the site produced an environment where bottom-up rule-making was critical to generating a shared sense of ownership of the site and where enforcement was necessarily fluid.

Conclusions. Removing external restrictions on operational rules for SCSs results in a flexible set of rules that are highly responsive to the social and public health needs of people who use drugs. Legislation and regulations of SCSs should aim to place as few hard limits on operating conditions as possible to maximize involvement of and responsiveness to people who use drugs. (*Am J Public Health*. 2022;112(S2):S166–S172. https://doi.org/10.2105/AJPH.2022.306714)

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Safe consumption sites (SCSs) are spaces in which people can consume otherwise illicit drugs in hygienic circumstances with trained individuals in attendance to provide monitoring and immediate intervention in the event of an overdose or other medical emergency. More than 180 such sites operate with legal sanction in 14 countries.[1] Before December 2021, no SCSs operated in the United States with legal authorization; however, 1 SCS has operated in the United States without legal authorization since 2014 in an undisclosed urban area. The authors have been conducting qualitative and quantitative research at this unauthorized site since it opened to explore the social, public health, and public order impacts of the site.[2–5]

Like any service provision space in which people who use drugs can enter, spend time, and receive services, all SCSs, whether authorized or not, have both formal and informal operational rules that shape how the space can be used, what services staff can and cannot provide, and what users of the space can and cannot do in the space. In the case of authorized SCSs, some operational rules may be determined by formal external constraints, such as those described in enabling legislation or regulation. One common example of such a regulatory constraint is a prohibition on either peers or medical practitioners assisting service users to inject their drugs.[6]

In addition to formal external constraints such as legislation, most authorized SCSs also exist in a political context in which retaining the goodwill of a range of external stakeholders is essential to being able to continue providing services. Examples of such stakeholders include neighbors, local health authorities, law enforcement,[7] funding agencies, and local government elected officials. Keeping external stakeholders supportive of (or at least not oppositional to) an SCS may mean setting operational rules designed to meet the needs of these external stakeholders, even where they conflict with the needs

of service users. For example, there may be rules preventing the sale of drugs within the site to alleviate law enforcement concerns,[8] or rules about not congregating outside the site to alleviate local business or resident concerns. Being in the public eye may also lead SCS proponents to take public stances that focus narrowly on SCSs as a public health and public order intervention, and to avoid any broader advocacy relating to the human rights and well-being of people who use drugs.[9,10] At the most extreme, this has in some cases meant minimizing the voices and concerns of people who use drugs in public debate regarding SCSs and other approaches to reducing drug-related deaths.[11,12] Likewise, although people who use drugs have been instrumental in advocating SCSs in every location where they exist worldwide, they have often been excluded from processes of determining the operational rules of resulting SCS, with a report on SCSs in 7 countries in Europe finding that only 6.3% of SCSs had involved people who use drugs in this process (whereas 18.8% had involved police).[13(p20)]

By contrast, unsanctioned SCSs have completely different sets of constraints and stakeholders. The primary external constraint at the unsanctioned SCS in the United States is the potential illegality of the service (e.g., the federal "crack house" statute stipulates up to 20-year prison terms for individuals operating premises for the purpose of consuming drugs[14]), and the need to minimize exposure to legal risk for both operators and users of the service. However, choices about how to do so, and what level of risk to take, have remained internal to the SCS. Likewise, the types of entities and individuals who make up the external stakeholders for most authorized SCSs are in this case largely oblivious to the existence of the SCS.

As part of a broader qualitative project exploring how the existence of the unsanctioned SCS affected the lives of those using and operating it, we found that operational rules and the ways they were made and enforced played a critical role in shaping the impact of the site on service users' lives. In this article, we describe how operational rules at the unsanctioned SCS were generated, enforced, and changed, and in what ways the resulting rules differ from or are similar to those at authorized SCSs elsewhere in the world.

METHODS

The unsanctioned SCS was created by an existing community-based organization that provided other legally sanctioned services to people who use drugs. The organization believed that legal authorization of SCSs was many years away and, in response to unacceptably high overdose death rates among their service users, chose to begin SCS services without authorization to prevent further deaths. Details about the site have been published elsewhere.[2–5] Use of the space is by invitation only, with those who have been invited being referred to as "members." As members cease drug use or move away, new individuals are invited to "join" from the surrounding community. At any given time there are approximately 50 active members. The site is open 4 to 6 hours per day, 5 days per week, and is staffed by a small number of paid staff and a larger number of volunteers. Many volunteers and staff also use the space for drug consumption themselves, although not while working.

Procedures

We conducted qualitative interviews with 44 individuals in 2 distinct rounds associated with 2 separate periods of grant funding, with 21 interviews being conducted between June and August 2016 and 23 interviews conducted between July 2019 and December 2020. Four of the participants were staff or volunteers, 30 were members, and 10 were members who also held staff or volunteer positions. The gender and ethnicity of respondents closely matched those of service users as a whole but are not reported, as this may indicate the urban area in which the site is located.

All participants were recruited at the SCS. All interviews were conducted by authors Davidson and Wenger. Most interviews were conducted in a private room at the SCS or at the research team's community-based field site. Interviews following the onset of COVID-19 were conducted with social distancing or by telephone. Interviews took between 20 and 60 minutes. All participants were remunerated $20 in cash for their time. Interviews were audio-recorded on devices with full disk encryption and sent encrypted to a professional transcription service.

Interviewers used a brief "probe sheet" listing topics of interest to guide the interviews, informed by a theoretical perspective shaped by both the feminist science and technology studies perspective that "users matter"[15] as well as the literature on peer-driven advocacy and service delivery by and for people who use drugs.[16] We iteratively modified the probe sheet throughout the data collection process to allow interviewers to follow up on topics emerging from earlier interviews—for example, the emergence of

the importance of the rule-making processes described here. Topics discussed included what SCS membership means to respondents, experiences working at the program (for current and former staff or volunteers), descriptions of rules and how they were made, and changes the respondent would like to make in programming or rules. After each interview, interviewers wrote brief field notes.

Analytic Approach

We analyzed data using an inductive analysis approach as described by Thomas.[17] We began with a close reading of all transcripts by authors Wenger and Davidson to identify and define categories and themes. We then developed an initial code list from the probe sheet and added to the list as we reread the data and additional categories emerged. We applied the code list to the entire data set and selected appropriate quotes to illustrate the meaning of each category.

Finally, we summarized operational rules described in the 2017 "Drug Consumption Rooms (DCRs): Current Practice and Future Capacity" report,[18] a survey of 49 authorized SCSs representing approximately 54% of the known authorized SCSs at that time, which included data on eligibility criteria and operational rules for services.

RESULTS

Following a brief comparison of rules common at authorized SCSs, we have organized results into 2 major thematic areas emerging from our analysis. In the first, we describe site rules and the processes for rule-making and how these changed over time. In the second, we describe the ways in which enforcement of those rules are discussed and enacted.

The Unsanctioned Site vs Authorized Sites

The 2017 Census of Drug Consumption Rooms, referenced in Methods, lists both eligibility criteria for being able to use SCS services and operational rules of those services. Table 1 shows eligibility criteria and operational rules instituted at more than half of surveyed authorized SCSs and whether these criteria and rules were ever in place at the unauthorized SCS. Only 1 of 5 common eligibility criteria (entry interview) and 1 of 5 common operational rules (no on-site drug sales) were consistently implemented at the unauthorized SCS.

Rule Creation and Modification

After the initial decision was made to start offering SCS services, a primary consideration was to minimize the potential risk of legal consequence should its existence become public knowledge. As a staff member explained:

> Well, the first rule of course was that it was a myth, that if anyone asked about it, it didn't exist.

Other initial rules were developed on the basis of the staff's previous involvement with providing services within the community as well as members' experiences with street drug use. For example, to ensure smooth participant flow and allow all the members who want to use the space to do so, a 30-minute time limit was set for use of injection spaces. Other early rules included drug use in designated areas only, no violence, no stealing, no dealing or exchanging drugs, and no smoking drugs (until an air extraction system was installed).

Other operational rules emerged somewhat organically in response to problems as they occurred. Members were involved in the process of rule-making and rule modification by design, through a process of weekly meetings held in the space as people were using it. One staff member described the process of rulemaking:

> A discussion would start [at a regular meeting] with someone bringing up an issue that had drawn their attention, then it gets talked through, the ED [executive director] would usually "provide guidance" and suggest a rule which seemed to articulate the concern, then it'd get thrashed out some more.

The executive director of the organization noted that the unauthorized nature of the service in many ways both facilitated and required this inclusive process:

> For me it was to make sure that as many people are involved in the decision-making as possible, not only because that's what we said we'll do, or what many organizations like ours say we're going to do, but also because we're doing this thing that's [potentially] illegal. The way that I basically created a sense of security was to include people in how the place was run, how it looked, how it was designed, so that they had this really strong buy-in because it was now part of their structure, their life, their ideas in this space, and they had a means to protect it, they had a reason because otherwise, we didn't really have any security; we were just crossing our fingers.

The executive director added that participating in the process of creating

TABLE 1— Most Common Eligibility Criteria and Operational Rules in an International Survey of Authorized Safe Consumption Sites (SCSs) Compared With the Eligibility Criteria and Operational Rules of the Unauthorized SCS: United States

	Authorized SCSs Globally With This Criterion or Rule, %	Did the Unauthorized SCS in US Have This Criterion or Rule?
Eligibility criteria		
Must be a certain age	87	No
Drug dependent/established drug user	67	No
Must undergo an entry interview	62	Yes
Complete a "registration" survey	56	Requested but not required
Sign a "terms of use" document	56	No
Operational rules		
Do not sell drugs on-site	96	Yes
Do not use alcohol on-site	76	No
Do not inject other people	64	No
Do not share drugs on-site	60	No
Limit users' time in the service per visit	58	Time at injecting station limited if others waiting to use one

Note. Authorized SCSs were surveyed by Belackova et al between September and December 2016; unauthorized SCS rules were consistent throughout the time frame covered by this article (i.e., 2014–2020).

Source. Belackova et al.[18]

and modifying operational rules for a shared space was seen as directly contributing to destigmatization processes for members:

> Thanks to the nature of our work and having this room where people could come in and use safely, it was also this room where people could discuss these ideas. So, people would all be sitting around in a circle and be able to do what they needed to do to feel better, and having these conversations also normalized their use, and made them more human also.

In most organizations, once a rule is defined and approved, the next step is propagation of the new rule and enactment. At the unsanctioned SCS, the process of enactment often formed part of the rule-making process itself. As a staff member put it:

> People tend to have strong feelings about specific rules when they were being discussed, but once the rule was actually agreed on there's sometimes a decline in interest, meaning it was inconsistent what happened next. Some rules people followed and put social pressure on each other to comply with, others not so much. . . . "Major" rules like not stealing stuff tend to be more strongly and consistently enacted. . . . Some rules went through a kind of "test run"—were people actually going to practice the rule and help encourage others to do so?—if it didn't actually stick then it tended to become abandoned.

Respondents also described how rules changed over time in response to either changing conditions or the development of more nuanced understanding of the underlying issue that a rule was attempting to respond to. For example, the "30 minute rule" was modified several times as it became clear that the limiting factor was not how long it took to inject—as the vast majority of members could easily inject within 30 minutes—but rather that members used the injecting tables for other purposes, such as unpacking and reorganizing the contents of their bags. As a staff member explains, the rule was altered to reflect this reality:

> As time went on, we did not care about time limits. It was only if people came in and we had to free up a station, we'd be like, "who's done?" But another thing that happened is that people would move on to their table because it was the only time that they ever had a surface that was clean to unload their bag . . . and if someone has already done their shot, yet they had spread out their entire life on one of our tables, you had to get them to clean it up. They sometimes would be too high; we'd have to help them, but there's biohazard shit involved with helping them. So not unpacking at the table

> then also became a, instead of a "time" rule, it was . . . more about "don't unpack your shit at the table."

Rule Enforcement

Rule enforcement—specifically, implementing consequences for breaking rules—was also a common topic of discussion for respondents. Many respondents complained that rules were not enforced consistently—for example, when asked about stealing at the site, a member who also worked as staff articulated a common complaint:

> People have been caught red-handed stealing and they still are allowed here . . . I would make it so that if you are caught stealing, you are immediately kicked out.

However, a number of factors shaped actual enforcement policy. One point of tension around enforcement relates to the unauthorized nature of the service: if someone is permanently banned from the service (or if a staff member or volunteer is fired) they have less incentive to preserve secrecy and may even feel aggrieved enough to deliberately disclose the existence of the service. However, as a member who also held a staff position explained, a stronger driving motivation for relatively limited and sometimes inconsistent enforcement was the shared understanding that people who use drugs often do not get second chances:

> So we've never taken membership away from somebody. If their behavior is just—like let's just assume it's just a little bit off, we just take a little bit more time and try and befriend them. . . . I kind of feel like people put these barriers up in their minds because they're afraid of things and we try and show them those barriers end up having these behaviors that come with them. And so we show them it's not like they think it is; it's all cool. There's not going to be no judgment and if they make a mistake, we're cool with it, we'll talk about it, and we'll find the solution to it, but we're not going to throw you out in the winter. And then they'll let some of those walls down and with them, some of those behaviors go away.

DISCUSSION

A limited literature exists on unsanctioned SCSs, although a growing body of literature examines Canadian overdose prevention sites (OPSs), a recent development in which legal protection is provided by province-level blanket authorizations but whose implementation is largely left to local control. McNeil et al., writing about a pre-OPS unsanctioned SCS in Vancouver, Canada, found that that site had emerged despite the existence of an authorized SCS in the same city. Specifically, a regulatory prohibition (since rescinded) against assisted injection made the authorized site useless to the 40% of people who use drugs who needed assistance from others to inject.[19] One ongoing discussion at the SCS documented in our field notes regarded what would happen if the jurisdiction in which the unauthorized US SCS is located were to formally authorize SCSs. Mirroring McNeil et al., a major thread of this "what if" conversation was the belief that the unauthorized SCS would and should continue to operate underground, on the assumption that any authorized site would be operating under top-down rules that would limit the utility of the site to many users. Our respondents expressed the hope that they might get to contribute as subject matter experts in discussions of how an authorized site might be operated, but the shared assumption was that such expertise—coming as it did from people actively using drugs—would be ignored.

Besides their immediate practical impacts, rules and rule-making at authorized SCSs play a broader political role in that they are in dialogue with broader societal notions of what drug use is and how it must be responded to.[11,20] Fraser and Moore have noted that "drug use activities," "the drug using way of life," and people who use drugs are all often portrayed in policy debate as "inherently chaotic" and hence requiring externally imposed "solutions," which almost by definition cannot meaningfully include input from the "chaotic" individuals involved.[21] Rules at authorized SCSs are by necessity in dialogue with such notions, either acceding to them—for example, by being designed to maximize the appearance that the SCS is restoring "order" to otherwise chaotic situations and people—or (more rarely) explicitly opposing them. Although rules and rule-making processes at the unsanctioned SCS are not overtly engaged with such dialogues, they do serve to illustrate the fallacy of these assumptions.

Our data suggest that both rules and rule-making processes at the unsanctioned SCS evolved organically to meet the needs of the individuals involved in the service. This had a number of substantial benefits, ranging from operational flexibility to the ability to create what Duncan et al., writing about an authorized SCS in Germany, termed an "atmosphere of engagement" in which destigmatization and respect for the

human dignity and rights of people using the service are foregrounded.[22] However, this ad hoc approach also has the potential for arbitrariness, in that the nature of any individual's relationships to staff and to other people using the service can influence how or even whether a given rule is applied to them, in a way that may be the case less often at an authorized site with more procedural rule enforcement.

More recent work following the development of the OPS approach in Canada has suggested a middle ground, in which legal protection is provided, but most operational rules are left to local design. Wallace et al. compared multiple models emerging from OPS authorization; in line with our data, they found that OPS organizational structures designed and implemented by people who use drugs are more responsive to the needs of service users and to changing circumstances than those with limited input from people who use drugs.[23] In early work on OPSs, Boyd et al. found that they provided some protection from gender-based violence prevalent in street drug use settings, but that they remained "masculine spaces" that may create barriers to access for women and transgender people who use drugs,[24] findings which are reflected in some of our earlier work on the unsanctioned US SCS.[4] In more recent work, however, Boyd et al. have described how the flexible OPS framework has allowed women who use drugs to lead the establishment of an OPS restricted to women, transgender women, and nonbinary persons to address such concerns.[25]

In short, in line with literature from both other unsanctioned SCSs outside the United States and the rapidly emerging OPS literature from Canada, our data suggest that operational rule-making processes for SCSs (and other services for people who use drugs) that are minimally constrained by externalities and the concerns of people who do not use drugs tend to be highly responsive to the actual needs of people using the services. Our data suggest that such rule-making processes are also associated with a deep and constructive sense of ownership and belonging among the people using the services. This in turn reduces many of the kinds of problems that require rules in the first place. As a reviewer of an earlier version of this article put it, our data show that "rules can be made organically without anarchy." AJPH

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CONTRIBUTORS

P. J. Davidson and L. D. Wenger conducted data collection and the analysis. P. J. Davidson led the writing with substantial contributions from L. D. Wenger. B. H. Lambdin and A. H. Kral assisted with analytic interpretation and editing drafts. P. J. Davidson and A. H. Kral conceptualized and co-led the overarching study.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

HUMAN PARTICIPANT PROTECTION

All study procedures were approved by the institutional review board of the University of California, San Diego.

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Understanding Racial Inequities in the Implementation of Harm Reduction Initiatives

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Objectives. To elucidate a structurally oriented theoretical framework that considers legacies of racism, trauma, and social exclusion and to interrogate the "unmet obligations" of the institutionalization of the harm reduction infrastructure to provide equitable protections to Black and Latinx people who use drugs (PWUD) in Maryland.

Methods. In 2019, we conducted a rapid ethnographic assessment of and qualitative interviews with PWUD (n = 72) and stakeholders (n = 85) in 5 Maryland counties. We assessed PWUD's experiences, service gaps in as well as barriers and facilitators to accessing services, and the potential to expand harm reduction programs.

Results. The unmet obligations we found included enforcement and punitive governance of syringes, naloxone, and other drug use equipment; racism and racialization, social exclusion, and legacies of trauma; and differential implications of harm reduction for populations experiencing racialized criminalization.

Conclusions. The implementation of harm reduction policies are a first step, but assessment of structural dynamics are needed for diverse communities with unique histories. This research illuminates a key paradox: progressive policy is implemented, yet the overdose crisis escalates in communities where various forms of racialized exclusions are firmly entrenched. (*Am J Public Health*. 2022;112(S2):S173–S181. https://doi.org/10.2105/AJPH.2022.306767)

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The inequitable effects of the US overdose crisis on Black communities, indigenous communities, and other communities of color have been well established, particularly within the past 5 years.[1–5] Between 1999 and 2018, growth rates of overdose death among Black Americans outpaced those among White Americans,[6,7] and in urban areas, synthetic opioid-related fatalities increased 361% for Black adults and 350% for Latinx adults.[1,8] Latinx and Black people who use drugs (PWUD) are less likely than White PWUD to have received or used naloxone, to have received overdose prevention training,[9] and to obtain a naloxone refill.[10] Recent data showed an association between COVID-19 and increases in overdose among Black people, while demonstrating a decrease among White people.[11] Hypotheses suggest that increases in overdose death rates among Black people are linked to differential engagement with prevention because of structural racism and being less likely to report access to and utilization of services overall.[9]

Since 2017, White Marylanders experienced a 14% decrease in overdose deaths, whereas Black Marylanders experienced an increase of more than 40%.[12] In Prince George's County, Maryland, a majority Black county, there was a 135.1% increase in opioid-related fatalities in the first half of 2020.[13] In 2021, the Maryland Department of Health established the Racial Disparities Task Force[12] to address disparities in overdose fatalities in Maryland among Black communities, where rates of overdose have escalated despite an institutionalization of harm reduction infrastructure.

In 2019, we conducted the Statewide Ethnographic Assessment of Drug Use and Services in collaboration with the Maryland Department of Health to conduct research outside Baltimore City,

Maryland, where little to no research on harm reduction had been conducted. Our objectives were to (1) characterize the experiences of PWUD at county levels, (2) examine service gaps and barriers and facilitators to accessing services from the perspective of PWUD and providers, and (3) assess the potential for expansion of harm reduction programs outside Baltimore City. A University of Maryland research team partnered with the Maryland Department of Health and conducted study activities in Prince George's, Montgomery, St. Mary's, Calvert, and Charles counties. Findings from the larger statewide study were made available in a series of reports,[14] and a series of community-based dissemination activities were conducted throughout the state.[15]

We highlight findings that elucidate the experiences of Black and Latinx PWUD and providers. Through rapid ethnographic assessment (REA), we report on embodied experiences at the intersection of legacies of social exclusion and structural racism, including fear of policing and other forms of punitive governance, historical trauma, and implicit and explicit exclusions from initiatives that shape racialized experiences with drug use, overdose prevention, and harm reduction. We elucidate the role of embedded structural racism and social exclusion in institutionalized harm reduction initiatives. Specifically, we asked: What are the structural conditions that make it possible for racial disparities in overdose fatalities to continue amid a historic moment of expanded harm reduction infrastructure to address the overdose crisis?

We developed a structurally oriented theoretical framework that considered legacies of racism, trauma, and social exclusion to interrogate the "unmet obligations" of harm reduction initiatives in providing equitable protections to Black and Latinx PWUD. The framework of unmet obligations is a way to theorize the gaps between the structural initiatives that have occurred as harm reduction has become institutionalized (e.g., naloxone access, Good Samarian legislation, access to syringes) and how much these initiatives protect people who live at the intersection of drug use, racism, and racialized forms of exclusion. A key component of our framework was to consider that when harm reduction initiatives are institutionalized in state policies and programs, extra attention must be given to ensure that these initiatives can be decoupled from the punitive arm of the state (e.g., punitive enforcement) and that they directly confront legacies of racialized social exclusion to optimize their effectiveness and inclusivity. We qualitatively generated this framework from data regarding the experiences of Black and Latinx PWUD as they negotiated emergent harm reduction infrastructures in Maryland.

METHODS

We conducted the Statewide Ethnographic Assessment of Drug Use and Services between December 2018 and September 2019. We split study activities between research teams at the University of Maryland and Johns Hopkins University Bloomberg School of Public Health. We conducted data collection in each Maryland county, excluding Baltimore City. The statewide study included all counties in Maryland with stakeholders (n = 288) and PWUD (n = 314). We report only on the 5 counties where our research team conducted study activities: Prince George's, Montgomery, St. Mary's, Calvert, and Charles County. Our findings are based on REA activities and semistructured interviews with a sample of stakeholders (n = 85) and PWUD (n = 72). For this study, we defined PWUD consistent with ethnographic orientations to research: through self-report of experience and identity by participants who underwent a screening during recruitment. Participant demographics are outlined in Table 1.

The study team began with REA[16] to map county contexts and inform strategies for sampling and recruitment. We collected ethnographic data on local histories of harm reduction through document review, existing services for PWUD, and observation-based ethnographic site visits. We sought to identify transportation infrastructure, built environment composition, service accessibility, drug use sites in diverse environments, and the infrastructure for police and first responders. We used this initial phase as the basis for organizing our sampling frame for each county and to inform which stakeholders to target for recruitment and where to recruit PWUD in community contexts. This approach was consistent with REA,[16] which adapts ethnographic methods to more punctuated periods when the need for findings is time sensitive and will be used by collaborators, such as health departments. This ethnographic data collection also informed the domains for probes during interviews, so that interviewers could probe about local services, risk environments, and community factors.

The second phase of research was recruitment and semistructured interviews with stakeholders. Based on phase 1, we created our purposeful sampling list of frontline service providers, program administrators, family members of PWUD, and first responders. During stakeholder interviews, we

TABLE 1— Demographic Characteristics of People Who Use Drugs Sample in Maryland: January–December 2019

Demographic Characteristic	No. (%)
Age, y	
< 30	17 (24)
30–50	40 (55)
> 50	15 (21)
Gender	
Men	45 (63)
Women	26 (36)
Other[a]	1 (1)
Race/ethnicity	
White[b]	29 (40)
Black/African American	41 (57)
Native American	1 (1)
Latino[b]	2 (2)
Drug type[c]	
Opioids	31 (43)
Stimulants	25 (35)
Marijuana	24 (33)
Inject	
Yes	23 (32)
No	41 (57)

Note. The population size was n = 72.

[a]One participant identified as a transgender woman.
[b]One participant identified as White and Latino.
[c]Participants also disclosed the use of K2 (synthetic cannabinoid; n = 4), PCP (phencyclidine; n = 4), and alcohol (n = 3).

probed for recruitment sites for PWUD. Phases 1 and 2 were fundamental to REA, allowing us to establish rapport in each county context, despite the time constraints of the study.

In the third phase of the study, we recruited PWUD through both stakeholder referral and direct outreach in settings identified through REA. Interview domains for stakeholders are included in Figure A (available as a supplement to the online version of this article at http://www.ajph.org). Eligibility criteria for this sample included (1) being older than 18 years, (2) self-reporting use of drugs other than alcohol (e.g., heroin, nonprescription opioids, crack cocaine, methamphetamine) in the past year, and (3) residing in a county where research was being conducted. All participants underwent written informed consent and completed a 1-time, 90-minute semistructured interview. Participants were paid $25 cash for participation.

The University of Maryland research team also conducted an exploratory substudy targeting stakeholders who engage with Latinx PWUD in Montgomery and Prince George's counties. Little has been written about Latinx PWUD in Maryland, and, because of issues related to immigration enforcement, this population may not access harm reduction services. One author (J. F.) conducted interviews with stakeholders serving the Latinx community in both English and Spanish.

We analyzed the data using thematic analysis.[17,18] We generated an initial codebook for all data, using deductive codes derived from research questions and iterative codes to allow salient themes to emerge. We organized initial codes, drawing from the theoretical and methodological frameworks of REA, including structural, community, and individual-level domains.[16] A PhD-level qualitative analyst coded the data using MAXQDA (VERBI Software, Berlin, Germany). We analyzed interviews from both PWUD and stakeholders using the same code book and process. After we coded the entire data set for first-level themes, A. M. L. and M. T. conducted a second phase of coding, specifically querying for the experiences of Black and Latinx participants. We compared all data in the second phase of the 2 investigators' coding to ensure consistency in their code application.

RESULTS

Our analysis was grounded in a methodology that centers how personhood and experience are shaped by sociostructural contexts. Development of the theoretical framework of "unmet obligations" is generated by 3 key analytic domains that emerged in our data: (1) intense enforcement and punitive governance regarding syringes, naloxone, and other drug use equipment that PWUD possess; (2) historic racialization, social exclusion, and legacies of trauma among Black PWUD and other PWUD of color; and (3) the differential implications of harm reduction policies for populations who experience racialized criminalization.

Our data highlight the role of 3 governance structures in the lives of PWUD: policing, legacies of racism, and the implementation of initiatives those forces inevitably shape.

Enforcement and Punitive Governance

In our analysis, we acknowledged the baseline adversities that all marginalized PWUD face as they interface with services, health care, and the police. This baseline reflects the deeply embedded systems of punishment directed at poor, marginalized, and racialized communities.[19] Our data demonstrate that PWUD, regardless of racial self-identification, are subject to various forms of punitive governance related to the possession of drug use equipment or naloxone. These issues are well documented in the literature, so we present a brief summary of these findings in Box 1.

Syringe service programs were legalized in Maryland in 2016 (SB97), and state law authorizes "the retail sale of syringes without a prescription with no direct prohibition on sales to people who inject drugs" (Md. Code Regs. 10.13. 08.01). However, we found that retail worker discretion and other forms of community stigma inhibit access to syringes for PWUD. This was especially true in rural and semirural areas, where PWUD were familiar to community retailers. Even when participants were able to access syringes, they described anxiety, anticipated stigma, and known criminalization if they encountered the police while in possession of syringes (Box 1). The findings in domain 1 of our theoretical framework are consistent with issues affecting all PWUD; however, they are the baseline experiences of adversity on which other adversities are compounded for Black and Latinx PWUD.

Racialized Histories of Trauma

Study participants, regardless of racial self-identification, described histories of trauma and loss connected to compounded adversity over their life course, including comorbid physical and mental health conditions, adverse childhood experiences, intergenerational drug use, multiple forms of violence, posttraumatic stress disorder, and trauma associated with witnessing overdoses or not being able to save someone during an overdose. However, our data yielded critical information regarding broader sociopolitical contexts affecting Black and Latinx PWUD.

Participants in Prince George's County discussed the intense and rapid impact of fentanyl in recent years and their experiences of concentrated fentanyl-related deaths affecting local Black communities, particularly in the District of Columbia–Maryland border area. They described the existential weight of witnessing overdoses, while managing grief from the overdose deaths of loved ones and their own continued fear of fentanyl. The lived experience for Black community members during the rapid onset of fentanyl is described in Box 2.

Larger historic dynamics also affected the impact of fentanyl locally. Participants expressed a generalized perception that public health prioritization of overdose prevention had long been needed. However, it was only when White communities began to experience the impacts of overdose that resources were rapidly

BOX 1— Domain 1: Enforcement and Punitive Governance of Drug Use Equipment: Maryland, January–December 2019

Community stigma and discretionary gaps affecting syringe access: "If we wanted to go to [pharmacy retail store] and buy a box of 100 [syringes] at a time at $13 a box. If they would sell them to you, depending on who was there and if they gave a shit, also depending on who they [the drug users] were. So, a lot of people aren't even allowed to go [to retail store] around here because they got caught stealing from there. . . . [That retail store is] your only option . . . if you do not have a diabetic card and have a prescription for them [the retail store] is not going to give them to you." 32-y-old White man, Calvert County
Inconsistent practices at retailers: "There's always been problems with [pharmacy retail store]. One day you'll be able to buy a box and the next day they'll be like, 'Oh, we stopped selling needles' or 'We stopped selling 10-packs. You've got to buy a whole box' or 'We stopped selling needles altogether.' And it was always a lie, because there's supposed to be a harm reduction model where pharmacies are supposed to . . . sell you needles regardless. But they don't care there." 27-y-old White man, St. Mary's County
Fear of arrest and anticipated stigma when engaging with police and first responders: "If you get pulled over and you don't have nothing on you, but you've got Narcan, they're going to think like, 'Oh, yeah. Now the police know.' Or they think, 'Somewhere I'm associated with it. So, now they're going to dig in my car more.' Or they think, 'They're going to harass me.' You know what I'm saying? Because I have seen people that's clear in active use that have denied Narcan. This on the street." Community organizer, St. Mary's County
Lack of trust when engaging with police: "They'll charge you right off the jump . . . they'll charge you straight possession . . . If it's a new needle, they'll get you for distribution of paraphernalia. If it's a used needle, they'll get you for possession of drugs. Then you got to fight it in court to get the lab results to prove that it just has residue." 32-y-old White man, Calvert County

BOX 2— Domain 2: Racialized Histories of Trauma in the Era of the Overdose Crisis: Maryland, January–December 2019

The impact of fentanyl on Black communities in the DC metro area: "When fentanyl came through and hit the population real hard, there were a lot of people you thought weren't on drugs [who] was OD'ing and dying. It's been hitting really hard in the Black community. When I was working at the needle exchange over in DC, we lost 14 to 15 people from fentanyl. Some of them don't look like they do nothing. Everyday clean cut. Dress nice. Go to work. But they'll end up getting bad dope, OD, and they're gone. People just like us. Everyday people from all walks of life." Frontline provider, Prince George's County
The impact of fentanyl on Black communities in the DC metro area: "So, that's why I say it's getting worse . . . since I got out of treatment, 6 people have overdosed and died that I knew. Six. . . . From heroin, [people] that I went to treatment with. It had to be [fentanyl laced]. It had to be, because nobody uses straight heroin anymore. There is no such thing anymore. There is no such thing as straight heroin anymore. From the heroin addicts that I do know, or the ones that were addicts and that are clean, there is no straight heroin anymore." 31-y-old Black woman, Prince George's County
Compounded loss: "We can go back and I tell you how many people I lost. So I had a friend in my addiction. I woke up and next to me dead. I woke up, he was dead next to me. Dead. He died right next to me. . . . My friend B died over fentanyl overdose. I lost, like, 3, 4 people. Last year when my father—year before last when my father died—I lost 7 people in that same year." 40-y-old Black man, Prince George's County
Anxieties related to anti-immigrant climate: "What I do see is that Hispanic people do sometimes, or several times, express their concern about the current anti-immigrant climate . . . and there is anguish, worry, and anxiety." Provider serving Latinx community
Political climate affecting engagement with services: "I think we've seen it since the [2016] elections. . . . I've heard from jurisdictions in the area that traffic through their health and human services department has dropped dramatically. . . . People have chosen to not renew their children's Medicaid or abandoned applications halfway through. Disenroll from other programs like SNAP [Supplemental Nutrition Assistance Program] or free and reduced lunch. Anywhere that they feel that their information can then be shared with other agencies or just out of fear of having their information in any kind of database or registry has been prevalent." Provider serving Latinx community
Compounded trauma with threat of immigration enforcement: "The ongoing attacks, it just exacerbates everything else. If you're already dealing with the trauma of coming here, and then dealing with the trauma of then living here under all this anti-immigrant rhetoric, I think it just exacerbates everything else. And it distracts from everything else, too. Like we were talking about people being fearful to leave their house and being out and about in the community. Then it makes everything else that much more secondary. So, yes, I may want to connect to these services, or go into treatment. And I was already thinking twice about it, and now these raid threats are here. It just pushes everything back even more, and potentially exacerbates all the needs in our community." Provider serving Latinx community

mobilized. Some stakeholder participants noted that Black community members were hesitant to engage with broader discussions or programs regarding overdose in the county. This was because they had historically been overlooked as victims of overdose death and their communities had not previously been prioritized for prevention measures. This new focus on the "overdose epidemic" as framed in national discourse thus garnered "eye rolls" from some community members, who felt that their experiences had been ignored or invalidated for decades. The dynamic that participants described in this county mirrors experiences of PWUD in Washington, DC, when fentanyl arrived in the local drug supply and overdose deaths escalated.[20] Both speak to the marginalized histories of overdose death in Black communities.

Similarly, stakeholders serving Latinx communities discussed the impact of the political climate on how people engage with services. We collected the data for this study during a particularly volatile moment of anti-immigrant discourse and racism in the United States and operations by US Immigration and Customs Enforcement nationally and in Maryland.[21] In our substudy with these providers, participants pointed to histories of trauma related to migration experiences, which were exacerbated by intensified fears of deportation that generated intense fear about engaging in any services. They described how their clients lived under chronic duress, anxiety, and fear because of current immigration policy and discourse. Threats of detention and deportation were realistic, as reports of local Immigration and Customs Enforcement raids circulated. These clients were subject to multiple intersecting stigmas owing to both their immigration status and their drug use. The stressors of the anti-immigrant political climate had tangible impacts on how Latinx people access all social services. Box 2 also outlines participant descriptions of the political climate's impact.

Racialized Criminalization

In 2015, Maryland passed its Good Samaritan legislation, which provides protection from arrest, charge, or prosecution of 6 misdemeanors when evidence of these misdemeanors was obtained during the time someone is seeking medical assistance. We found that people did know about the legislation but that it did not relieve concerns about engaging with police during an overdose. A 32-year-old White man from Calvert County reported, "That's why people get found dead all the time in peoples' houses, because they're like, 'Oh, shit, I'm not calling the cops. I'm not going to jail for this.'" Furthermore, some participants reflected on

differential applications of the law for people of color. This was rooted in lack of trust based on histories of disproportionate policing and criminalization of communities of color and direct experience with the carceral state. This fear and mistrust extend not just to those who witness the overdose but to the person experiencing overdose themselves. Data demonstrating domain 3 of our model are outlined in Box 3.

DISCUSSION

Our data facilitated the development of a structurally oriented framework for the unmet obligations of the institutionalized harm reduction infrastructure in ensuring sufficient protection for Black and Latinx PWUD. We found intense experiences of enforcement and anticipatory punitive governance regarding drug use equipment (domain 1), consistent with research that finds policing to be a structural determinant of health[22,23] associated with a range of negative health outcomes among PWUD.[24,25] Our data are also consistent with research examining the punitive impacts of policy for PWUD in the United States and globally.[26] Participants described an overall lack of trust in harm reduction policies meant to grant them legal protections and specifically feared police interaction and arrest. These findings are consistent with a large body of research that demonstrates that PWUD are hesitant to call 911 or engage with police based on personal and community experience and believe that they will be subject to punitive measures at the time of an overdose event.[27–33]

Participants described racialized histories of trauma and social exclusion for Black and Latinx PWUD that hindered engagement with harm reduction services (domain 2). These included the rapid impact of fentanyl on overdose deaths in Black communities in the Washington, DC, metro area and a perception that resources to address the overdose crisis came because of increasing overdose deaths and prioritization in White communities. These legacies are important structural contexts for Black communities' experiences of exclusion or disengagement from harm reduction efforts.

We also found that the structural context of immigration enforcement and threat of detention and deportation is an important backdrop for understanding how Latinx communities prioritized service engagement. For both Latinx and Black PWUD, historical experiences and current fear of enforcement (whether by police or immigration officers) intersected with feeling less protected by the harm reduction infrastructure (domain 3).

In our development of the framework of unmet obligations, we drew from scholarship that views the examination of drug use and addiction-related experience as inextricably tied to the construction and maintenance of racial hierarchies in the United States[34] and the implications of the legacies of racialization and criminalization of drug use[35] in Black and Latinx communities.[36] Given the literature on the effects of policing on health and wellness in communities of color,[36] the pressing contemporary question is not of whether disparities are rooted in legacies of racialized enforcement and policing of communities of color—this has been well established.[36,37] Rather,

BOX 3— Domain 3: Racialized Criminalization in a Life-Saving Policy: Maryland, January–December 2019

Hesitancy to engage with police: "People are still going to be hesitant. It's still scary to call the cops. It's a scary thing, especially if you're on drugs. Your experience . . . and sadly, the experience with the cops around . . . is they're just out to get you. They're not there to help you. They're out to get you. So, just calling the cops is just one thing you just never want to do here, no matter what." Calvert, 33-y-old man, declined to report racial identification
Gaps between the law in its ideal form and the realities of practice based on broader perceptions and experiences of racism and policing: "But you really think that they won't try to do nothing to you if you're using too? And you help them [person overdosing]? . . . Man, these people will be trying to lock you up too. That's the whole thing. You probably want to do right by somebody that's out, but then there's so many other things that are going to come with that . . . . Questions: 'Was you with him?' You know? . . . I'm not saying I wouldn't trust it. I don't know to be honest. . . . I mean I hate to see anybody fall short, you know? Nowadays, you've got to really watch yourself. To get involved in stuff like, that especially a person like me and where I come from. A young lady like yourself, they probably wouldn't even question, but I don't know. They probably think I gave it [the drugs] to them. I don't trust the police at all. . . . You've got to watch yourself . . . when they stop you, you've got to be mindful of everything with these people today because they shoot you and everything." 63-y-old Black man, Montgomery County
Perceptions of ramifications faced when calling 911 to save a life: "Yes, I got out of there and dialed 911 because that means they going to shake [search] the whole house. There was a lot of crack pipes and all kinds of stuff going on in that house. . . . I got out of there." [Recounting conversation he had with 911 dispatcher]: "'There's a dead man in that house, okay? You go there.' 'Who are you?' 'Nobody. Don't call me back. Okay? Go get him.'" 40-y-old Black man, Prince George's County
Witnessing others flee their own overdose event for fear of criminalization: "Two days ago, a dude was standing up talking, and he put his hands on the fence, and all of a sudden he collapsed. And I knew then what it was. Called an ambulance, but he had come to by then [regained consciousness], and he hauled it [fled quickly]. I mean he left!" 66-y-old Black man, Prince George's County

the task is to elucidate the machinations of structural racism that manifest in everyday experiences for PWUD and to show how the linkages between punitive arms of the state and harm reduction initiatives become implicated in their everyday maintenance. These dynamics include the constant threat of differential and harsher enforcement and a historic consciousness of the racialized trauma of deprioritization and abandonment in overdose death.

Research has explicated the dynamics of structural racism in overdose crises, demonstrating the interplay of the medicalization of addiction for White PWUD versus the criminalization of addiction for Black PWUD[38–40] and the ways that race becomes "invisible," in policy and practice, yet always operates as a "ghost variable."[39] Building on this scholarship, we argue that when harm reduction initiatives are institutionalized, these institutionalized forms must be critically analyzed as both implicitly and explicitly racialized, given that its enactment is done in the context of decades of mass incarceration of PWUD and the racialization and hypercriminalization of Black people and other people of color. Despite its rootedness in community-based movements among PWUD, harm reduction has been institutionalized in broader public health and legal systems and, thus, is subject to the well-documented systemic racism rooted in those governance systems and the role that enforcement plays in those systems.

In line with numerous calls to make public health practice explicitly antiracist,[4] we add to the literature on structural causes of the overdose crisis and urge the development of an accountability-oriented framework that directly names and confronts the unmet obligations of our institutionalized harm reduction infrastructure. Accountability-oriented public health practice should be understood as a direct engagement with how structural racism and punitive practices, as always-present mediators of institutionalized harm reduction, might disallow the possibility for equitable protective initiative effects. We posit that if we take racist and racialized unmet obligations as a starting point established in the evidence base, we can begin to interrogate and dismantle the taken-for-granted constructs of Whiteness embedded in harm reduction policy that harm communities of color. This framework allows us to change from solely focusing on behavioral interventions (e.g., getting people to engage with overdose prevention education) to instead include reimagining structural interventions to strengthen protections for Black people and other people of color who have been historically excluded from institutionalized health services. This framework provides guideposts to investigate how to hold harm reduction policy and practice accountable for the legacies of harm that Black communities and other communities of color have experienced.

Limitations

This study has the following limitations. We used purposeful and targeted sampling methods, and therefore findings are not representative of all PWUD in Maryland counties, nor are findings generalizable to other populations or geographic locations. Compared with the larger statewide study, the 5-county sample from which our analysis draws is comparatively small. Nonetheless, consistent with best practices in qualitative research,[16] this limitation is mitigated by the fact that qualitative data are intended to provide deep, contextualized information about a topic of interest that cannot be captured quantitatively.

Another limitation of our study is that we did not yield data on participant's access to medication for opioid use disorder (MOUD), partially because of our focus on the emergent infrastructure, such as syringe service and overdose prevention. Research has indicated that racial inequities in access to MOUD persist[41] and that it is beneficial to consider the incorporation of MOUD into trusted harm reduction service spaces.[42] Our theoretical framework can be useful in considering how to examine the similar unmet obligations in MOUD linked to historic racialization, social exclusion, and legacies of trauma among Black PWUD and other PWUD of color in those clinical spaces. These issues will need to be addressed in any future hybrid harm reduction and MOUD spaces to mitigate racial disparities.

Public Health Implications

The public health implications of our study and theoretical framework are numerous. Our findings demonstrate that the implementation of harm reduction initiatives are a first step but that we must assess how initiatives operate in real time and what structural dynamics are at play in their implementation for diverse communities with unique histories and experiences. Furthermore, our ethnographic methodology is critical in demonstrating the complexity of the overdose crisis, how behavioral variables captured quantitatively provide an incomplete picture of people's real-world engagement with harm reduction infrastructure, and how racial disparities are perpetuated in it. This research also helps to illuminate a key paradox in the current era of the implementation of harm reduction

policy nationally: progressive policy is implemented and tireless frontline providers deliver services, yet the overdose crisis escalates in communities where various forms of racialized exclusions are firmly entrenched. Indeed, Maryland is an example of a state with substantial and growing harm reduction infrastructure, yet recent data show an escalation in overdose mortality in Black communities. This research opens avenues for continuing to strategize for an explicitly antiracist harm reduction agenda that confronts historically unmet obligations of harm reduction infrastructure to bring this infrastructure to its full potential and create equitable protections based on the existing public health evidence base. AJPH

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CONTRIBUTORS

A. M. Lopez designed the study and led the study team. A. M. Lopez, M. Thomann, and J. Ferrera conducted analysis. A. M. Lopez, J. Ferrera, M. Al-Nassir, M. Ambrose, and S. Sullivan conducted study activities. Z. Dhatt coordinated analysis. M. Al-Nassir, M. Ambrose, and Z. Dhatt coordinated study activities.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

HUMAN PARTICIPANT PROTECTION

The University of Maryland institutional review board approved these study activities (project #1300187-1).

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Drug Harm Reduction in Vietnam: A Review of Stakeholders' Perspectives and Implications for Future Interventions

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Objectives. To determine how harm reduction should be applied in low-resource countries such as Vietnam by exploring the perspectives of people who use drugs (PWUD), health care professionals, and policymakers regarding methadone treatment and harm reduction strategies.

Methods. We conducted 2 qualitative studies in Vietnam between 2016 and 2021. We interviewed 62 PWUD and 22 experts in drug policy development and drug treatment programs, conducted observations at methadone clinics and harm reduction program meetings, and analyzed drug policy documents.

Results. PWUD considered methadone treatment only as a transition to a drug-free life. Policymakers deemed harm reduction ineffective and continued to enforce arrest and incarceration of PWUD. Drug intervention programs are not yet geared to providing specialized services. Effective communication strategies and information on evidence-based harm reduction models are inadequate to help policymakers make the right decisions.

Conclusions. Harm reduction principles have not been fully adopted in Vietnam. A harm reduction strategy based on a more humanistic approach that goes beyond a biomedicalized approach is urgently needed in Vietnam and other countries in the Global South. (*Am J Public Health*. 2022;112(S2):S182–S190. https://doi.org/10.2105/AJPH.2022.306764)

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Starting in the 1980s, harm reduction became a pillar of drug policy in different parts of the world, including Australia, Canada, and Western Europe, as a rational policy response to the HIV public health crisis.[1] In many Western countries, the AIDS epidemic introduced a radical shift. Harm reduction replaced the accepted vision of care for people who use drugs (PWUD), which only considered abstinence as an adequate response. In this new framework, abstinence could be considered integral to recovery, but only if PWUD themselves chose abstinence and not if external forces imposed it.[2,3]

Since its implementation worldwide, harm reduction has proven successful over time. A notable benefit of harm reduction programs is that they facilitate the dialogue of PWUD with harm reduction and drug treatment professionals about drug use and harms and their access to treatment and social services.[4] The following principles make harm reduction successful[5]: humanism, meaning that services are patient centered and personalized according to their needs; pragmatism, or understanding that abstinence is not a priority unless patients choose it; individualism, or recognizing that decisions about medications, treatments, and health behaviors should be left to the individual; autonomy, or leaving the choice of medication, treatment, and health behavior to PWUD based on their preferences, beliefs, and abilities; incrementalism, or recognizing that we all experience plateaus and negative trajectories at times; and accountability without termination, or accepting

that people have the right to make harmful health decisions and that providers can still warn them about the consequences.

Despite the effectiveness of harm reduction, it was implemented late in Vietnam after coming under heavy criticism from some politicians and addiction professionals, who claimed that harm reduction interventions were too tolerant of drugs and that they contradicted abstinence.[6] For decades, the official Vietnamese policy was detoxification of PWUD, with or without their consent.[7] Drug-related harm reduction strategies were implemented in Vietnam starting in the early 1990s in response to a burgeoning HIV epidemic and in a context of international funding availability. At the outset of the epidemic, HIV prevalence among people who inject drugs rocketed from 10.1% in 1996 to 32.0% in 2002.[8] The need to control the HIV epidemic led Vietnam to break from its traditional law enforcement approach to drug use to endorsing evidence-based harm reduction programs.[9] Since 2004, as 1 of the 15 focus countries under the United States President's Emergency Plan for AIDS Relief, Vietnam received international funding to implement drug-related harm reduction programs, including peer-based education, syringe exchange, and opioid substitution treatment using methadone or buprenorphine.[9]

Harm reduction has been successful at containing the HIV epidemic in Vietnam and shifting the country's drug policy to a less prohibitionist stance.[10] Data from the pilot implementation of methadone maintenance treatment showed only 1 new HIV seroconversion among 760 HIV-negative patients after 9 months.[11] Moreover, the proportion of methadone patients who reportedly engaged in criminal activities decreased from 40.8% to 1.3% after 2 years.[12] After almost 2 decades, HIV prevalence among people who inject drugs decreased to 12.7%.[13] These achievements facilitated the government's decriminalization of drug use in 2009 as well as the official recognition of addiction as a chronic disease and of people with drug use disorders as patients in need of treatment.[14,15]

The prevalence of methadone treatment as a harm reduction strategy is particular to Vietnam. In the early 2000s, international organizations brought methadone into Vietnam with the aim of reforming national drug policies that the international community considered draconian and unethical.[9] As a strategy to secure acceptance from the government of Vietnam, proponents of drug policy reform described methadone treatment, a voluntary, community-based treatment of opioid use disorder, as just another approach to reducing the risk of an injection-related HIV epidemic.[9] The complex status of methadone treatment makes it a good example to understand the perspectives of health care professionals and policymakers on harm reduction.

Despite these early accomplishments, methadone treatment and other harm reduction programs face multiple challenges in attaining their optimal effect to reduce harm among PWUD and improve their lives. Since 2017, the number of PWUD on methadone has stagnated.[13] Only 53 000 people who use opioids in the country are in methadone treatment.[13] This number is low, given Vietnam's commitment to providing methadone treatment to 80 000 people who use opioids by 2015.[11] Dropout rates shot up to 33.3% at 36 months,[16] of whom 24% were arrested.[12] Moreover, the coverage of needle and syringe distribution programs has remained mediocre since 2008, and the number of needles and syringes distributed every year per person who injects drugs has gone down since 2013.[13] Attempts to provide buprenorphine as an alternative at methadone clinics have met with reluctance from health care providers, who have to verify compliance by observing the patient until the medication has completely dissolved.[17]

Increased methamphetamine use among PWUD, including methadone patients, has further complicated the situation.[18] Methamphetamine use is associated with lower uptake of methadone treatment[19] and weaker viral suppression among HIV-positive PWUD.[20] People who use methamphetamine are stigmatized and considered paranoid, violent, and dangerous, resulting in significant social concerns.[21] In addition, nongovernmental organizations have piloted harm reduction initiatives for people who use methamphetamine. However, peer workers who delivered group education and safe smoking equipment (e.g., bongs, pipes) in hotspots ran the risk of being arrested, as the government did not recognize their work.[22]

In an international context that acknowledges the benefits of harm reduction policies, the struggles that harm reduction programs face in Vietnam led us to question what harm reduction means to different Vietnamese stakeholders by addressing the limitations of harm reduction implementation in Vietnam and the application of harm reduction programs in a specific Vietnamese context.

METHODS

Over 5 years (2016–2021), we conducted 2 qualitative studies on harm

reduction implementation in Vietnam. The first project examined the experience of methadone patients, including their perception of the role played by methadone treatment in their personal recovery. The second project explored the opinion of addiction treatment specialists who are policymakers or service providers in Vietnam about the effects of policy on developing new addiction treatment services in Vietnam. Both studies included semidirective interviews and ethnographic participant observations in services that delivered methadone treatment. The similarities between the 2 studies enabled us to define the research question, define the original codes, and proceed with coding. Our findings come from the synthesis of the 2 studies, reflecting similar key points in the experiences and opinions of different stakeholder groups regarding methadone and harm reduction programs in Vietnam. The recruitment and interview questions are as follows.

Project 1

We interviewed 62 PWUD in Haiphong, a large city with a high prevalence of HIV and injection practices.[9] This study was part of an intervention study called DRIVE (Drug-Related Infections in Vietnam) with people who inject drugs in Haiphong.[23] The intervention study recruited participants using respondent-driven sampling and provided them with harm reduction and referral to treatment through community support groups.[19,20] The semidirected interview guide included 2 main questions: "What have your experiences with methadone treatment been?" and "For what reasons did you decide to delay treatment?" As active members of the national technical assistance network for drug treatment, we also conducted participant observations in meetings with policymakers and harm reduction professionals and with patients, their families, and their providers at methadone clinics. Information from observation was dutifully recorded during our visits to the clinics. Thus, we analyzed information from meetings as an additional resource to reflect on the findings from interviews with patients.

Project 2

Between 2019 and 2021, we carried out a desk review of policy documents and interviews. We scanned 51 legal and policy documents, including 19 related to harm reduction and methadone. We invited 23 senior managers of key governmental agencies, international and nongovernmental organizations, and universities working in drug-related fields for interviews. Twenty-two of them agreed to participate in face-to-face semistructured in-depth interviews. Sample questions included "How is Vietnam planning to conduct harm reduction activities?" and "What conditions and resources are needed for harm reduction interventions in Vietnam now and in the future?" We applied the Delphi technique, in which Vietnamese experts (who were also study participants of the second study) reviewed the research findings before the article was published to improve the credibility of qualitative data

For data analysis, we developed initial codes based on the research questions and added emergent codes throughout the coding process. The initial codes were "PWUD's understanding of methadone treatment and factors affecting their thinking," "health care providers' and policymakers' understanding of a harm reduction approach and factors affecting their thinking," and "current limitations to developing a harm reduction approach in Vietnam." We then reviewed and categorized codes as they related to the research questions. We compared the themes from both projects and collated them to present the perspectives of different stakeholders regarding methadone treatment and harm reduction. The qualitative and social science approach allowed us to overcome the naturalistic, biology-based perspective of methadone and reveal the complex nature of methadone experiences and perceptions.[24]

RESULTS

Table 1 presents the demographic characteristics of participants, and Boxes 1 and 2 present quotations that support the analysis.

People Who Use Drugs

To the PWUD who participated in our study, living a drug-free life independent of methadone remained the main desirable goal. All participants in methadone treatment had known about methadone for a long time. They knew peers who had undergone methadone treatment and gotten better, which gave them the confidence to enter methadone treatment, but they only decided to enter treatment after multiple failed attempts to quit drugs by themselves. Both women and men considered methadone treatment a last resort to find relief from opioid addiction and related financial and relationship issues (Box 1, quotation 1).

Although methadone patients experienced significant positive changes in

TABLE 1— Participant Characteristics of Two Qualitative Studies: Vietnam, 2016–2021

Characteristic	No. (%) or Median
PWUD (n = 62)	
Gender	
Female	19 (30.0)
Male	43 (70.0)
Age, y	40
HIV positive	35 (56.0)
Currently under methadone treatment	38 (61.0)
Never been on methadone treatment	17 (27.0)
Median length of methadone treatment, y	3
Marital status	
Married/living with partner	29 (47.0)
Single/divorced/widowed	33 (53.0)
Occupation	
Unemployed or odd jobs	34 (55.0)
Relatively stable jobs	28 (45.0)
Expert participants (n = 22)	
Gender	
Male	18 (81.8)
Female	4 (18.2)
Age, y	48
Workplace	
National level (MOLISA, MOH, MOPS)	6 (27.3)
Local level (drug rehabilitation centers, methadone clinics, provincial centers for disease control)	6 (27.3)
UN agencies and NGOs, CBOs	6 (27.3)
Universities (addiction treatment networks)	4 (18.2)
Experience working with drug policies and drug users, y	
5–10	4 (18.2)
> 10	18 (81.8)

Note. CBO = community-based organization; MOH = Ministry of Health; MOLISA = Ministry of Labour, War-Invalids and Social Affairs; MOPS = Ministry of Public Security; NGO = nongovernmental organization; PWUD = people who use drugs; UN = United Nations.

their lives thanks to the treatment, during our visits to methadone clinics, patients and their families commonly asked how long it would take for them to stop methadone treatment and become abstinent. As many as 9 of 38 participants described detailed plans for leaving treatment to work and live what they envisioned as a "normal" life. Some tried to lower their doses by secretly cutting away a portion of the medication or even dropped out of treatment to see whether they could go without it. A few family members also encouraged patients to get off methadone (Box 1, quotations 2 and 3).

Among the 24 PWUD who were not in methadone programs, 17 had past experiences of treatment. The main reasons for leaving treatment were wanting to stay drug-free without medical assistance and wanting to be able to work (Box 1, quotation 4). It is interesting to note that these reasons were similar to the reasons for not getting into treatment cited by the 7 participants who had never undergone methadone treatment. This perception of methadone treatment might relate to the constraining methadone delivery regulations in many clinics in Vietnam.[25]

Health Care Professionals

Health care professionals working in methadone programs were under

BOX 1— Quotations From In-Depth Interviews With People Who Use Drugs (PWUD) and Expert Participants: Vietnam, 2016–2021

Quotation 1: "I had to do heroin since [the withdrawal] was too painful. I was too tired of it. When I saw my poor children, I only wanted to get off it but I could not. I feel so fortunate that we have methadone now." (methadone patient, female, aged 38 y)
Quotation 2: "I told him he should take methadone for a few years then stop. We should not be dependent on anything. We must be the master of ourselves." (wife of a methadone patient, aged 34 y)
Quotation 3: "My father says if I have strong willpower, I should stop getting methadone, then I would not have to go to the clinic daily." (methadone patient, female, aged 33 y)
Quotation 4: "I'm not into methadone since I have no time to go to the clinic every day. If I have to spend time getting methadone, I won't have time to make money for my family." (non–methadone patient, PWUD, female, aged 44 y)
Quotation 5: "In the context of withdrawn funding from international donors, Vietnam does not have enough resources to build a comprehensive harm reduction program as in the past. The methadone model, which includes many components of psychological counseling, could be eliminated. The methadone program now mainly focuses on examining and delivering methadone to patients rather than providing intensive counseling support." (expert participant, Ministry of Health)
Quotation 6: "Drugs bring benefits to people who use them. If we don't ban illicit drugs, they will use them as popularly as cigarettes. Now there are warnings that smoking provokes harmful effects to public health, but many young people still do it. So harm reduction will not be practical to prevent drug use." (expert participant, Lao-Cai Centre for Disease Control)
Quotation 7: "The Vietnamese discriminate against illicit drug use because there are too many cases involving drug users. Ideally, there should be a network or organization of PWUD in Vietnam immediately following such events to build trust and demonstrate that not all drug users are bad. Yet, despite public concern, representatives of organizations that work with PWUD remain silent. This allows PWUD to become subject to social prejudice. Harm reduction messages are nonexistent." (expert participant, National Assembly)
Quotation 8: "Experimental harm reduction interventions often prove effective on a small scale, but they do not address the actual risk situations or how to deal with the risk when such measures are implemented. For example, having PWUD undergo addiction treatment in a community may cause fear, conflict, and instability in the community as a result of stigma and the lack of experience of local officials. How can we handle such an issue?" (expert participant, National Committee on HIV/AIDS, Drugs and Prostitution Prevention and Control)
Quotation 9: "It is not sufficient to provide evidence of the effectiveness of harm reduction programs to policymakers. When applying harm reduction interventions, it is important to examine potential undesirable situations and possible solutions. The harm reduction strategy proceeds in this manner. To develop such strategies, policymakers require professional assistance. However, the current capacity of specialized agencies is not sufficient to do this." (expert participant, National Assembly)

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constant pressure to secure funding for treatment in competition with law enforcement and compulsory drug rehabilitation programs, both of which also fall under the purview of the ministries of public security and social affairs. Although health workers promoted methadone treatment, they also seemed to neglect patients' needs and challenges and did not fully adopt harm reduction principles. Our ethnographic notes reveal this ambivalence being manifested during a meeting among social workers, police, and methadone treatment workers (Box 2, quotation 1).

The related incident illustrates the challenges facing health care providers when, to defend the methadone program, they attempt to articulate harm reduction principles in response to law enforcement's abstinence-based criticism. On the one hand, they called on the principle of reducing drug-related harms rather than prematurely terminating methadone treatment for those who relapsed. On the other hand, they tried to avoid further

BOX 2— Quotations From Field Notes in Observations and Discussions Among Participants: Vietnam, 2016–2021

Quotation 1: "The representative of the Prevention AIDS Center of X started with a presentation of the city's current methadone program. At first, she criticized the two articles in Decree 96 that required patients who test positive with nonopioid drugs to be kicked out of methadone treatment for not fitting the harm reduction principles. However, as the police depicted the methadone program as a harbor for addicts to avoid compulsory rehabilitation and complained that the dropout rates and concurrent heroin use were high, she suggested we should screen patients for their motivation. She argued that at the beginning, when the screening process of potential methadone patients was stricter, dropout was much rarer. She also criticized patients for picking "unsuitable" jobs that did not allow them to come to the clinics." (Field notes, September 18, 2018)
Quotation 2: "I told the staff I wanted to call potential interviewees on the phone to invite them to the interviews, but they said we should call patients in when they come and force them to participate by insisting they must complete the interviews before taking their medication." (Field notes, January 3, 2020)

criticism by proposing to screen unmotivated patients out of treatment to reduce dropout rates—an action that goes against the low-threshold principle of the harm reduction approach. This discourse indicates that the medical system and its providers focus on abstinence from all drugs and retention rates as the main treatment outcomes without recognizing other challenges (e.g., unemployment) facing methadone patients.

In the clinics, providers' distrust of patients became evident in their daily practices. Because of this lack of trust, methadone dosing was used to coerce patients into doing what the clinics wanted them to do. For example, in a methadone clinic in Northern Vietnam, all patients were required to take turns cleaning the clinic without payment because the clinic was insufficiently staffed. Patients who resisted this requirement were denied medication. This practice was widespread in other areas, as shown in our notes taken during a study trip to a clinic (Box 2, quotation 2).

Thus, there is a mismatch between the priorities of PWUD and their families and those of health care providers. PWUD and their families considered abstinence desirable because they equated it with a conventional, functioning life outside methadone treatment. Health care providers considered abstinence the only goal of treatment and neglected patients' other needs.

Vietnamese Drug Policy

There is still no comprehensive framework for developing a harm reduction policy for PWUD in Vietnam. Harm reduction interventions for HIV prevention, including condom and syringe delivery and maintenance treatment therapies, were first regulated in 2007. They are the only 2 government-approved programs,[26] and no new harm reduction strategies have been mentioned in legal documents so far. Other initiatives, such as overdose response and peer-based mental health assistance, were implemented on a small scale with support from nongovernmental organizations.[22] No national funding has been committed so far to scale up these initiatives. This lack of a solid national framework had a negative impact on harm reduction practices that consequently allowed stakeholders not to take into account the rights of PWUD as patients who may equally benefit from medication such as methadone.

The current Drug Prevention Law, passed in March 2021, briefly mentions harm reduction in 1 article and dedicates extended sections to the management of PWUD with center-based compulsory treatment and administrative sanctions.[26] Despite the positive impact of harm reduction strategies, policymakers in Vietnam remain reluctant to adopt them. They perceive harm reduction as a colonialist model imposed by the Western world without adjustment to the Vietnamese context and resources. Additionally, Vietnam's legal documents still consider drug use to be a "social evil."[26] As international funding for methadone treatment has shrunk, policymakers opted to keep the medication that directly helped achieve abstinence but to forgo other components that would support patients' other needs (Box 2, quotation 5). Accordingly, it appears that a major limitation of the methadone treatment program is that it does not consider harm reduction principles to engage PWUD and only focuses on methadone distribution as a method of abstinence. Harm reduction principles include providing individualized support to each target group, which we did not observe in this study.

Refusing the Harm Reduction Approach

Policymakers worried that harm reduction was not powerful enough to meet the ultimate goal of ending illicit drug use in Vietnam (Box 1, quotation 6). This policymaker's argument reflects the influence of abstinence-based ideology and shows that the evidence of harm reduction's effectiveness was still not persuasive.

Additionally, policymakers' perceptions of the effectiveness of harm reduction measures can be adversely affected by the lack of a sound communication strategy. Although there is too much information about drug cases and their consequences, actions for harm reduction are rare and news outlets disseminate little information about harm reduction activities (Box 1, quotation 7).

Furthermore, for policymakers, information about effective interventions was insufficient. They were looking for a comprehensive harm reduction strategy that outlined potential political and social risks and indicated how to deal with them (Box 1, quotation 8). The traditional strategies of harm reductionists to prove harm reduction interventions medically effective and feasible might not address this need of policymakers (Box 1, quotation 9).

DISCUSSION

Our data from different qualitative and archival sources contributed to describing how different stakeholders in Vietnam—including PWUD and their

families, health care professionals, and policymakers—view and experience harm reduction, particularly methadone treatment. Our findings showed that methadone treatment is now recognized in Vietnam as one of the first harm reduction programs at the national level. However, it is still considered a treatment method with the exclusive goal of achieving perfect abstinence after 20 years of implementation and public health improvements, rather than as a real harm reduction approach embedded in a philosophy that recognizes the rights of PWUD without achieving abstinence unless that is their declared intention.[2] Developments and adaptations in harm reduction measures have yet to be made. Harm reduction still struggles to meaningfully integrate into Vietnamese drug policy, and abstinence continues to be the ultimate goal of PWUD and other stakeholders.

Shifting mindsets in favor of harm reduction principles is not easy, as shown in the examples of countries with more progressive harm reduction programs that are still embedded in repressive frameworks.[27–29] Medical professionals need to shift from the dominant biomedical tendency of "fixing" individuals to accepting that abstinence is not always an option, from stigmatizing PWUD to focusing on their needs, and from blaming individuals to enhancing their decision-making abilities.[29] Long-term negotiation between different actors is required to implement particular harm reduction initiatives and overcome political and social reluctance because of lack of information about harm reduction principles and the benefits of harm reduction.[27]

The social and political construction of drug issues in Vietnam is complex. It involves concerns about not only public health but also national security.[10] Thus, there is no simple way to shift Vietnam to a tolerant approach to drug consumption. Still, the example of methadone treatment in the country shows that sufficient evidence of the benefits of harm reduction interventions can successfully advocate policy changes.[11] International examples suggest that in countries that still endorse repressive frameworks for drug use, harm reduction innovations can start at the local level with meaningful pilot projects that are later expanded nationally.[27] Harm reduction initiatives must address current political concerns, just as methadone treatment was once adopted to deal with the HIV threat to national security.[10] Harm reduction initiatives should also take into account local sociocultural characteristics, such as the role of families as both a critical resource and a source of stigma for PWUD and the lack of social welfare services to aid PWUD.[30]

The framing of drug-related harm is important in achieving harm reduction principles.[31] Drug-related harm has been widely framed as "harm to others," which assumes that individuals' drug consumption harms people other than the user. Although this approach has been effective in creating alcohol policies such as safe driving and prohibition of underage drinking, it elicits public opprobrium against the individual user and heightens stigma and discrimination of PWUD when applied to illegal drug use.[31] New harm reduction initiatives should acknowledge the multiple difficulties experienced by PWUD and involve their families. When family members are informed about the positive effects of harm reduction approaches for PWUD, their social networks, and environments, they are more likely to accept this approach without focusing on abstinence, and PWUD are more likely to follow through when their families are convinced. This approach would allow programs to take into account the multilevel, multidimensional environmental risk factors for effective interventions.

Limitations

In analyzing data from previous studies, we were unable to conduct additional interviews and observations to enrich our findings. Our observations from this source may be influenced by our recall bias because we did not systematically take notes at all meetings.

The majority of our PWUD participants were middle-aged; only 2 participants were younger than 30 years. Thus, we were unable to explore the perceptions of methadone treatment for younger patients, who might have different needs than middle-aged patients.

Conclusions

Although harm reduction interventions have existed in Vietnam for 2 decades, harm reduction principles have not been fully adopted and an abstinence-based approach dominates, as shown in the perspectives of PWUD, health care professionals, and policymakers. This situation is common in other places in the world. It is worth noting that the failure to recognize the purpose of harm reduction solutions has contributed to increasing dropout rates from methadone therapy and to an inability to cope with emerging drugs. Policymakers can easily dismiss the mere idea of implementing harm reduction evidence because of ideological barriers.

A harm reduction strategy based on a more humanistic approach that goes beyond a biomedicalized approach focused on medication availability is urgently needed for Vietnam and other countries. International experiences show that shifting to a more tolerant drug policy takes time and negotiation between different actors, and initiatives that speak to the political concerns of those who advocate harm reduction would accelerate this process. AJPH

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CONTRIBUTORS

T. T. Nguyen wrote the first draft of the article. T. T. Nguyen and M. T. N. Tran analyzed and wrote up the results of the 2 studies. M. T. N. Tran further clarified and completed the article. G. M. Le was responsible for the research and directed the combined analyses. M. J.-R. supervised the work. All authors conceptualized the study, developed the methodology, and reviewed and edited the article.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

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Haiphong University of Medicine and Pharmacy Ethics Committee approved the first study, and the Hanoi Medical University Ethics Committee approved the second study.

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Mothers Who Use Drugs: Closing the Gaps in Harm Reduction Response Amidst the Dual Epidemics of Overdose and Violence in a Canadian Urban Setting

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Objectives. To identify key gaps in overdose prevention interventions for mothers who use drugs and the paradoxical impact of institutional practices that can increase overdose risk in the context of punitive drug policies and a toxic drug supply.

Methods. Semistructured interviews were conducted with 40 women accessing 2 women-only, low-barrier supervised consumption sites in Greater Vancouver, British Columbia, Canada, between 2017 and 2019. Our analysis drew on intersectional understandings of structural, everyday, and symbolic violence.

Results. Participants' substance use and overdose risk (e.g., injecting alone) was shaped by fear of institutional and partner scrutiny and loss (or feared loss) of child custody or reunification. Findings indicate that punitive policies and institutional practices that frame women who use drugs as unfit parents continue to negatively shape the lives of women, most significantly among Indigenous participants.

Conclusions. Nonpunitive policies, including access to safe, nontoxic drug supplies, are critical first steps to decreasing women's overdose risk alongside gender-specific and culturally informed harm-reduction responses, including community-based, peer-led initiatives to maintain parent–child relationships. (*Am J Public Health.* 2022;112(S2):S191–S198. https://doi.org/10.2105/AJPH.2022.306776)

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The epidemic of overdose deaths driven by fentanyl- and fentanyl analog–adulterated drugs in the United States and Canada represents a pressing public health concern.[1,2] While overdose mortality rates are significantly higher among men than women in both countries, overdoses among women in the United States (aged 30–64 years) have increased at higher rates than among men, and are disproportionately high for Indigenous women in British Columbia (BC), Canada.[3–5] Despite making up approximately 3.3% of BC's population, Indigenous Peoples accounted for 12% of overdose deaths in 2018 and 16% in early 2020,[4,5] with Indigenous women 8.7 times more likely to have a fatal overdose than non-Indigenous women.[5] The toxic drug supply in BC is the leading cause of unnatural deaths, with unprecedented numbers of drug poisonings.[2] In response, a range of overdose prevention interventions have been implemented, including peer-led, low-barrier supervised consumption sites (SCS), buprenorphine and naloxone (Suboxone; BC's first-line treatment of opioid use disorder), and the expansion of access to opioid-agonist medications.[6,7] However, women's, especially Indigenous women's, and gender-diverse persons' (e.g., nonbinary, transgender, Two-Spirit) needs are underserved by harm-reduction services.[8–11]

Women (inclusive of gender-diverse persons) who use drugs are disproportionately affected by social violence, which shapes health, overdose risk, and access to and uptake of overdose prevention interventions.[10–14] They are subject to gendered patterns of interpersonal violence (e.g., intimate partner violence)[15] and state violence (e.g., punitive sex-work and drug laws, regulation of reproduction and mothering)[13,16,17] compounded by intersecting systems of oppression (e.g., White supremacy, capitalism). In Canada, colonialism begat systemic social and legal discrimination resulting in the forced removal of Indigenous children from their homes (residential schools, child apprehension) and an alarming epidemic of racialized, gendered violence (including homicide) among Indigenous women and girls.[18–22] Despite evidence that structural factors intersect with social context and individual circumstances to shape drug use, research is limited as to how those factors operate to compound overdose risk among cisgender women and gender-diverse persons who are parents.

Concepts of social violence operating across the structural, interpersonal, and internal levels are useful in examining overdose risk and drug use among mothers (including, hereafter, gender-diverse parents who have given birth). Structural violence refers to how social structures and institutions (e.g., drug criminalization, child protection services [CPS]) sustain, perpetuate, and normalize inequalities and resulting harms.[23] Internalization of social–structural subordination because of its ubiquity and resulting self-blame is understood as symbolic violence.[24] Structural and symbolic violence frame the "everyday" interpersonal violence and normalized social violence while rendering it invisible.[25] Analyses applying this lens have highlighted how gender-specific macrocontexts (e.g., social dynamics of gendered violence) have an impact on microcontexts (e.g., injection practices) in women's health outcomes (e.g., overdose).[19,26]

The systematic surveillance and regulation of mothers, particularly those who are poor, racialized, and gender diverse, is heightened for those who use criminalized drugs.[13,16,27–29] Stigmatizing discourses construct them as "irresponsible" and "unfit" parents and serve to justify and uphold diverse forms of social control,[27,29–31] including punitive drug policies (e.g., child protection and apprehension) that deter mothers who use drugs from accessing health and social services because of risk of disciplinary actions that can include involuntary drug testing, forced drug treatment, incarceration, forced sterilization, and involvement of CPS.[8,14,16,27,32,33] CPS disproportionately affect families marginalized by structural violence, criminalization, poverty, and systemic racism.[30–34] In Canada, social services overregulate and surveil Indigenous, Black, and poor mothers, leading to gross overrepresentation of their children in care.[21,27,35–37]

Fear of custody loss, stigma, and limitations to child-accommodating services can inhibit mothers' use of overdose interventions, treatment, and harm-reduction services,[8,9,14,31] yet scholarship on the socio–structural contexts contributing to mothers' overdose risk is limited. Custody loss has a profound effect on health outcomes, including heightened drug use and overdose,[10,22,38–41] warranting further investigation. In this study, we drew on findings from qualitative interviews of women accessing SCS in Greater Vancouver, BC, one of the epicenters of Canada's overdose epidemic, to examine the experiences of mothers who use criminalized drugs, including perceived gaps in harm-reduction responses, amid intersecting epidemics of violence and overdose.

METHODS

We drew on semistructured interviews with 40 mothers who used criminalized drugs (opioids and stimulants) undertaken between May 2017 and September 2019 as part of a larger study on the implementation of 2 women-only low-barrier SCS (inclusive of gender-diverse persons; 77 total participants).[9,42] These official sites allow people to consume preobtained drugs, without arrest for drug possession, under the supervision of overdose responders (including people with lived and living experience of drug use).[6] Women were recruited directly from SCS by research team members, including peer researchers (team members who lived in the neighborhood, had lived experience of criminalized drug use, and were trained in research), and by referral from SCS (peer) staff. Interviews were conducted onsite or at a nearby field office.

Developed in consultation with a community advisory board of women with living experience of criminalized drug use, interview guides sought to examine experiences of criminalized drug use amid a fentanyl-driven overdose epidemic. Though participants were asked if they had children, parenting experiences were not the focus of the interview guide. Rather, the subject emerged through open-ended questions on social violence, caretaking responsibilities, and interactions with institutional services and systems. Participants received CA $30 honoraria. Interviews averaged 45 to 60 minutes, and were audio-recorded and transcribed verbatim with identifying

information removed and pseudonyms assigned.

Data were imported into NVivo and coded thematically deductively (codes from interview guide) and inductively (codes developed through team discussions after reviewing transcripts).[43] Transcripts were coded by multiple team members with discrepancies resolved by consensus. Data pertaining to mothers' experiences were further analyzed via these methods by the research team and in consultation with community advisory board members who had children to further refine themes.[43] Emergent themes were analyzed with attention to intersecting systems of oppression[44] and informed by theories of social violence.[23–26] Data generation and analysis were further enriched by researcher familiarity with the setting, including several years of community-engaged research.[9,12,45]

RESULTS

Participants' drug use and overdose risks were shaped by the loss (or feared loss) of child custody and barriers to reunification. No participants were living with their children at the time of the interview. All reported daily use of criminalized drugs and severe socioeconomic marginalization (Table 1). Thirty-one participants had experienced homelessness in the previous year, 21 had been in foster care, and 30 had previously been incarcerated. Fifteen participants reported experiencing at least 1 overdose in the year before the interview. Analysis identified 3 primary themes: (1) mother–child separation resulting from gender-based interpersonal and institutional violence, (2) child separation as a risk factor for overdose, and (3) contesting discourses and stigmatization of mothers who use drugs.

Mother–Child Separation and Gender-Based Violence

Everyday gendered violence. Escaping gendered, everyday violence occurring within intimate partnerships was cited as a significant factor driving participants to flee their homes, resulting in separation from their children. "Marisol," a 30-year-old Indigenous woman, described having to leave her children: "I got raped, that's why I left home." Another participant described leaving their children because of spousal violence:

> I had to leave him because it was just like too crazy of a relationship and too abusive and I finally left that like six years of abuse and I came up this way and he ended up raising our daughter by himself. ("Demi": age 52 years, Indigenous)

"Catherine" described mothers as especially vulnerable to gendered and racialized violence, noting that lack of overdose prevention supports that address violence can lead to criminalization and overdose:

> There is not enough support for women [with children] who have experienced violence or are, or just had a bad date, to be able to talk about some of the things that they went through or going [through] in violent relationships; there is not enough spaces to deal with those kinds of situations and so many women fall through the cracks and end up overdosing or just don't give a shit and they go to jail. (age 55 years, Indigenous)

Structural gendered violence. Institutional mother–child separation was routine among participants and experienced as structural violence (e.g., institutionalized discrimination and stigma against mothers who use drugs). Participants often described the Ministry of Child and Family Development (MCFD), BC's CPS, as being in the "business of taking children"—something that loomed over their interactions with support systems subject to reporting requirements around child welfare. "Serena" relayed how being surveilled by welfare resulted in the forced removal of her children:

> When I first had my baby, because I am a junkie and a drug addict, of course they got fucking welfare and all that shit on you right, because a lot of times they just come in and snatched the baby out of your fucking arms and don't say hi, bye, boo, fuck you. I had been up all night because they both had fucking runny noses and were crying, fucking, you know, no sleep I had, and they're fucking judging me and stuff. (age 55 years, White)

"Paige" described the pain she and her Indigenous children (aged 5 and 8) felt because of forced separation by CPS. She attributed her drug use to the agony of separation from her children and positioned child apprehension as an extension of the forcible removal of Indigenous children for residential schooling:

> The system should . . . go to great lengths, to keep the children and the parents together . . . The only reason I'm even using heroin is because it became so stressful that it was unbearable. I wanted to kill myself, I was in so much pain . . . There wasn't a second during the day when I didn't feel completely fucking overwhelmed with grief . . . And my children still feel like that, and so do I. Thank god for heroin . . . It's worse than residential school. They just changed the name. Residential

TABLE 1— Characteristics of Mothers Recruited From Two Low-Barrier Women-Only Supervised Drug Consumption Sites: Greater Vancouver, Canada, 2017–2019

Participant Characteristics (Mothers)	Total (n = 40), No. (%) or Median (Range)	Women-Only SCS 1 (n = 19/45), No. (%) or Median (Range)	Women-Only SCS 2 (n = 21/32), No. (%) or Median (Range)
Age, y	40.5 (22–55)	37 (26–52)	43 (22–55)
Race/ethnicity[a]			
White	20 (50.0)	10 (52.6)	10 (47.6)
Indigenous	20 (50.0)	9 (47.4)	11 (52.4)
Gender identity			
Woman	39 (97.5)	18 (94.7)	21 (100.0)
Transgender	1 (2.5)	1 (5.3)	0 (0.0)
Housing			
Yes	13 (32.5)	6 (31.6)	7 (33.3)
No	27 (67.5)	13 (68.4)	14 (66.7)
Homeless in year before interview			
Yes	31 (77.5)	14 (73.7)	17 (81.0)
No	8 (20.0)	4 (21.1)	4 (19.0)
NA	1 (2.5)	1 (5.3)	0 (0.0)
Overdose in year before interview			
1	6 (15.0)	3 (15.8)	3 (14.3)
2	2 (5.0)	2 (10.5)	0 (0.0)
≥ 3	7 (17.5)	2 (10.5)	5 (23.8)
No	25 (62.5)	12 (63.2)	13 (61.9)
History in foster care			
Yes	21 (52.5)	11 (57.9)	10 (47.6)
No	16 (40.0)	5 (26.3)	11 (52.4)
NA	3 (7.5)	3 (15.8)	0 (0.0)
History of incarceration (jail or holding)			
Yes	30 (75.0)	13 (68.4)	17 (81.0)
No	10 (25.0)	6 (31.6)	4 (19.0)

Note. NA = not available; SCS = supervised consumption site.

[a]Some participants identified as more than 1 race/ethnicity (i.e., Indigenous and White). However, having 1 Indigenous category is to reflect that Canada's colonial policies homogenize Indigenous women, regardless of their heterogeneity, particularly in relation to the high number of child apprehensions and overdose-related deaths.

> school to adoption and foster care. (age 34 years, White)

Participants noted that, with few supports, drug use provided a way of dealing with the pain and grief of child loss.

(Fear of) Child Separation and Overdose Risk

Numerous participants described an increase in overdose risk (e.g., injecting alone to hide drug use) following mother–child separation or in response to the stress associated with custody-related drug-use surveillance, which included increased drug use in a setting characterized by an increasingly toxic drug supply. When asked when her drug use began, "Lauren" explained, "When I lost my kids." Many participants reported significant increases in drug use after separation from children as a means to cope with their grief, while simultaneously navigating expectations to abstain to regain custody:

> They expect people to be sober and healthy in order to see their kids [after apprehension], but how are they supposed to be sober and healthy without their kids? ("Simone": age 32 years, White)

The predicament resulted in what one participant, "Lori," described as a

"Catch-22." Similarly, "Maya" described wanting to "numb" herself to deal with the loss, guilt, and shame of having her children taken, yet hiding her use because of expectations of sobriety:

> Like, because I don't have my kids with me and you know if I'm being a sober woman taking care of her kids and then [they] get taken away from you, it's out of your control and um, I intend to hide and just shame, guilt, and I just want to numb myself but at the same time it's not making any changes, right. (age 31 years, Indigenous)

To minimize risk of child apprehension, some participants reported having a "responsible" adult care for their children when they consumed drugs but would often then consume drugs alone, which placed them at an increased risk of overdose and other drug-related harms:

> No, they [my children] were always with me. They were never ever taken. I was kind of the closet case mother. I hid it [drug use]. I tried to. I tried to hide from myself mainly I guess. ("Abby": age 52 years, Indigenous)

Other participants described mechanisms of surveillance associated with the social control of mothers who use drugs as driving increased drug use and potential overdose risk. "Doro," a 33-year-old White woman, attributed her overdose to significantly increasing her drug use to deal with stress after being subjected to hair drug testing by MCFD, with results used to deny custody of her daughter.

"Sam," a 32-year-old Indigenous woman, noted that she was in the process of "fighting [her] ex for custody" of their 3-year-old daughter that she had raised alone until recently, and had a court date looming. "He won't let me see my daughter, so . . . I've had this problem with street drugs for about a year now. And I've been drug testing for them [MCFD] for about a year and just stupid." She described routinely being subjected to drug tests by authorities and maintained she was trying to "get back on Suboxone" to pass the tests. "Sam" attributed surveillance by staff at her single-room occupancy hotel as exacerbating her drug use and chances for custody:

> I shouldn't have moved there . . . . So many children have got apprehended in this building . . . . There's staff there 24/7 and they write down everything you do and . . . yeah, so many children got apprehended there and I think I was the only person that got . . . that actually got their kid back.

Structural violence framed the everyday surveillance practices across the settings occupied by participants.

Contesting Stigmatization and Dominant Discourses

Several participants resisted abstinence-based frameworks that contribute to the social control of motherhood through their refusal to accept and internalize these discourses (e.g., that drug use is inherently harmful). They challenged their stigmatization and the related symbolic violence. "Elyta," emphasizing autonomy, rejected opioid-agonist treatment:

> Let's be realistic, I am not going on [Suboxone]. Yeah, that stupid one. I'm not a quitter. I'm not quitting drugs because you know what, I've already brought up my son. I'm going to be selfish for once and I'm sorry but I always think of everyone else and I'm not harming myself. I'm going to the right places and it's my life. If I can get a job and I can maintain, these girls are doing it, I can too. So it's my life. (age 42 years, Indigenous)

Similarly, "Paige," whose children were removed by MFCD, explained that drug use is not, as it is commonly understood, universally problematic. She instead described her use as a means to temper social suffering:

> I use it in a healthy way. People are using it to maintain. People use it for relief because when we wake up in the morning we don't feel normal like other people. We have so much pain and sadness and grief during the day that we're suffering so immensely that people wake up and do drugs in order to feel normal . . . . Thank god for drugs. (age 34 years, White)

Many participants described their drug use as mitigating social suffering, including the impact of child apprehension. "Rose" felt that mothers would be discouraged from accessing even a women-only SCS for fear of being reported to CPS:

> But if the community wasn't so stigmatized, and if their kids were getting taken care of while you go and use, like in daycare or something, but it's . . . I don't know. If they have it under control. It's like smoking a doobie [cannabis, legalized in Canada] once in a while or having a beer. It's like going to the bar and doing your thing and leave the bar and go home and you're back to dealing with your family life. But there's so much stigma. (age 35 years, Indigenous)

She indicates a need for alternative approaches to regulating parenting

and drug use that are more akin to legalized drugs.

DISCUSSION

Building on limited research on social–structural contexts of mothers' overdose risk,[10,22,41] we documented social violence as a contributing factor. Participants described their lives as negatively impacted by gendered violence, punitive policies, and intersecting regulation and surveillance. The structural violence of gendered drug laws that shaped health, child protection, and social and housing-based policies and services framed their experiences. For many participants, the stigma of being perceived as a "bad" mother, along with the institutional and social pressures around drug abstinence in hope of regaining custody or visitation, compounded the grief of child removal. Stigma and fear of institutional and partner scrutiny compelled participants to consume drugs alone to avoid detection, or to increase drug use in response to the trauma of parent–child separation (child removal, fleeing violence)—increasing overdose risk in the context of a toxic drug supply. Institutional practices oriented toward drug abstinence (e.g., surveillance) thus produced paradoxical impacts with potential for severe health-related harm.

The intersection and experiences of drug use, overdose risk, and custody loss cannot be divorced from the ongoing effects of colonialism and systemic racism, which permeate Canada's criminal justice, health, and social services, for which Indigenous women bear a disproportionate burden.[21,22,39,46,47] Structural and everyday violence (including intimate partner violence)[19,26] poses obstacles for mothers, including some of our study participants, attempting to escape domestic violence with their children. Criminalization, surveillance, and stigma,[13,16,27–32] alongside a dearth of apprehension-free integrated harm-reduction and domestic violence services,[48] can result in grave health outcomes and custody loss. Forced child separation disproportionately affects mothers marginalized by criminalization, poverty, and racism.[27–32] Participants in our study, all of whom were poor and half of whom were Indigenous, similarly noted the negative impacts of surveillance systems (e.g., drug testing, housing-based surveillance). Fear of child removal and profound stigma among mothers who use criminalized drugs can deter parents from accessing health and social services.[8,14,29,31,33,39]

Research has highlighted the "Catch-22" identified by our participants. Custody loss precipitated heightened structural vulnerability, including poverty and increased drug use. This, in turn, decreased the prospect of regaining custody and had negative health implications, including feelings of hopelessness and increased overdose risk.[10,30,38,39] The profound social suffering[25] resulting from custody loss is well documented[27,30,39] and continues to be cast as self-orchestrated.[26] Obscured is the sustained institutional and state-orchestrated violence,[23] including that of CPS, which has been critiqued for failing to account for social–structural forces impacting parents' lives.[30–32,34,39]

This study has limitations. The data are not reflective of the experiences of women who did not feel safe disclosing personal information or accessing the SCS. Further research is needed that directly addresses the unique barriers diverse mothers experience in addressing overdose-related risks and harms. Nevertheless, our findings have implications for overdose prevention. Using drugs alone is a significant barrier to timely overdose responses,[49] and, yet, the majority of overdose deaths in BC occur under these circumstances.[50] Previous research in Vancouver has found a high burden of accidental nonfatal overdose among marginalized women, particularly Indigenous, who have experienced child removal, indicating an unmet need for unique overdose prevention responses for this vulnerable population.[22]

Our study adds to this work by detailing how the confluence of structural violence of institutional policies and practices and everyday gendered violence produce these drug-use dynamics—intersections that have received scant attention. In Canada, drug use alone is not a specific cause for child apprehension; however, it continues to influence child protection outcomes,[21,22,27] and it is unclear how mandated reporting would play out in SCS. There exist significant barriers to accessing support and services while punitive state surveillance continues. Our findings indicate that fear of surveillance can be a deterrent to accessing SCS (and likely drug services more broadly) and an incentive for using drugs alone, even before child apprehension.

While some participants described hiding their drug use, others challenged abstinence-based expectations[51] and instead emphasized minimization of harm from drug use through a range of strategies (e.g., leaving children with a relative when consuming drugs). Given that women are disproportionately and negatively affected by the criminalization of drug use, broader policies focused on support rather than punishment, including access to safe, nontoxic drug supplies[52] and legalization of drugs, are critical first steps.

PUBLIC HEALTH IMPLICATIONS

Needed, yet scarce, are community-based mother-focused strategies as alternatives to parent–child separation, including apprehension-free integrated services[40] that are culturally informed, gender-inclusive, and child-friendly, including women- and gender diverse–specific, (Indigenous) peer-led programs. Even with the above actions, as long as drug use is inaccurately conflated with child abuse and neglect, mothers will continue to be negatively impacted as subjects of regulatory scrutiny. Without extensive overhaul of criminal justice, medical, and child welfare systems, mothers will continue to be at risk for custody loss, and efforts to reduce fatal overdose among these marginalized populations will remain constrained.

Mothers who use drugs navigate a complex matrix of institutional and social control that exacerbates gaps in overdose response. Heightened surveillance, regulation, and discrimination intersect to create barriers to accessing harm-reduction and overdose-prevention interventions. Prevailing discourses framing mothers who use drugs as unfit parents have a negative impact on their lives and exacerbate drug-related harms. There is a need to reimagine CPS and mothers who use drugs. While the BC and federal governments recently passed legislation to hand over child welfare services to Indigenous governments in response to systemic racism, implementation has been slow.[53] Noncriminalizing and decolonizing alternatives that better support community-based and peer-led initiatives to maintain and reinforce positive parent–child relationships are critical. Meanwhile, addressing social–structural conditions (e.g., criminalization, systemic racism, poverty, misogyny) that drive health inequalities and increase overdose risk among this vulnerable population remains imperative. AJPH

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CONTRIBUTORS

J. Boyd conceptualized the study, performed the investigation, performed the formal analysis, acquired primary funding, and wrote the original draft. J. Lavalley, T. Austin, T. Kerr, L. Maher, and R. McNeil reviewed and edited the article. J. Boyd, J. Lavalley, and T. Austin collected the data. J. Boyd and R. McNeil performed project administration. T. Kerr and R. McNeil acquired supporting funding.

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CONFLICTS OF INTEREST

The authors report no conflicts of interest.

HUMAN PARTICIPANT PROTECTION

All participants provided written informed consent and received a CA $30 honorarium for their participation. Ethics approval was obtained from the Providence Healthcare/University of British Columbia Research Ethics Board.

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An Ethnographic Assessment of COVID-19–Related Changes to the Risk Environment for People Who Use Drugs in Tijuana, Mexico

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Objectives. To characterize the effects of the onset of the COVID-19 pandemic on the risk environment of people who use drugs (PWUD) in Tijuana, Mexico.

Methods. We used intensive participant-observation ethnography among street-based PWUD and key informants, such as frontline physicians and harm reductionists.

Results. PWUD described an unprecedented cessation of police violence and extortion during the initial pandemic-related lockdown, though this quickly reversed and police violence worsened. Government-provided housing and medical treatment with methadone were temporarily provided to PWUD in a dedicated clinic, yet only for PWUD with COVID-19 symptoms. Concurrently, non–COVID-19–related hospital care became virtually inaccessible, and many PWUD died of untreated, chronic illnesses, such as hepatitis C, and soft-tissue infections. Border closures, decreases in social interaction, and reduced drug and sex tourism resulted in worsening food, income, and housing insecurity for many PWUD. By contrast, potent illicit drugs remained easily accessible in open-air drug markets.

Conclusions. The pandemic exacerbated health risks for PWUD but also offered profound glimpses of beneficial structural changes. Efforts are needed in Tijuana and elsewhere to institutionalize positive pandemic-related shifts and ameliorate novel harms for PWUD. (*Am J Public Health*. 2022;112(S2):S199–S205. https://doi.org/10.2105/AJPH.2022.306796)

For people who use drugs (PWUD), the COVID-19 pandemic disrupted the risk environment, defined as the confluence of physical, economic, social, and political factors that interact to drive the harms stemming from substance use.[1] Early reports from numerous locations globally documented positive shifts in drug policy, including better access to medications for opioid use disorder (MOUD) and housing, and reductions in police contacts and incarceration for drug-related infractions.[2–4] For example, the United States saw increased access to methadone take-homes, the removal of restrictions on buprenorphine prescription, and loosening federal restrictions on harm reduction.[5–7]

Conversely, drug-related harms also reached newfound heights. Overdose deaths in the United States skyrocketed in 2020, with mortality during peak lockdown elevated by 60% compared with the previous year.[8] Furthermore, many potential benefits, such as reductions in incarceration for drug possession, were inconsistently applied.[2] In many locations, jail cycling continued even as longer-term incarceration rates declined, which contributed to COVID-19 transmission in overpoliced communities.[9]

Many aspects of the pandemic's effects on PWUD remain poorly characterized. For example, experts predicted that disruptions to drug supply chains would lead to widespread shortages of illicit drugs.[10] However, the effects of major world events on drug supply chains are notoriously difficult to predict.[11]

Tijuana, a large city on Mexico's northern border, was hard-hit by COVID-19, yet accurate and timely statistics

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describing pandemic-related impacts were not systematically collected.[12,13] Data are especially scarce for stigmatized outcomes related to substance use disorders, such as overdose mortality or HIV infection rates.[13] Therefore, although important shifts in the risk environment for PWUD likely occurred in Tijuana, it is challenging to identify them through traditional administrative data sources. To fill this gap, we leveraged intensive participant observation ethnography among street-based PWUD, which can provide insight into evolving public health dynamics in data-sparse environments.

METHODS

The ethnographic data used in this article were drawn primarily from more than 30 months of fieldwork, spanning 2018 to 2021, conducted in Tijuana, Mexico, by 2 of us (J. F. and P. B.). Fieldwork was initially based at harm-reduction sites and expanded naturally through snowball sampling to significant locations frequented by participants, including residences, encampments, sex strolls, and open-air street markets. Ethnographers accompanied PWUD in their daily activities with permission, enabling documentation of stigmatized or illegal practices that can be otherwise difficult to measure reliably because of desirability or recall bias, such as injection practices and syringe-sharing dynamics, income-generation tactics, and interactions with law enforcement and health care providers. By building long-term and iterative relationships with participants, we were able to minimize biases and access "common-sense" knowledge held by PWUD about survival strategies, drug consumption, and other dynamics.

We interviewed study participants in a conversational format, in English, Spanish, or "Spanglish" depending on participants' preferences. When participants consented and indicated it was safe, we also audio- or video-recorded and photographed events and conversations. We sought out key informants for more formal semistructured interviews (as well as conversational interviews) covering specific aspects of the PWUD risk environment sampling a range of knowledgeable and approachable physicians, harm reductionists, outreach workers, emergency medical technicians, law enforcement officers, substance use treatment center staff, etc.

The ethnographic database for this study entailed text from 77 transcribed interviews, more than 300 pages of fieldnotes, dozens of videos, and more than 500 photographs providing evidence of events unfolding in real time. We used NVivo version 12 (QSR International, Melbourne, Australia) to analyze data, and we assessed emergent themes iteratively. We selected representative passages from ethnographic notes and photographs and combined them into photo-ethnographic vignettes to illustrate consensus views, structural forces, and routinized daily interactions. Pseudonyms were used to protect participant confidentiality, and demographic and other details were changed in minor ways when altering was not relevant to dynamics being assessed.

RESULTS

Photo-ethnographic-vignette 1 in the Appendix (available as a supplement to the online version of this article at http://www.ajph.org) details an encounter between police and Johnny, a charismatic and gregarious man who grew up in California and was deported to Tijuana for his involvement with drugs. He lives on the street, where he injects heroin and methamphetamine regularly. This kind of encounter with police is a near-daily occurrence for him and for a broad swath of marginalized people in Tijuana's impoverished *Zona Norte* neighborhood. Walking distance from the US border, *Zona Norte* concentrates a dizzying array of retail drug sales points, brothels and independent sex workers, US tourists, shelters for migrant families and other marginally housed individuals, government offices, religious and secular nongovernmental organizations, formal businesses, small-scale gambling operations, middle-class Mexican families, and informal street marketplaces in a relatively small, 4- by 6-block area. It also has a major police base, and police- and military-branded pickup trucks, paddy wagons, vans, motorcycles, and armored vehicles circulate constantly, directly patrolling the neighborhood, and passing by on their way to the base. This gives the neighborhood a remarkably surveilled feel, and, at times, when one is standing on a street corner, it feels as if a police vehicle passes every minute.

For PWUD in Tijuana, interactions with the police are a daily source of anxiety and uncertainty. Especially for individuals like Johnny, who are often unable to pay 100 to 200 pesos (US $5–$10) for a cheap hotel and consequently sleep on the street, confrontations with law enforcement are unavoidable, day and night. At a moment's notice, he would routinely be surrounded by heavily armored police and soldiers, held at gunpoint, searched, often beaten and mocked, and ultimately tossed into the back of a paddy wagon. There he would wait for hours, as the van was slowly crammed full with up to 30 human beings over the course of several hours.[14]

It is common sense among PWUD that the presence of people perceived

by police to be of higher socioeconomic status (such as nongovernmental organization staff, politicians, researchers, or well-meaning "gringo" volunteers) reduces the immediate risk of police violence. In photo-ethnographic-vignette 1, Johnny was pleased that the police did not "confiscate" for resale the expensive-looking, albeit broken, plasma TV that he had found in the trash and was hoping would fund his next dose of heroin and methamphetamine. They also did not take him to jail, beat him, or even verbally abuse him to any significant degree. All in all, this was a best-case encounter, likely related to their eventual reading of J. F.'s positionality as a US-based professional. In front of a clinic doctor, for example, police may carefully search an unhoused person and release them if no drugs or syringes are found, whereas normally they would be unceremoniously thrown into the back of police vans, their possessions left unsearched, strewn on the street.[15]

Police violence also contributes to rapidly declining physical and mental health among PWUD. A constant string of police-inflicted wounds—such as baton-shaped bruises, broken fingers, fractured joints and appendages, and bloodied faces—stream into harm-reduction clinics in *Zona Norte* daily. Female PWUD report frequent rape and sexual assault by police officers, as well as pressure to perform sexual acts in lieu of incarceration.[16]

The detainment procedures frequently imposed on PWUD are orchestrated to maximize opportunities for them to "buy their way out" at distinct prices. They include (1) driving arrestees around in vans for hours, (2) detouring to short-term holding cells in the *fuerzas especiales* (special forces) police base in *Zona Norte* to see a judge for several more hours delay before adjudication, (3) being driven across the city to the *la 20* jail and serving a standard "drug nuisance" sentence of 12 to 36 hours. In each stage, police and corrections officers eagerly accept progressively smaller bribes to release the PWUD from the rest of the artificially prolonged cycle. Informants also report "early release" for volunteering to clean jail facilities or wash police vehicles. Driving past the *Zona Norte* police base, we often saw a dozen police cruisers being washed by unhoused individuals, "earning their freedom."

In the worst case, the full cycle takes up to 48 hours to complete (the Mexican legal infrastructure prevents short-term incarceration longer than 36 hours without a more elaborate trial). Yet, this time is sufficient to incite excruciating withdrawal symptoms among opioid-using PWUD, a syndrome often referred to colloquially as *malilla*.[17] Once released, with no money and many miles from where they were picked up, the hustle begins again to find 50 pesos (~US $2.50), score heroin at the sales point immediately outside of the jail to "get well," and travel by foot or public transport to *Zona Norte* to begin the cycle over again.

This tedious dance of evasion, capture, extortion, and violence exacts a punishing toll on PWUD, disrupting their efforts to achieve day-to-day stability, save money, pay rent, or find employment. For many, it is ever-present. In a recent study of people experiencing homelessness in Tijuana, 93.5% reported having ever been detained by police, and 70% were detained at least once per week.[18] For Johnny, it would not be uncommon to repeat the entire ordeal 2 or 3 times in a week. Notably, recent incarceration has also been associated with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.[13]

This cycle of police harassment, violence, detention, and short-term incarceration disproportionately affects more vulnerable PWUD (e.g., those who "look homeless"). Johnny fit a profile that made him an especially frequent target, as he was tall, confident, and gregarious—rendering him more salient—and covered in tattoos, having grown up rough in Southern California.

A Temporary Cessation of Routinized Police Violence

During April–May 2020—the first peak COVID-19 mortality window in Tijuana—police remarkably ceased detaining PWUD almost entirely. The front door of the *Zona Norte* police base was boarded up, and the steady stream of police vehicles slowed to a trickle. Most PWUD reported that it had been months since their last incarceration. As income-generation opportunities dramatically diminished during lockdowns, Johnny quipped, "The cops know we don't have 2 pesos left to steal, so they'd rather stay home and watch TV!" Others surmised that police were afraid of dying from COVID-19. Several high-profile COVID-19 deaths among police in Baja California generated press outcry over lack of personal protective equipment for frontline workers. Whatever the causes, for a short period, abusive police interactions miraculously ceased for PWUD.

By June–July 2020, police returned to patrolling with renewed aggression. Reports of beatings, solicitation of bribes, incarceration, and informal, forced abstinence–based addiction treatment quickly followed. Local government announced new plans to raze homeless encampments. As the pandemic drew on, most PWUD concluded that police violence had ultimately worsened compared with before the pandemic. Nevertheless,

April–May 2020 was the first time Johnny could ever remember going a full month without being jailed or beaten by police, a remarkable shift that eased his struggle to survive.

Access to Health Care

In photo-ethnographic-vignette 2 in the Appendix, Johnny is denied hospital-based health care despite symptoms indicating a potentially life-threatening condition (before COVID-19). Johnny's access to hospital care was structurally limited by intersecting factors of stigma against PWUD, lack of opioids (and other medications) in the hospital system, distrust of doctors, and extremely underfunded public hospitals.[15] In Tijuana, PWUD are routinely turned away from hospital care, even with life-threatening conditions, by untrained security guards or overworked interns who are struggling to treat a huge volume of critical patients. On numerous occasions, J. F. or other volunteer health workers managed to insist that PWUD with grievous injuries be allowed past the front door. Yet, even then, numerous factors still impeded treatment.

The Tijuana General hospital often relies on having family members stand by 24/7 and purchase medications in nearby private pharmacies. Socially isolated, deported, broke, and covered in stigmatizing tattoos and injection scars, Johnny simply did not fit the profile of a "deserving patient." Furthermore, even if admitted, Johnny would never receive sufficient opioid medications to prevent withdrawal symptoms. In practice, PWUD only received effective health care in hospitals in Tijuana when (1) family members in the United States paid for expensive care in a private facility for their deported relatives or (2) local harm reduction–activist doctors spent an enormous amount of time, social capital, and personal resources calling in favors to get a patient admitted, hand deliver methadone daily, and advocate for them at each step of treatment. As a consequence, many PWUD with treatable conditions unnecessarily die on the streets. In response to mistreatment and rejection, most PWUD distrust the hospital system, and believe that "*Los medicos matan a los tecatos*" (doctors kill junkies).

Health Care During the COVID-19 Pandemic

Photo-ethnographic-vignette 3 in the Appendix describes how Johnny's health—long precarious—suddenly worsened during the pandemic. In response to COVID-19, the Tijuana General hospital became designated as a COVID-19 center. As a consequence, patients without demonstrable COVID-19 infection had to travel to neighboring cities for medical care. Hospital care became virtually inaccessible during the pandemic in Tijuana for a wide swath of people dying of non–COVID-19–related conditions. Johnny died during the pandemic, yet not from COVID-19. He died on the street, from treatable complications of the curable hepatitis C virus, unable to access hospital care.

Although the pandemic further stressed an already saturated health care system, it also offered glimpses of positive structural shifts in the medical treatment of PWUD. Remarkably, a government-funded, dedicated shelter and medical treatment facility was opened for PWUD and unhoused individuals during the onset of the pandemic in recognition of their particular medical vulnerability. For the first time, MOUD was authorized by the governmental health care system during inpatient care for PWUD, albeit only for those who contracted SARS-CoV-2. In practice, methadone was never actually provided by the government; instead, it was funded and supplied by a nongovernmental organization. Yet, the simple fact that it was authorized and administered in a government-run inpatient facility represented a paradigm shift. The facility was integrated with nongovernmental organization–run harm-reduction services and served as a notable investment of public-sector resources in serving PWUD.

COVID-19 symptoms were a prerequisite to receive this governmental support, which limited the benefits to a specific subset of PWUD. Nevertheless, harm-reductionist activists were thrilled by the remarkable progress of specific unhoused people who received housing and medical care. Long-festering abscesses healed, gaunt patients gained weight, outlooks improved, and newfound stability was achieved.

Increased Difficulty of Basic Survival

As lockdowns were imposed over Tijuana, income-generation sources disappeared for PWUD reliant on face-to-face social interactions. Odd jobs dried up as businesses closed. Panhandling income plummeted in the absence of passersby on the street. With the border closed to Mexican nationals, many US citizens avoided crossing (although the Mexican government never restricted their travel). Thus "working the line" of cars trapped in traffic on the US border became less lucrative. One PWUD informant reported that "People don't even want to lower the car window now to give us money. If I'm lucky they'll crack the window a tiny bit and push the money out." Border closures and fear of travel

also limited drug and sex tourism from the United States, a major source of funds for PWUD in Tijuana. Drugs, on the other hand, were not generally reported to be more difficult to access in ethnographic interviews, nor was psychoactive potency majorly affected. Yet, the difficulty of daily struggle to fund the purchase of drugs increased, at least initially during lockdowns, making the process of "staying well" and finding food and shelter harder than before.

DISCUSSION

The COVID-19 pandemic arrived to an already fraught risk environment[1] for PWUD in Tijuana. We draw on ethnographic fieldwork to describe how the pandemic offered us glimpses of previously unthinkable structural shifts undertaken by government and civil society. Nevertheless, many of these measures quickly fell away, and basic survival generally became harder for many PWUD.

The coexistence of positive changes in policy alongside acute exacerbations of harms for PWUD has been noted in studies of pandemic-related shifts to drug policy.[19] Aronowitz et al. articulate this potential through the lens of punctuated equilibrium theory, which describes how rapid changes in policy can occur after extended periods of stagnation, prompted by crisis (e.g., a pandemic).[19] In their analysis of Philadelphia, Pennsylvania, they highlight a number of positive shifts, especially improvement in access to MOUD, general medical care, and harm-reduction services. However, they also note that basic survival grew more difficult for many PWUD. Alongside similar results from a host of cities, our findings from Tijuana reinforce the notion that times of crisis offer the potential for profound structural change on issues of drug policy as well as acute exacerbations of harms. In Tijuana, these dynamics were seen especially in shifts relating to policing, housing, and access to health care.

Several studies have noted reductions in police contact with PWUD during COVID-19, yet many have been applied inconsistently or briefly.[4,9,20] The pandemic has been highlighted as a moment of opportunity for reassessing the scope and goals of policing practices.[20] In cities across the United States, police virtually ended drug-related arrests during the pandemic.[19,20] Similarly, in Tijuana, the COVID-19 pandemic provided rare insight into what the world would look like without routine policing of PWUD. Notably, it occurred just as the abolition movement was surging in popularity and public recognition, calling for radical restructuring of spending on policing and carceral systems.[21] These discussions may be particularly relevant for a context such as Tijuana, where police violence and extortion is a highly disruptive force for PWUD, despite possession of all drugs being decriminalized (albeit within certain limitations) more than a decade before the pandemic arrived.[22] Yet, for 2 months during 2020, Tijuana saw life without routine policing of street scenes. No massive destabilizations resulted, highlighting that cycles of abusive policing are unnecessary for maintaining public safety. COVID-19 therefore put on display a de facto police abolition scenario in Tijuana and allowed the city to observe life without a regular police presence. Nevertheless, these gains were short-lived in Tijuana, as they have been elsewhere.

Access to health care—both general and opioid use disorder–specific—has also been a key axis of change for PWUD during the COVID-19 pandemic. In high-income settings, expanded access to MOUD via telehealth appointments and increased take-home doses have been widely lauded.[2,3] Nevertheless, studies have noted that other aspects of routine health care were disrupted during the pandemic, for the general population and for PWUD in particular.[12,23,24] In Tijuana, MOUD access is generally limited.[13,25] Some positive shifts were seen in increases in MOUD in clinical settings during the pandemic, but they were limited in scope and impact. Furthermore, in the context of very poor access to health care in Tijuana for PWUD at baseline, pandemic-related disruptions to care were especially acute. For many PWUD—such as Johnny—the pandemic proved fatal, not from direct COVID-19 mortality, but rather because of lack of access to treatment of hepatitis C, HIV, and other treatable conditions. COVID-19 highlighted general health system dysfunction and lack of access to basic care for many low-income *Tijuanenses* despite the promise of universal health care for the poor in Mexico.[26] For PWUD, these access gaps are further compounded by profound stigma and a near-universal lack of MOUD to facilitate medical stays.

The COVID-19 pandemic also demonstrated that local governments can effectively house PWUD experiencing homelessness given sufficient political will. In many cities, short-term improvements in housing have been reported.[27,28] Similarly, the pandemic led to a small example of a "housing-first" model to supporting unhoused PWUD in Tijuana. A small-but-notable number of PWUD received government-funded shelter with integrated medical services, including MOUD (albeit ultimately provided by the civil sector). Promising improvements in physical and mental health were noted for vulnerable individuals. Although the shelter stopped

receiving patients in the fall of 2020 (at the conclusion of the first peak of COVID-19 deaths, but long before the end of the pandemic), it offered insight into how larger-scale interventions could be developed in Tijuana to offer greater stability to PWUD.

Although early reports indicate evidence of disruptions to drug supply chains in other contexts, such as Canada, Norway, and crypto markets,[29–31] this was not reported by PWUD in Tijuana. This may be related to Tijuana's position as a major hub for storage and transport of drugs heading north. Border closures likely disrupted the transport of drugs into the United States and Canada but would not disrupt the supply in Tijuana.

The specifics of many of the trends described here are unique to PWUD in Tijuana. Nevertheless, many themes and findings presented here likely generalize to a wide swath of PWUD globally. For example, as we described previously, literature from other locations describe short-term shifts in policing, and increasing availability of MOUD and housing services, coexisting with overall increasing difficulty of basic survival and barriers to health care. Our results reinforce these tensions and opportunities and extend them to the context of a middle-income, Latin-American border city. Further study is warranted to better characterize the long-term public health implications of these shifts and how they may provide guidance for structural change in drug policy globally.

CONCLUSIONS

In sum, we traced how the pandemic provided remarkable insight into specific structural interventions that could improve the risk environment for PWUD in Tijuana. These include ending routine de-facto drug criminalization and providing government-funded shelter, health care, and MOUD. Nevertheless, without concerted efforts to institutionalize these measures, all signs indicate that high rates of preventable morbidity and mortality will continue for PWUD in Tijuana. AJPH

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

HUMAN PARTICIPANT PROTECTION

This study received ethics approval from the institutional review boards at UCSD and UCLA in the United States, and Xochicalco University in Mexico.

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