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## “We have to be uncomfortable and creative”: Reflections on the impacts of the COVID-19 pandemic on overdose prevention, harm reduction & homelessness advocacy in Philadelphia

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### ARTICLE INFO

#### Keywords:

Substance use  
Housing insecurity  
Harm reduction  
Community organizing

### ABSTRACT

The COVID-19 pandemic and ensuing service delivery interruptions had serious impacts on people who use drugs (PWUD) and people experiencing homelessness, including instability in the drug supply, decreased access to substance use disorder (SUD) treatment and harm reduction supplies, increased substance use and relapse due to stress and isolation, inability to properly isolate and quarantine without stable housing, and risk of COVID-19 spread in congregate living spaces. At the same time, many have noted a potential opportunity for rapid change in health, housing, and drug policy despite previous stagnation—referred to as a “punctuated equilibrium” by Baumgartner and Jones—in response to the pandemic. The pandemic forced some important policy interventions in the United States at both national and local levels, including eviction moratoriums and loosening of drug policy related to substance use treatment. However, to what extent some of these changes will be sustained past the current COVID-19 crisis is still unclear, as is how drug and housing related policy shifts have impacted the work of frontline overdose prevention, substance use treatment, and homelessness advocacy workers. In this qualitative study, we used semi-structured interviews to assess how Philadelphia’s harm reduction advocates, community organizers, and SUD treatment clinicians have responded to the overdose and homelessness crises during COVID-19, and how they predict the pandemic and ensuing policy changes will impact the future of overdose prevention, harm reduction efforts, and homelessness advocacy. We interviewed 30 eligible participants during July and August 2020. The analysis of these data yielded three themes: 1/“None of it should be new to anybody”: COVID-era issues impacting PWUD and people experiencing homelessness are extensions of existing problems; 2/“An opportunity to actually benefit in some way from this crisis”: Possibility for innovation and improved care for PWUD and people experiencing homelessness; and 3/“Nothing we’ve tried has worked, so we have to be uncomfortable and creative”: The uncertain path forward. Despite the many barriers that participants faced to promoting the health and well-being of marginalized communities during the pandemic, they also believed that the pandemic presented an important opportunity for positive policy change that has the potential to promote drug user health into the future, including a continuation of loosened federal restrictions on substance use disorder treatment, legalization of safe consumption spaces, safe supply of substances, and progressive, creative housing solutions.

### 1. Background & significance

Since the COVID-19 pandemic began, activists, researchers, and clinicians in drug user health and harm reduction communities across the globe began sounding the alarm about how the pandemic and subsequent

shut-downs would negatively impact people who use drugs (PWUD), people with substance use disorders (SUDs) and people experiencing homelessness. Specific concerns included instability and unpredictability in the drug supply (Dietze & Peacock, 2020), decreased access to SUD treatment, harm reduction supplies, and other vital services

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<https://doi.org/10.1016/j.ssmqr.2021.100013>

Received 14 May 2021; Received in revised form 24 September 2021; Accepted 26 September 2021

Available online 28 September 2021

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(Bartholomew et al., 2020; French et al., 2021), increased substance use and relapse rates due to stress and isolation (Friedman et al., 2021; Wakeman et al., 2020), inability to properly isolate and quarantine without stable housing, and risk of COVID-19 spread in congregate living spaces like shelters (Melamed, 2020; Tsai & Wilson, 2020). In the United States (US), the co-occurrence of the COVID-19 pandemic along with the existing overdose crisis has been referred to as a “crashing of the crises,” with both public health emergencies potentially exacerbating the other (Khatri & Perrone, 2020; Volkow, 2020).

At the same time, many have noted potential health, housing, and drug policy opportunities that could arise from the COVID-19 pandemic. In many cases, the closing of social services offices and clinics led to necessary innovation and adaptation in a variety of sectors at a speed not normally seen. One notable example is expanded use of telehealth for many conditions, including mental health and SUD treatment (Davis & Samuels, n addition, many methadone programs became more lenient in their take-home dose schedules, allowing for patients to visit clinics less often, and harm reduction supplies mailing programs received legal sanction and gained traction (Figgatt et al., 2021; French et al., 2021; Hayes et al., 2021; Yang et al., 2021).

### 1.1. Punctuated equilibrium theory & COVID-19

According to Baumgartner and Jones' (1993) punctuated equilibrium theory, rapid changes in public policy can occur after long periods of stability or stagnation, sometimes spurred by crisis or conflict (Baumgartner & Jones, 1993). A frequently cited example is the case of tobacco policy, which was slow to change until the groundbreaking publication of the Surgeon General's report *Smoking and Health* in 1964 (Masse Jolicoeur, 2018). A major event or crisis, in this case, the COVID-19 pandemic and ensuing impacts like increasing rates of drug overdoses related to isolation and lack of access to SUD treatment, can move previously siloed conversations (for example, those surrounding drug policy and SUD treatment access) into new “venues,” including into other parts of government and the mainstream media, effectively raising their profile (Amri & Drummond, 2021). Although experts in community-based substance use disorder treatment and overdose prevention had been working to call attention to the overdose crisis for years before the COVID-19 pandemic, policy related to improving treatment access was slow to change, and much of the focus was directed towards reducing opioid prescribing rather than addressing economic and social root causes or investing in harm reduction services and innovative treatment delivery models (Dasgupta et al., 2018). Similarly, issues related to housing insecurity entered the public discourse during the COVID-19 pandemic as the importance of shelter for quarantining became apparent, as well as the widespread difficulty in keeping up with rent or mortgage payments faced by millions of individuals who lost jobs when businesses closed (Kasakove, 2021; Rushing, 2020). As highlighted by Amri and Drummond, punctuated equilibrium theory can be applied to explain rapid policy shifts that have emerged as a result of the COVID-19 pandemic, and the public engagement in issues that previously received less mainstream attention (Amri & Drummond, 2021). What remains unclear, however, is whether drug and housing related policy changes will be sustained past the current pandemic, and how these shifts have impacted the work of frontline overdose prevention and homelessness advocacy workers.

### 1.2. Substance use, overdose, and housing in Philadelphia

Urgent and innovative change is needed to address the overdose and housing crises in Philadelphia. Pennsylvania is among the states with the highest overdose rates in the US, and Philadelphia, the location of this study, has both the highest fatal overdose rate and highest poverty rate of any large city the country (Centers for Disease Control, 2018; Farley, 2017; The Pew Charitable Trusts, 2018). As fatal overdose rates rose across the US during the COVID-19 pandemic, similar trends occurred in

Philadelphia (Friedman et al., 2021). For the first time in recent history, fatal overdose rates among Black Philadelphians outpaced those among white Philadelphians (Khatri et al., 2021a). In addition, city's street drug supply has become increasingly contaminated with fentanyl, including fentanyl-containing pills pressed to look like oxycodone, benzodiazepines, and stimulants (Whelan, 2021). The pandemic has limited many residents' ability to access naloxone at pharmacies and harm reduction organizations (French et al., 2021). The city also struggles to address housing security and close to 6000 Philadelphians are experiencing homelessness (Farley, 2019). Overdose death and homelessness are tightly intertwined in Philadelphia; in 2019, 60% of deaths that occurred among individuals experiencing unstable housing or homelessness were caused by drug overdoses, most involving opioids (Farley, 2019).

Numerous housing, harm reduction, and SUD treatment organizations work to address these issues across Philadelphia. Along with traditional healthcare and social service professionals, much of the harm reduction work – including street outreach to PWUD and people experiencing homelessness, naloxone distribution, and political advocacy to drive substance and housing related policy change – is led by peer workers and grassroots volunteer groups, many of whom have lived experience of substance use and unstable housing themselves (Kennedy et al., 2019). These individuals possess valuable insights about what is taking place “on the ground” in communities of PWUD and people experiencing homelessness, which is essential to fostering trust between these marginalized communities and the organizations that aim to serve them. Their work is also a vital part of the city's infrastructure of services supporting the health and well-being of PWUD and people experiencing homelessness.

Given the importance of peer workers and grassroots volunteers – along with licensed SUD clinicians – to the provision of harm reduction services and SUD treatment in Philadelphia, the aim of this study was to explore how the COVID-19 pandemic and ensuing policy shifts have impacted the work of harm reduction advocates, community organizers, and SUD treatment clinicians, and how they predict that the pandemic-related changes to their work can inform future directions of overdose prevention, harm reduction efforts, and homelessness advocacy. This study explored the potential of the pandemic to “punctuate the equilibrium” in local and national drug and housing policy from the perspective of individuals engaged in direct service harm reduction and SUD treatment in Philadelphia (Amri & Drummond, 2021; Baumgartner et al., 2018).

## 2. Methods

### 2.1. Research design

In this qualitative descriptive study, we conducted one-on-one, semi-structured, in-depth interviews to assess how Philadelphia's harm reduction advocates, community organizers, and SUD treatment clinicians have responded to the overdose and homelessness crises during COVID-19, how related policy shifts at local and national levels have impacted their work, and how they believe that the pandemic will affect the future of overdose prevention, harm reduction efforts, and homelessness advocacy in Philadelphia.

### 2.2. Procedures

Once approval was granted by the University of Pennsylvania Institutional Review Board, we recruited participants using several strategies. Eligibility was limited to people who work (in a paid or volunteer capacity) at or with an organization providing harm reduction, substance use, or housing services. Individuals were also eligible if they engaged in grassroots activities promoting the health of PWUD or people experiencing homelessness, including via community organizing or activism. People engaged in this work who had personal lived/living experience of substance use and/or unstable housing were eligible to participate. We

first reached out to eligible individuals and community organizations known to the research team. We also advertised the study on social media using a graphic that explained the study and provided PI contact information. We used snowball sampling to recruit additional participants. Data collection entailed one-on-one, semi-structured interviews. The PI conducted all interviews between June 2020 and September 2020. All participants provided verbal informed consent prior to interviews, and interviews lasted 30–60 min. The interviewer recorded field notes during and following the interviews. Participants received a \$20 digital VISA giftcard via email as compensation.

The design of the interview guide was based on the Social Ecological Model (Alexandridis et al., 2020; Centers for Disease Control, 2021; Lounsbury & Mitchell, 2009) and included questions about participants' work duties before the COVID pandemic, how their work had changed since the pandemic started, how they envision their work will look in the future, how the pandemic has impacted the communities they serve in their work, and their policy recommendations for supporting the health of PWUD and people experiencing homelessness during the current pandemic and into the future. Participants were also asked about select demographic and experience characteristics including age, race/ethnicity, years of experience working with PWUD and/or people experiencing homelessness, gender, languages spoken, and role/title. Due to COVID-19 social distancing requirements and infectious disease protocols, all interviews were conducted via the BlueJeans video conferencing platform or phone and were audio-recorded, transcribed verbatim, and de-identified.

### 2.3. Data management and analysis

We used NVIVO 1.3.1 software to inductively analyze the interview transcript and field note data with thematic analysis methodology (Braun et al., 2012). Two independent coders (the PI and another author) began analysis after the first interview and continued until all interview transcripts were coded. The two coders created a preliminary codebook by coding the first three interviews, which they then used to code subsequent interviews. The coders met weekly throughout the data analysis process to refine the codebook. Once all interviews were coded, codes were then grouped into themes based on coder discussions and the consensus of the study team. The PI used multiple methods to certify trustworthiness and rigor of the findings. Field notes added non-verbal data to supplement interview transcripts. In addition, the PI kept thorough documentation of self-reflections, study processes and analytic decisions, and the study team engaged in debriefing and analytic discussions throughout the duration of the study. As a harm reduction community organizer and SUD treatment clinician herself, the PI was cognizant of her positionality with regards to participants (some of which were members of her own community), and to the topics of focus in this study, and she engaged in reflexive journaling throughout the study (Dodgson, 2019). The PI performed member-checking with several study participants once themes were identified; these participants expressed that the study findings reflected their experiences.

## 3. Results

A total of 30 participants were interviewed (Table 1). The mean age of participants was 31.6 (SD: 6.1), and mean years of experience working in the present role or similar roles was 5.6 (SD: 5.0). Roles included nurse, physician, social worker, peer worker, recovery specialist, volunteer community organizer, and case manager. Twenty-two participants (73%) were female, 6 (20%) were male, and 2 (0.6%) were gender non-conforming/non-binary. Eleven participants (36%) reported speaking another language in addition to English, with Spanish being the most commonly reported additional language.

The analysis of these data yielded three themes: 1) "None of it should be new to anybody": COVID-era issues impacting PWUD and people experiencing homelessness are extensions of existing problems; 2) "An

**Table 1**  
Participant demographics.

Interview	Years of experience	Gender	Race/Ethnicity	Role
1	2	F	White	Harm reduction community organizer
2	5	Non-binary	White	Harm reduction community organizer
3	1	Non-binary	White	SUD treatment program coordinator
4	15	M	White	Housing program mental health therapist
5	9 mo.	F	White	Drop-in support staff
6	2	M	White	SUD treatment physician
7	3	F	White	Social Worker
8	6	F	White	Peer worker
9	4	F	Asian	SUD treatment physician
10	*	M	White	Community Care Specialist
11	3	F	White	Researcher, harm reduction community organizer
12	17	M	White	Social worker
13		F	White	SUD treatment physician assistant
14	1	F	White	Research assistant
15	2	F	White	Harm reduction community Organizer
16	4	F	White	Harm reduction community Organizer
17	11	F	Latina	Physician
18	*	F	White	RN at recovery house program
19	1	F	White	Case manager
20	10	F	White	Medical case manager
21	4	F	White	Medical case manager
22	3	F	White	Social worker
23	15	F	White	Center manager for SUD program
24	1	M	Biracial	Harm Reduction specialist
25	8	F	White	Social worker/therapist
26	10	M	White	SUD treatment physician
27	6 mo.	F	White	Registered nurse
28	11	F	Asian	SUD treatment and harm reduction program coordinator
29	1	F	White	Housing case manager
30	10	F	Black	Housing advocate

\*Missing data.

opportunity to actually benefit in some way from this crisis": Possibility for innovation and improved care for PWUD and people experiencing homelessness; and 3) "Nothing we've tried has worked, so we have to be uncomfortable and creative": The uncertain path forward.

### 3.1. None of it should be new to anybody: COVID-era issues impacting PWUD and people experiencing homelessness are extensions of existing problems

Participants spoke in detail about how COVID-era infection control policies and restrictions had unique impacts on PWUD and people experiencing homelessness, but also stressed that these issues were extensions of existing problems that were present long before the pandemic. As was stated by one participant:

*I don't understand why people who are experience homelessness are getting such the short end of the stick during this pandemic. I mean, I guess...I get it because people who experience homelessness and people who use drugs are always getting the short end of the stick.*

For example, some participants shared that the closures of public spaces due to COVID-19 restrictions made it increasingly difficult for people without shelter to find a safe space to spend time, and highlighted the fact that permanent housing solutions are sorely needed:

*When COVID first hit and literally everything shut down and the subway concourse where a lot of my patients would hang out for respite essentially from the elements – when that closed for them and then all the public spaces closed and you literally had this entire population that has nowhere to go. Literally nowhere to go. And the shelters they are all decreasing the number of individuals allowed in the shelter...because of COVID. And so not only are the public spaces where people are usually hanging out no longer available, but then even the places that were to provide them shelter were also cutting back their numbers. So you have even more people out looking for a place to get away from the rain or the hot sun.*

Participants working at organizations that provide case management to these populations had difficulty providing clients with even the most basic services because of closures, but acknowledged that providing these services before the pandemic had already been difficult. One participant reflected on how little their organization was able to provide when the shut-downs were first implemented:

*It's sucked up a lot of people's basic stuff. I mean, when all of the city stuff was closed, people needed IDs, people needed birth certificates, people needed to get their benefits...It just really was hard because people were coming. People wanted HIV tests...there was a period of time where it felt really hard to be at work because people would have all of these needs which are, under any circumstance, hard to meet. But to not be able to refer someone to anywhere, because everywhere is closed and we have no idea when it's gonna open again, was a very helpless period where I feel like a lot of people felt totally abandoned.*

Another participant reflected on the ways that the pandemic both intensified disparities and made existing issues impossible to ignore:

*I think on a global scale...it just highlights the underlying health inequities that really drive poor health for certain populations and certain individuals about the city. None of it's necessarily new. None of it should be new to anybody. I think it highlighted and perhaps amplified some of the things that have been going on where it certainly drew attention from policy-makers and individuals that I think hopefully will lead to change.*

Highlighted in these interviews was the fact that while the COVID-19 pandemic was new, the lack of accessible services available to PWUD and people experiencing homelessness—although intensified during the pandemic—was not.

### 3.2. An opportunity to actually benefit in some way from this crisis: Possibility for innovation and improved care for PWUD and people experiencing homelessness

Despite the countless difficulties that the pandemic caused for PWUD and people experiencing homelessness, some participants expressed hopefulness that the pandemic brought attention to the ongoing issues that PWUD and people experiencing homelessness face and that this increased attention might spark important change. One participant stated:

*[The pandemic] forced people to really start to talk about...and think about...and implement different types of policies to try to maintain safety for people...like making sure that people couldn't be thrown out if they couldn't afford their rent and then increase homelessness. And then while those perhaps are band-aid type of things that occurred during a pandemic, it really should force us to think about like why are we in this situation to begin with and like how we sustain that type of funding and those sorts of streams to provide those services ongoing.*

Many participants discussed COVID-era policies that helped increase access to SUD treatment, including federal policies expanding the use of telehealth for buprenorphine prescribing and access to methadone take-home doses. Although these policy changes were originally intended to enable treatment access while complying with social distancing

guidelines, the changes benefited individuals who had trouble traveling to appointments for various reasons:

*Sometimes people have chronic pain or low mobility or, you know, barriers to transportation. You know, various things that are very valid that telehealth is now able – we're now able to give access to people who we previously weren't.*

However, despite the benefits of telehealth is for some individuals, participants shared that many of the people they worked with do not have access to technology and rely on case management staff to connect them with prescribing clinicians. For these patients and the staff that help them manage the technology, the use of telehealth does not necessarily facilitate easier or safer access:

*Because of the cell phone situation that I explained earlier [patients who do not have phones or computers] our patients couldn't do that [use telehealth]. So in order for them to do that they actually would come physically to our clinic...we loan them one of our laptops and set it up so they can do televideo with a psychiatrist but in our clinic space. So the psychiatrist isn't coming but they can do the televideo from our clinic.*

In this case, the use of telehealth was limited by patients' access to technologies. While telehealth-related policy changes promoted socially-distanced treatment for some prescribing clinicians, these patients and case management staff were still required to present in-person and risk potential exposure to COVID-19.

In addition to telehealth, many organizations and treatment programs became more flexible in their approach and stopped mandating urine drug screening (UDS) at every visit, which was identified as a positive change by many study participants:

*I mean the main thing that has changed is that we have stopped doing the urine drug screenings...in the interest of trying to keep contact minimal [we] phased those out but also as a team kind of decided that it would be a good time to move away from drug screenings as a measure of recovery for our folks...I think amongst at least case managers – felt that it was kind of – it created like a lot of anxiety for folks. So people often felt like they needed to justify why there would be a certain drug in their urine. And yeah, we just – we thought it would be a good opportunity to move away from that as a marker of progress for folks.*

Another participant stated

*We almost entirely have done away with urine drug screening...we also started lengthening out prescriptions, in order to avoid foot traffic into the building...Both of those things resulted in – really, I think the vast majority of patients are doing better in their recoveries as a result of that.*

These rapid changes in regulations and practices, both at the federal and individual program level, and the benefits that these changes provided led many participants to question the necessity of these restrictions and whether there is any reason to re-implement them once the pandemic has passed:

*I think that a lot of those barriers – and honestly, arbitrary systematic and bureaucratic hoops have dropped a lot more. And what that's indicated to me [laughter] is that they are unnecessary. Why do we need to keep those things in place if, in a crisis, we can drop them? And so, that's applicable in both housing sense and also in medications, and telemedicine, and medications for opioid use disorder.*

In addition to increased flexibility at the federal and program level and “top down” changes, the pandemic and ensuing crises for PWUD and people experiencing homelessness led to multiple “bottom up” initiatives across Philadelphia. Members of grassroots volunteer-run harm reduction groups reported that the pandemic forced them to reconsider their usual approaches to outreach activities. While before the pandemic they performed weekly outreach to PWUD and people experiencing

homelessness on foot, they switched to a car-based model to decrease risk of COVID-19 transmission. Although this approach altered the way that members of the group interacted with the community, it also allowed for distribution of additional supplies and made it easier for the group to cover more ground:

*So we used to go out on foot and there would be a group of two to four people that would go out to each area. And it was like we could be right there with our people talking. And since COVID happened, we've been doing car outreach. And it's actually been going really well. We've come up with a really good system of one person is the driver and another person is in the backseat of a car with the supplies. And then we direct everybody to one of the side windows in the backseat... And we have bags that have a lot of our base supplies, and then we add in whatever else people want. There is a lack of like regular stuff that people are used to getting socks and food at. And so, we've started giving out fruit, granola bars, and bottles of water when we're out on outreach. And sometimes people stop by the car just for those snacks.*

Another participant stated

*So, the whole ability to talk, to like sit with people and look them in the eye and even comfort them, like a hand on the back, a hug, to listen to people and to connect with them and to let people speak for themselves and offer people that support and those resources...that's kind of gone out the window because we have shifted our outreach model [to car-based outreach]...It's less obvious when you're on foot [doing outreach] all the areas and pockets that you're not necessarily hitting, but now in the car, you might see more people...so, I think right now we're strategizing on how to sustainably up our supplies that we put out there or if we can't do that, how to diversify the areas we hit, how to maybe alternate where we're going so that we are not just sort of willfully ignoring the fact that we're always missing certain pockets of people.*

Members of this harm reduction group identified that while the depth of their interactions with individuals may have been reduced by a car-based approach, they were able to serve an increased number of individuals, including people that they had not previously.

One commonly cited and well-known example of a “bottom up” initiative that took place in Philadelphia was the protest encampments that were established in several parts in the city. These encampments were organized by PWUD and people experiencing homelessness and developed as a way to both shelter and provide care for people in need and to draw attention to the housing crisis. Participants reflected on the encampments as a strategy to push back against the traditional framework guiding housing efforts and to empower people experiencing homelessness to design creative solutions. One participant compared the expectations of mainstream housing programs to the goals and demands of the encampment activists:

*The encampment and the people there, they're trying to think in this much more expansive way and [mainstream housing/homelessness initiatives] they're like, you're not fitting into the hole that we're - or you won't go in through this door that we keep telling you, this is where the door is, this is how it goes. But there's a whole other - [laughter] it's an archway in the woods.*

Another participant stated

*I'm happy to see the encampment on the parkway pushing some of the things that are really needed which is permanent housing - permanent low-income housing, sanctioned encampments, like recognizing that some people for a variety of reasons don't want to go into services that the city offers and that even if you gave them keys to a house today, because they're so connected to the community that they use drugs with and that they're not judged by - you know what I mean - they may not even go in that house that you gave them keys to...sanctioned encampments across the*

*city is also a good thing. And that protest encampment has kind of pushed that.*

Some participants also shared that watching the protest encampments develop and being involved in other community-organizing efforts led them to think about social change and the potential of grassroots, “bottom-up” movements differently:

*I feel like even though I started out my public health journey in policy, I think I've shifted towards thinking like these things are not done by the government. These aren't done by the city. These are done by on the ground folks who are living this experience, such as the encampment, to kind of radicalize and push the meter further along.*

Participants shared that the progress made by these “bottom-up” movements was inspiring and highlighted the possibility for innovation outside of traditional healthcare and social services frameworks.

*3.3. Nothing we've tried has worked, so we have to be uncomfortable and creative: The uncertain path forward*

Finally, participants shared that they had a great deal of uncertainty about the future - both the future of their own work and the future of the policy landscape impacting PWUD and people experiencing homelessness. Anxiety about the future and what might come next was present across all interviews, with some participants expressing feelings of hopelessness and sadness for their communities and the people they serve in their work:

*The future might not have been bright in the before times, but now it's dark and chaotic and that has lent a real - I don't know. It's colored all of my interactions with the community. That people don't seem particularly hopeful about the future and that if you're going to be going into recovery, you need to have some sort of vision of a better future and that's just not a thing that my patients seem to be seeing right now.*

However, the interviews were also rich in discussions about uncertainty as an opportunity for creating lasting policy change at the local and national level that could support the health and wellbeing of PWUD and people experiencing homelessness. Participants discussed a range of opportunities that could potentially emerge from the pandemic including increased access to SUD treatment, the decriminalization of substance use, safe supply of substances, safe consumption sites, and universal income, housing, and healthcare. Many participants pointed to initiatives taking place in other parts of the country or internationally and reflected on how these potential solutions could help improve the health of PWUD and people experiencing homelessness during the pandemic and into the future.

Participants shared that they believed that some COVID-era drug and housing policy changes should continue beyond the pandemic. A few SUD clinicians stated that they hoped policy changes allowing for buprenorphine treatment via telehealth would be made permanent in order to facilitate access to treatment for individuals who have difficulty receiving care in person:

*I think in substance use care...a lot of us are really trying to rally around these changes in regulations to allow for low threshold access to buprenorphine. I'm a part of a group that is advocating for permanent change in the DEA language allowing telephone only access even beyond the COVID pandemic and also advocating for changes through legislation in Congress. And I think what we've learned is that this authority was vested in the DEA before COVID hit. They are able to declare a public health emergency and allow these changes in practice around telehealth under any public health emergency. And we know that the opioid epidemic has been a public health emergency and will continue to be a public health emergency well beyond the time of COVID. And so, I think there's a big potential to change practice and we just have to show that it's safe and that it actually has always been necessary.*

In addition, some participants discussed the Philadelphia Police Commissioner's decision to halt drug-related arrests during the early months of the pandemic and shared that they would welcome this change being made permanent:

*I know that for a while they weren't charging people for nonviolent crimes like drug use ....In general, I don't think that people should be arrested for substance use. So, I think I would love to see that continue.*

Other participants discussed potential policy changes that did not take place during the pandemic but are needed moving forward. A few participants discussed the need for public spaces that are more accommodating for people experiencing unstable housing, including the need for public restrooms:

*I think the first thing on a local level – and I see its benefit in a pandemic but also I think it would benefit after – is we need more public restrooms. The use at [program name] during COVID has been astronomical, and I can only imagine – I don't know if there is a public restroom site in Center City...but if there's not I can only imagine with all the businesses closed where folks – homeless folks normally could use public bathrooms not being open causes a big issue.*

Some participants spoke about the city's efforts to provide quarantine sites to people experiencing unstable housing who also used drugs, and stated that these interventions might have been more successful if individuals were allowed to access and use substances while they were there, which then sparked conversation about the need for safe consumption spaces and safe supply of substances moving forward:

*Because I think if you provide housing, a safe place for people to be, then that is huge. And it's been frustrating to look at places like in California... where there was a hotel...that people were given drugs – like the understanding that if you have people who use drugs and you want them to quarantine then you have to give them the fucking drugs, like that's just some basic-level stuff. And so I think there was an absolute failure on policymakers' parts here in Philadelphia to really meet people where they're at and provide the resources that would be needed for people to be safe.*

Another participant stated

*I know a lot of people want safe consumption sites. I agree. I think it's something that we need on the continuum of all the wonderful things that we need. I think most of all we need safe supply.*

Finally, many participants spoke about how the pandemic had highlighted the need for permanent quality housing programs for all people experiencing unstable housing, which would benefit individuals during the current COVID crisis and moving forward:

*Being able to prescribe housing for people, and not just housing, but sort of sustainable quality housing...sustainable in the sense that additional services are there within that program to be able to provide sort of mental health, behavioral health services, physical health services, but also employment services and being able to link people with opportunities and reducing barriers to employment...the social programming and those sorts of things that will not only provide housing, but allow it to be sustainable are really critical. But again, that's just not applicable during a pandemic ....I'm not sure that I can give you something that I would say that really would just be applicable during a pandemic that doesn't transcend to really to all time, to be perfectly honest with you. I mean, I think there's nothing I can think of that I would say, well, during a pandemic this should really be done, but like it wouldn't be helpful or appropriate outside of that front.*

Despite anxiety and uncertainty about what the future would bring, participants shared numerous suggestions for policy changes that would better support the health and wellbeing of marginalized Philadelphia citizens during the COVID-19 pandemic and beyond.

#### 4. Discussion

This study explored the impacts of the COVID-19 pandemic and ensuring policy shifts on overdose prevention, substance use treatment, harm reduction & homelessness advocacy in Philadelphia. While the pandemic and ensuing shut-downs negatively impacted the ability of many of our participants to support PWUD and people experiencing homelessness, participants also shared that the pandemic presented an opportunity for rapid positive policy change and the reimagining of care and service delivery. Examples of these changes ranged from a continuation of loosened federal restrictions on SUD treatment (i.e., the use of telehealth for buprenorphine prescribing and more flexible approaches to methadone take-home doses) to individual program policies (including discontinuation of regular urine drug screening and surveillance), to grassroots, “bottom-up” initiatives like organized protest encampments for people experiencing homelessness. While several commentaries have been published exploring how pandemic-related policy changes might inform the future of harm reduction and substance use treatment (Khatri & Perrone, 2020; Volkow, 2020; Davis & Samuels, 2020; del Pozo & Beletsky, 2020), to the best of our knowledge, no comprehensive exploration of the experiences of the substance use treatment and harm reduction & housing community in Philadelphia—including members of grassroots organizations and community advocates—has been published.

Our findings highlight the fact that while the COVID-19 pandemic had serious impacts on service provision for PWUD and people experiencing homelessness, many of the existing services were already not meeting needs before the pandemic began; as one participant stated: “people who experience homelessness and people who use drugs are always getting the short end of the stick.” While the impacts on these populations were devastating, they were also predictable from the perspective of individuals performing this work. Participants expressed frustration that many of the factors driving poor outcomes among PWUD and people experiencing homelessness during the pandemic (lack of safe spaces to quarantine, increasing rates of fatal overdose) could have been avoided if policy measures to address these issues had been taken earlier. As stated by Amri and Drummond, “attention should not be solely directed to flash fires, but instead, to the bushes that were burning before the crisis [COVID-19 pandemic] and will burn long after.” (Amri & Drummond, 2021)

However, participants identified that the COVID-19 pandemic presented an opportunity to attract increased attention these issues and move them into new “venues,” including mainstream media and new policy spheres at the individual program, local government, and federal levels. The need for flexibility in substance use treatment program policies created by the pandemic also led to important changes that seemed unthinkable before, an example being the move away from regular urine drug screenings. Regular screenings had been an integral part of treatment prior to the pandemic, and their abandonment in some circumstances due to social distancing guidelines has led to debate about their importance in treatment and how/whether they should be reinstated once the pandemic has passed (Khatri and Aronowitz, 2016). These findings, especially those regarding loosened restrictions on substance use disorder treatment, echo sentiments expressed by many other harm reduction advocates and researchers; a study of how syringe-service programs responded to the COVID-19 pandemic found that opportunities for agile innovation at the program-level was cited by staff as a “silver lining” of the pandemic (Wenger et al., 2016). Although much of the published literature focuses on interventions like the use of telehealth for SUD treatment (Davis & Samuels, 2020; Khatri et al., 2021b), and legalization of safe consumption spaces (Lofaro & Miller, 2021), participants in our study discussed using the heightened need and increased attention caused by the pandemic to push for more radical measures like universal housing, sanctioned encampments, and safe supply of substances, all of which began to receive coverage in mainstream media outlets as the pandemic dragged on and rising overdose rates and housing insecurity attracted widespread attention (Rushing, 2020; Goodnough, 2021; . It's, 2021The Editorial Board). Some participants expressed

frustration that programs like sanctioned safe consumption spaces (SCS) exist in other countries like Canada but not the US. (Kerr et al., 2017) This is especially relevant in the Philadelphia context, as the city came close to opening an SCS shortly before the pandemic began (Lofaro & Miller, 2021).

Inclusion of peer workers and case managers in our study along with unpaid harm reduction advocates and grassroots community organizers, rather than only licensed or prescribing SUD clinicians, is fairly novel in health services research. Olding et al. and Kennedy et al. highlight the importance of including peer workers in harm reduction and SUD health services research as they often have extremely valuable insights about the reality “on the ground,” and often have closer relationships with communities of PWUD and people experiencing homelessness than clinicians (Kennedy et al., 2019; Olding et al., 2021a, 2021b). In addition, many peer workers and community organizers identify as having lived experience of substance use and unstable housing themselves (Olding et al., 2021a). As noted by Olding et al. peer workers are essential for the functioning of successful harm reduction and SUD treatment programs, but often receive low pay and experience “precarious” working conditions, which, in the context of the COVID-19 pandemic, include high risk of exposure to the virus during direct-service work that could not be done remotely (Olding et al., 2021b). For example, while many participants in our study supported the federal COVID-era policy changes allowing for the use of telehealth for SUD treatment and their programs’ decision to switch to a virtual model, they discussed that individuals without telephone or computer access rely on case managers or other SUD program staff to connect with their prescribing clinician. As a result, telehealth models may involve a prescriber who is remote but case management or peer staff and patients who must meet in person to facilitate telephone or video conferencing meetings with prescribers. This highlights the limits of these policy changes and signals the need for evaluation of how expanded use of telehealth for SUD treatment in the future can benefit the most marginalized individuals, as well as impact frontline, lower paid staff in SUD treatment programs (i.e.: case managers and peer staff).

The inclusion of members of grassroots harm reduction groups led to rich discussions about their outreach activities and how their organizations’ policies and practices were altered in the face of the pandemic. While the switch from walking to car-based outreach limited their ability to connect to individuals via touch (hugs, handshakes, etc.) or long conversations, it did allow members to distribute more supplies and to travel to areas that they had previously missed on foot. Despite fears of exposure to COVID and their unpaid volunteer status, members continued to go out and distribute supplies weekly, even when other programs closed. Members noted that they noticed an increase in need for certain supplies and food among the individuals that they outreached to as many of the other groups that generally provided outreach in those areas, such as church groups or more established, better funded programs, halted services.

This study has several limitations. We could not directly assess the impact of COVID-19 on PWUD and people experiencing homelessness who were not also involved in harm reduction work, as we did not explicitly recruit members of these communities for participation. However, many harm reduction community organizers and advocates identify as having lived experiences of substance use and/or unstable housing, and a few participants expressed this in their interviews. In addition, the study’s primary goal was not to characterize changes in the lived experience of PWUD and people experiencing homelessness during the COVID-19 pandemic, but to gather data about the shifting policy landscape and ways the pandemic impacted participants’ work. As service provision and the policy landscape may differ in other places, these findings may not be generalizable to the experiences of harm reduction advocates, community organizers, and SUD treatment clinicians outside of Philadelphia. Finally, we conducted interviews via teleconferencing or phone due to the COVID-19 pandemic, which limited participation to individuals who had access to a phone or computer, or who were willing to be interviewed in this way.

## 5. Conclusion

The COVID-19 pandemic and ensuing service delivery interruptions had serious impacts on the work of Philadelphia’s harm reduction and homelessness advocates, community organizers, and SUD treatment clinicians in ways that were both devastating and predictable. However, participants also identified important opportunities for lasting drug and housing related policy changes that emerged from the pandemic in addition to increased attention on substance use and housing issues. In line with Baumgartner and Jones’ punctuated equilibrium theory, policy related to substance use treatment, harm reduction service access, and housing precarity have been slow to change despite pressing need. The COVID-19 pandemic and its related impacts—including rising overdose rates and widespread housing insecurity—have driven increased media coverage of these issues, forcing them onto policymakers’ agendas and into important policy changes at federal and local levels. This policy reform is ongoing and incomplete. Our findings point to important spaces where flawed federal and local policy persists from perspective of frontline overdose prevention and housing workers. While the future of these policy changes remains unclear, COVID-19 highlighted that these types of shifts can happen rapidly when a major event, in this case, a global pandemic, forces them. The findings of this study serve as a reminder that every day of delay in the meantime is measurable in preventable suffering.

## Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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