

COVID-19 and People Who Use Drugs - A Commentary

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Objective: People who use drugs (PWUD) face increased risk of exposure to COVID-19, but also elevated risk associated from injection drug use. We describe factors underlying their increased risk and identify mechanisms for reducing or minimizing rates of COVID-19 transmission and other health outcomes. **Methods:** Our commentary draws upon empirical data, governmental and other reports, and field-based unpublished data from our own studies to inform our conclusion and recommendations. **Results:** Co-morbid health conditions (eg, diabetes), structural challenges (eg, homelessness, criminal justice involvement), stigma (eg, social devaluation, discrediting), and syndemic clustering of overdose, HCV, and HIV among PWUD are exacerbated by COVID-19. **Conclusions:** Beyond the many challenges all people face to remain safe and healthy during the COVID-19 pandemic, PWUD face additional barriers to remaining safe not only from COVID-19 but from negative health outcomes associated with their living environments, socio-economic positions, and injection drug use. Collaborative efforts among governmental agencies, health providers, SSPs, CBOs, and other agencies providing services to PWUD is essential to the development of programs and services to meet the many needs of PWUD, which have been particularly accentuated during the COVID-19 pandemic.

Key words: people who use drugs; COVID-19; prevention and treatment

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As of this writing, there have been 35,347,404 confirmed COVID-19 cases and 1,039,404 deaths worldwide. The United States (US) has been disproportionately impacted by COVID-19, accounting for 20% of the world's COVID-19 deaths (208,433 people),¹ but only making up 4.25% of the world's population.² As the pandemic has continued for 8+ months, there are multiple reports that specific populations may be at increased risk of infection, morbidity and mortality, and that there may be unintended consequences of mitigation interventions. For

context, past research has documented numerous disparities in health by race/ethnicity and has argued that race/ethnicity is a fundamental cause of health outcomes.³ Indeed, data are indicating that COVID-19 infection and mortality are disproportionately impacting racial and ethnic minorities,^{4,5} including clustering in neighborhoods with larger non-white populations.⁶ Other populations facing increased COVID-19 risk, many of which include racial/ethnic minorities, include persons who are incarcerated,⁷ healthcare workers,⁸ persons over the age of 65 (especially men and people living in

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long term care facilities),^{9,10} and persons who use drugs (PWUD).¹¹

Rural Opioid Initiative Description

The Rural Opioid Initiative is an 8-site cooperative agreement under RFA-DA-17-014: “HIV, HCV and Related Comorbidities in Rural Communities Affected by Opioid Injection Drug Epidemics in the United States: Building Systems for Prevention, Treatment and Control.” This RFA supports a two-stage, multi-method research projects that inform community response and promote comprehensive, integrated approaches to prevent HIV and HCV infection along with associated comorbidities, such as HBV infection and STDs, among people who use drugs (PWUD) in rural US communities. Unpublished data or correspondence reported in this commentary are from the Illinois and Wisconsin sites who are represented on the authorship team of this commentary.

People Who Use Drugs (PWUD) and COVID-19

PWUD may face unique risks for adverse effects during this pandemic but focus on this population has received little attention to date. In the US, PWUD experience a high prevalence of underlying health conditions such as diabetes, respiratory diseases, and cardiovascular issues, conditions that can be associated with prolonged drug use and increased risk for a severe COVID-19 infection.¹² In addition, PWUD face structural disadvantages such as homelessness, stigma (i.e., social devaluation and discrediting),¹³ and criminal justice involvement^{14,15} which contribute to overall health disparities. The added COVID-19 related health risks of people in incarcerated settings has been discussed elsewhere¹⁵ and we are continuing to see new outbreaks with the most recent being 137 new infections in a Massachusetts jail.¹⁶ Prior to COVID-19, there was a syndemic (i.e., synergistic clustering of diseases)¹⁷ of overdose, HCV, and HIV among both stimulant and opioid using populations.^{18,19} These inequalities are likely being exacerbated as social disparities driving disease burden remain.²⁰ Other negative health conditions and outcomes experienced by PWUD may be directly related to COVID-19 infection and illness, or secondarily related through the unintended con-

sequences of intervention methods.¹¹ For example, social distancing protocols can potentially increase overdose risk as individuals cope with increased social isolation, and new/increased infection risk as they struggle to access limited services.²¹ Below, we discuss some PWUD-specific risks, unintended pandemic intervention consequences, and how they may increase disease burden among PWUD.

COVID-19 and the Provision of Harm Reduction Services

Limitations in face-to-face services and the movement of harm reduction and health services online may place PWUD at greater risk for injection-related infections and overdose. Syringe service programs (SSPs) are key spaces for PWUD to acquire new drug equipment (eg, sterile syringes, cookers, cottons, smoking pipes), items to prevent sexually transmitted infections (eg, dental dams, condoms), and overdose prevention materials (eg, naloxone, fentanyl test strips). SSPs are, for the most part, designed to be welcoming and non-stigmatizing and are often the only source of healthcare with which PWUD engage.²²⁻²⁵ Thus, SSPs are critical and unique public health resources, and have consistently been associated with lower risk behaviors and better health outcomes among users.²⁶⁻²⁸ In response to COVID-19, many SSPs have diminished or temporarily suspended their services,^{29,30} with most SSPs stopping their HIV and HCV testing programs due to the need for close physical contact for specimen collection.³¹ However, the SSP pandemic responses are not necessarily universally dire, as some SSPs have successfully adjusted their protocols. For example, in the Wisconsin site, SSP partners continue to offer in-person HIV and HCV testing by appointment following newly-established safety protocols or by at-home self-testing mechanisms.

Some suggestions for contact-free distribution methods include having vending machines or lockers where PWUD can acquire new syringes and other equipment at times and locations of their convenience. Vending machines have been used in Las Vegas, NV since 2017.³² The Champaign-Urbana Public Health District SSP (IL) has recently instituted coded lockboxes where safer injection and overdose prevention supplies can be accessed at any time day or night. (Ending Transmission of HIV, HCV, and STDs and Overdose in Rural

Communities of People who Inject Drugs, ETHIC; unpublished data). The lock box has been highly successful, dispensing 40,000 syringes in the first 9 months of 2020 compared to 50,000 in all of 2019 for the entire program. To address lost opportunities for harm reduction messaging and referrals that usually occur during face-to-face encounters, the SSP has posted small flyers with messages on the lockbox and syringe packaging that remind clients of safe practices and other services offered. Another SSP in rural southern IL has implemented an online request form, whereby clients can enter their “order” that is either prepared for curbside pickup or delivery (ETHIC, unpublished data). These examples show that important harm reduction services can be successfully adjusted to meet pandemic needs while still being acceptable to clients

COVID-19 and the Receipt of Clinical Services

Prior to COVID-19, the US was experiencing an increase in injection drug use (largely opiates and stimulants), drug related deaths, and health conditions related to injecting drugs.³³⁻⁴² HCV incidence in the United States had almost tripled due to the opioid epidemic,^{43,44} with the vast majority of infections attributed to injection drug use, and there have been several recent HIV outbreaks also attributed to injection drug use.^{41,45-47} COVID-19 mitigation strategies (eg, social distancing, mandated stay-at-home orders) resulted in the closing of many clinical offices and the interruption/cessation of services.⁴⁸ Although clinical spaces have largely reopened, there remains a reluctance by many to schedule in-person visits due to fear of infection.⁴⁹ Thus, many PWUD have had significant interruptions in their abilities to seek HCV, HIV, and STI screening, seek and receive confirmation testing, and schedule treatment.⁵⁰

ETHIC (IL) data lend support to these ideas (unpublished data). Two team members involved with ECHO training and clinical support (HCV treatment) have received information regarding disruptions in patient visit scheduling as many clinics have closed or transitioned to telehealth, and clinicians are concerned that they will lose patients to follow up. They have also noticed delays in lab workups and testing, delaying HCV diagnoses and treatments. Similar observations have been made in the Wisconsin site.

Telehealth is the Great Answer to COVID-19, but not Everywhere and for Everyone

As a response to COVID-19, many health services have become virtual through the use of forms of web-based videoconferencing (telehealth).⁵¹ Since some PWUD lack access to internet and cell phone use, telehealth is not a universally viable option. For example, in rural Illinois, a sample of 173 PWUD pre-COVID found that only 67.6% reported having an active cell phone, and only 53.2% indicated that they had a smart phone (ETHIC, unpublished data). When asked if they use the internet, 79.1% reported that they did (however we do not know their means of internet access, and qualitative data indicate that many go to the local McDonalds to access Wi-Fi). Similarly, in the Wisconsin sample, only 660 out of 1005 (65.7%) participants had an active cell phone in 2019. Attempted contact was made among participants after the pandemic was established in 2020. Of the 420 previous participants that were contacted from the 3 phase-2 intervention sites, 140 phone numbers were disconnected, 82 were wrong numbers, and 137 did not pick up after 3 attempts. It is of concern that many PWUD may not have access to phones or the internet, especially in rural environments. Further, local areas where Wi-Fi had been available may now be closed due to social distancing or mandated business closure protocols. Alternatively, if these internet access points remain open, people who access them may be placing themselves at infection risk.

COVID-19, Mental Health, Drug Use, and Overdose

Pandemic fears and associated intervention efforts have substantially impacted individual mental health, especially those with existing illness and conditions/behaviors associated with illness. A 2020 MMWR report details increased incidence in several conditions associated with the pandemic, such as depression and anxiety, substance use, and suicidal ideations.⁵² The report also found that 13.3% of people sampled began using substances to cope with anxiety or stress related to the pandemic, and twice as many people reported suicidal ideations compared to 2018.

The Substance Abuse and Mental Health Services Administration (SAMHSA) reported an 891% increase in phone calls to the Disaster Distress

Helpline in 2020 relative to the same time period in 2019.⁵³ COVID-19-related increases in mental illness, substance use, and suicidal ideations may explain observed increases in fatal overdoses. For example, one study found a 61.8% increase in overdose since March 19, 2020, with more overdose clusters in suburban and rural areas.⁵⁴ Data from Indianapolis indicated that overdoses treated by emergency medical services (EMS) increased 43% and naloxone administration increased 61% after stay-at-home orders.⁵⁵ A likely contributor to these increases may be that many PWUD are no longer using drugs with other people due to stay-at-home or social distancing mandates (resulting in a lack of immediate assistance should an overdose occur). Further, changes to drug supply during COVID-19 may result in more potent or adulterated (eg, increased fentanyl contamination) which could contribute to increases in overdose.^{56, 57}

COVID-19 and Changes in Access to Medications for Opioid Use Disorder (MOUD)

Increasing access to MOUD, such as methadone and buprenorphine, helps prevent HIV, HCV, and other diseases due to reduced drug use and sexual risk behaviors and less frequent injections.⁵⁸⁻⁶¹ MOUD also is associated with fewer overdoses.⁶² However, MOUD, particularly methadone, is often cumbersome and requires substantial time commitments from patients.^{63,64} Although PWUD are able to obtain extended prescriptions for buprenorphine (usually a 30-day supply), methadone requires much more frequent clinic attendance (e.g. daily) until the client achieves sufficient stabilization for multi-day prescriptions. Interactions such as these pose COVID-19 transmission risks, and to mitigate such, SAMHSA has issued new guidance allowing for 14- or 28-day take-home doses of MOUD.⁶⁵

The expansion of MOUD prescribing has been utilized by many providers to increase social distancing while maintaining proper medication. Yet, questions remain on if and how well some clinics are implementing new guidelines.^{66,67} One methadone clinic in southern IL, who implemented increased take homes, reported that take-homes have not been an unqualified success (ETHIC, unpublished data). While some clients do well with the extended time between clinic visits, the clinic reports

several “surprises”, eg, clients who had been stable for 7+ years experiencing a relapse during the past couple months. Other clients have been unable to maintain criteria needed to be eligible for extended prescriptions, and have had to resume more frequent check-ins. Together, these experiences point to the underlying stress and uncertainty faced by all individuals, and perhaps more so among already-marginalized PWUD.

IMPLICATIONS FOR HEALTH BEHAVIOR OR POLICY

Empirical data, combined with anecdotal field-based observation and reports, indicate that PWUD, particularly those in rural areas, are facing multiple and disproportionate negative impacts associated with COVID-19 and its responses. We propose that the extant (though limited) literature and preliminary data from the field should drive evidence-based action and policies to avert further harms within this population.

Fund and Promote Innovative Harm Reduction Responses

Increasing funds to SSPs and community health centers would allow for community-based care, which is often preferred by PWUD, to remain open and adapt to pandemic response needs.⁴⁸ We also should make efforts to increase access to broad based internet so that individuals can access telehealth.⁶⁸ SSPs should consult the literature and their peers to devise and implement reduced- or no-contact methods for delivery of services. SSPs also should consider needs based syringe distribution (ie, not requiring used syringes in order to get new syringes) along with increasing access (information as well as physical access) to naloxone and fentanyl test strips.²⁴ Naloxone and fentanyl test strips are critical tools with an immediate and expanded need as we are already seeing overdoses related to opioids increase.

Increasing Access to MOUD and Other Drug Treatment Programs

We fully endorse the SAMHSA’s recommendation that MOUD providers consider and be allowed to increase the amount of dose prescriptions for up to 28 days with stabilized patients,

and that strong consideration be given to making this recommendation permanent. Allowing for more accessible MOUD also will help meet the goals Healthy People 2030 objectives, including to increase the amount of people in substance use treatment and experience opioid use disorder specifically, as well as reduce the number of overdose deaths per 100,000 people, and the proportion of people who used and/or initiate use of heroin each year.⁶⁹ We also support efforts to increase the number of practitioners who can prescribe MOUD by streamlining the approval process for physicians and providing incentives for them to incorporate MOUD in their practice. Although monitoring of patients on MOUD for compliance is important, reducing the frequency of in-office visits will reduce infection risks and access barriers due to travel.⁷⁰ It also may mitigate concerns expressed by providers who are hesitant to have PWUD patients due to feared negative perception and interactions with other patients.⁷¹

Methadone treatment in particular has been critiqued as being highly restrictive, and the oversight, often moralizing, was a barrier to treatment.^{63,72} On one hand, requirements such as counselor meetings and frequent check-ins embedded in methadone programs could be beneficial, as they provide an opportunity to intervene if a person is having issues. On the other hand, they may create additional anxiety and barriers associated with hyper regulation and these anxieties may be exacerbated by COVID-19. One potential issue with methadone and anxiety is that benzodiazepines are commonly prescribed for anxiety and possible interactions with methadone may impact prescribers' willingness to treat anxiety among methadone clients. PWUD experience mental health conditions along with substance use, and we need to think through the best way to treat both in tandem. In addition, research that works with MOUD clients to understand their perspectives on MOUD in general, and changes in MOUD post COVID-19 in particular, is needed.

Accurate Public Health Messaging Targeting PWUD

Clear and targeted messaging to PWUD about overdose risks, prevention and reversal, and infection risk (both drug- and COVID-19-related) are

needed. Information from news stories should give complete information and include steps for reducing personal health threats.⁶⁸ PWUD frequently rely on SSPs and other community-based organizations (CBOs) for credible information, and many take the nature of pandemic seriously. To date, there has not been a widespread distribution of materials regarding how individuals can safely use drugs in the social distancing era. In addition to increasing the capacity of SSPs and CBOs to modify and perform their duties, we also should make efforts to increase individual PWUD efficacy to safely navigate the new environment to retain access to harm reduction and clinical care.

An example of rapid and targeted information dissemination aimed at PWUD during the early stages of the pandemic was summarized in an article by Heimer and colleagues.⁷⁰ Their efforts focused on four main messages. First, COVID-19 symptoms could be similar to withdrawal symptoms. Second, smoking drugs might increase the odds of having a severe case of COVID-19. Third, they provided information on mitigating risks of withdrawal and overdose by navigating changing drug markets. Finally, they gave suggestions on how to manage the scarcity of disinfectants that are used to prevent infection and clean drug equipment. Messaging could be further enhanced by explicitly including information about naloxone and fentanyl test strips and availability of local resources (harm reduction and clinical care). Earlier data (2019) suggested that PWUD were not well informed about these measures.^{73,74}

We also need better public health messaging about how to protect against COVID-19, particularly via mask wearing. At this time, masks are likely the most effective defense against infection,⁷⁵ and given that many PWUD are unstably housed and living in overcrowded environments,⁷⁶ masks may be one of their most important tools. Mask use also can provide added protection for individuals who use in the presence of other people, as does maintaining proper distancing.⁷⁷ Drug use with others is an important component of avoiding fatal overdose (as others can administer naloxone and/or call for help) and combinations of mask wearing, social distancing, and "virtual" shared use (use with others while on the phone or over the internet) should be explored. Being able to interact with

other people in their social networks may have additional benefits aside from mitigating overdose, given the importance of social ties and social support for health and wellness.⁷⁸ We also must recognize that many PWUD do not have a safe place of shelter to “stay-at-home.” In the Wisconsin study, 66% (660 out of 1005 surveyed) of PWUD reported being homeless in the prior six months. Similarly, in rural Illinois, out of 173 participants who used drugs, 50% reported being homeless (defined as living from place-to-place, “couch surfing”, on the street, in a car, park, abandoned building, squat or shelter) (ETHIC, unpublished data).

Not only do PWUD need access to masks, but they also need the ability to wash reusable masks often and have access to soap, hand sanitizer, and bleach. The shortages of basic resources such as soap and bleach pose additional health risks for those who are unable to properly clean their drug use equipment. We recommend promulgating concise guidance, and minimum needed resources, for individuals to disinfect their supplies and reduce their risk of infection. Past research on HIV has clearly demonstrated the efficacy of PWUD to reduce HIV transmission when provided with the information and tools to do so.^{79,80} Although messaging targeting PWUD is necessary, providing this information is not enough for decreasing disparities because often inequalities due to race/ethnicity,⁸¹ poverty,⁸² and stigma⁸³ are fundamental causes of disease.

In sum, beyond the many challenges all people face to remain safe and healthy during the pandemic, PWUD face many additional barriers to remaining safe from COVID-19 itself, from negative health outcomes associated with their drug use, and unintended consequences of intervention efforts. Collaborative efforts among governmental agencies, health providers, CBOs, and other agencies providing services to PWUD is essential to the development of programs and services to meet their needs.

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HUMAN SUBJECTS APPROVAL STATEMENT

This commentary did not involve human subjects data. However, site specific data cited in the commentary fell under the ethical review board jurisdiction of the local research team’s Human Research Protection Offices.

CONFLICT OF INTEREST DISCLOSURE STATEMENT

None of the authors have any conflicts of interest.

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