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Research Paper

A rapid ethnographic study of risk negotiation during the COVID-19 pandemic among unstably housed people who use drugs in Rhode Island

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A B S T R A C T

Background: The COVID-19 pandemic has greatly exacerbated the United States' overdose crisis. However, the overlapping impacts of COVID-19 and the overdose crisis have not been experienced equally, with unstably housed people who use drugs (PWUD) disproportionately impacted. Amid these changes, there is a need to understand how risk is experienced and managed among unstably housed PWUD to address health and social needs more effectively.

Methods: This project draws on ethnographic research conducted from June 2020 to April 2021 in Rhode Island. Data include 39 in-depth interviews with unstably housed PWUD and approximately 50 h of ethnographic fieldwork conducted alongside street-based outreach workers.

Results: COVID-19 risks were primarily contextualized in relation to participants' prior experiences of overdose events and adverse health outcomes. However, participants had varying levels of risk tolerance that were managed in ways that allowed them to reassert control and agency within the uncertainty of overlapping public health crises. Given participants' level of structural vulnerabilities, COVID-19 risk was managed alongside meeting their basic needs to survive.

Conclusions: Findings demonstrate how COVID-related public health measures (e.g., stay-at-home orders, service closures) reinforced participants' structural vulnerabilities in ways that increased their risk of health and social harms. Implementing and scaling up programs that meet the basic needs of individuals, including permanent housing, social supports, and overdose prevention interventions (e.g., supervised consumption sites) is critically needed to address intersecting risks faced by unstably housed PWUD.

Introduction

In March 2020, COVID-19 emerged as a global pandemic (Hedegaard, Minino, & Warner, 2020; WHO, 2020). To prevent the rapid transmission of SARS-CoV-2, public health guidelines such as travel bans, stay-at-home orders, and mask mandates were rapidly implemented worldwide (Lasry et al., 2020; WHO, 2020). Yet, variations in implementation approaches (e.g., mandatory vs. recommended) and inconsistent uptake of COVID-19 public health measures have resulted in recurrent public discussions too often locating COVID-19 transmission as the consequence of individualized risk-taking and 'rule breaking' (e.g., Baskar, 2020; Chang, 2020; Socolovsky, 2020). In doing so, dis-

courses have targeted individual behaviors, such as willingness to get vaccinated or wearing a mask, rather than the structural determinants impacting risk and risk management (Rhodes, 2009). This shifting of attention to the individual and away from broader social-structural contexts minimizes the social production of risk (Rhodes & Treloar, 2008).

Using individualized framings of risk are not unique to the COVID-19 pandemic. Similar approaches have been leveraged in the North American overdose crisis—an ongoing public health emergency that has been overshadowed and intensified by the COVID-19 pandemic (Friedman & Akre, 2021). For example, overdose-focused public health messaging has predominately targeted individual behaviors, such as using drugs alone or rushing use, to contextualize risk rather than social and struc-

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tural factors (e.g., safety from harm, criminalization of drug use) that shape risk and risk mitigation strategies (Collins, Boyd, Cooper et al., 2019a; Rhodes, 2009). It is against this backdrop of a decades-long overdose crisis that people who use drugs (PWUD) have experienced the COVID-19 pandemic. However, little is known about how PWUD perceive and navigate the pandemic amidst their ongoing survival of an overdose crisis in the United States (US).

Understanding the complex, multilevel network of factors that shape and re-shape how risk is experienced and enacted (Collins, Boyd, Cooper et al., 2019a; Rhodes, 2009; Rhodes & Treloar, 2008) is critical within public health crises, in which structurally vulnerable populations, including people who are unhoused and PWUD, have been disproportionately impacted (Bonn et al., 2020; EMCDDA, 2020; Friedland, 2010; Jacka, Phipps, & Marshall, 2020; Zolopa et al., 2021). Here, structural vulnerability can be understood as the ways in which groups are at an increased risk for experiencing negative health outcomes due to their marginalized position within social hierarchies that stem from intersecting structural and social forces (e.g., racism, poverty, criminalization) (Quesada, Hart, & Bourgois, 2011; Rhodes et al., 2012). Within the context of risk and decision-making, structural vulnerability is a useful concept as it underscores how COVID-related public health measures (e.g., social isolation, stay-at-home orders) intersect with broader socioeconomic, political, and institutional structures in ways that can constrain agency and increase susceptibility to COVID-19 and drug-related harms for particular populations (Bartholomew, Nakamura, Metsch, & Tookes, 2020; Bonn et al., 2020).

Rhode Island, a state located in the New England region of the US, has been significantly impacted by both the COVID-19 pandemic and overdose crisis. In December 2020, Rhode Island had the highest rate of COVID-19 in the country (Mandavilli, 2021) and has historically had among the highest overdose mortality rates in the nation (CDC, 2021; Hallowell, Weidele, & Scagos, 2020; Macmadu et al., 2021). Compounding these public health crises is a growing housing shortage in the state, which has led to substantial increases in homelessness since 2018 (Rhode Island Coalition to End Homelessness, 2021). In 2020, the homelessness rate increased by 15% in Rhode Island, with a 67.6% increase in the number of unsheltered persons in 2021 compared to 2020 (Rhode Island Coalition to End Homelessness, 2021). Simultaneously, COVID-19 hotel programs operated by non-profit agencies were implemented in the state to temporarily house individuals during the pandemic, and to be responsive to the reduction in shelter beds experienced during this time (Fox, 2021). These overlapping contexts point to an urgent need to understand how unstably housed PWUD responded to the COVID-19 pandemic to be more responsive to evolving needs.

In what follows, we examine the 'situated rationality' of risk (Rhodes, 1997) and how unstably housed PWUD interpreted, negotiated, and resisted this risk in relation to their structural vulnerabilities and social interactions throughout the COVID-19 pandemic and overdose crisis. Situated rationality underscores how risk perception and risk-related decision making are socially dependent and context specific (Moore, 2004; Rhodes, 1997). Previous research has documented the importance of understanding social contexts when assessing risk and risk-taking practices (e.g., sharing syringes, rushed injections), stressing how particular environmental contexts necessitate an 'ordering' of risks in relation to one's structural vulnerability (e.g., Collins, Boyd, Czechaczek, & McNeil, 2020; Ivsins, Roth, Benoit, & Fischer, 2013; McNeil & Small, 2014; Moore, 2004; Rhodes, 1997). This work has illustrated how drug use practices can often be at odds with public health messaging (e.g., use with others, do not share supplies) as people contend with daily realities shaped by their structural vulnerabilities. Understanding the ways in which PWUD manage risk and respond to COVID-19 and overdose risk is important for being able to effectively respond to future "big events" (i.e., significant social, economic, political, or environmental disruptions that lead to social instability), including future pandemics, but also economic recessions and extreme climactic events (Friedman, Rossi, & Braine, 2009).

Methods

This study draws upon rapid ethnographic work conducted in Rhode Island between October 2020 and April 2021 to examine COVID-related housing transitions and overdose risk among unstably housed PWUD. Commonly implemented within the context of public health emergencies (Johnson & Vindrola-Padros, 2017), rapid ethnography draws on a researchers' familiarity with a particular setting to engage in contextually-informed and intensive data collection—here, fieldwork and interviews—within a condensed period of time (Handwerker, 2001). As this work focused on the impacts of the co-occurring public health crises of COVID-19 and overdose, rapid ethnographic approaches were valuable as they allowed for the 'real-time' observations that could inform ongoing public health efforts to mitigate the pandemic (Johnson & Vindrola-Padros, 2017). For example, during the study period, the first author met regularly with public health officials, outreach workers, and housing officials to rapidly share findings that could inform response approaches.

The first author conducted approximately 50 h of ethnographic observation in 1–4 hour sessions. Fieldwork involved naturalistic observation and informal, unstructured conversations with individuals in encampments, hotel programs, and public spaces frequented by unstably housed PWUD across six towns in Rhode Island. All fieldwork was conducted alongside street-based housing, harm reduction, and peer support workers who had been working in Rhode Island for numerous years. This allowed for informal conversations to occur that provided a more comprehensive and localized understandings of the Rhode Island context. Written fieldnotes documenting observations, interactions, and conversations with outreach workers and individuals at the field site were taken immediately after each session and sought to situate these events within broader social, structural, and implementation contexts.

A total of 39 in-depth interviews were conducted with unstably housed PWUD (i.e., individuals who were unsheltered, staying in temporary hotels or shelters, couch-surfing, or otherwise lacked a permanent address) (see Table 1). Participants were recruited during fieldwork and by word-of-mouth. Interviews were conducted by two members of the research team (ABC, JG), averaged 32 min in length (range: 17–50 min), and were audio-recorded. Due to COVID-related protocols and to maximize opportunities for involvement, most interviews were conducted in field sites (e.g., parks, hotels, drop-in centers), with five taking place in a private office at our institution due to inclement weather. Interviewers ensured participants' privacy was maintained during field-based interviews by moving to nearby, secluded areas (e.g., park bench, outreach van, private room in drop-in center) if other individuals were in the area. Interviews were facilitated using an interview guide that captured topics such as housing and drug use transitions, COVID-related experiences, and service access. The interview guide was developed by the first author, in consultation with community partner organizations, and modified iteratively as new lines of inquiry emerged. Participants received $40 cash honorarium for their time. Interviews were transcribed verbatim by a professional transcriptionist. Each transcript was reviewed for accuracy against the original recordings by the first author. An online pseudonym generator was used to assign each participant a pseudonym. All study activities were approved by the Institutional Review Board at Brown University.

Field notes and interview transcripts were imported into NVivo, a qualitative analysis and data management software, where they were coded using a preliminary coding framework informed by the interview topic guide. The framework was revised as new categories emerged during analysis (Deterding & Waters, 2018). Transcripts were then recoded following the establishment of final categories. To enhance validity of findings, we sought feedback from housing and harm reduction outreach workers, PWUD, and community partners through informal conversations throughout the project. Analysis was informed by the intersectional risk environment framework (Collins, Boyd, Cooper, et al., 2019a) and situated rationality, which allowed us to examine how participants'

Table 1
Participant demographics (*n* = 39).

Participant characteristic	Baseline *n* (%)
Age	
Mean	45 (range: 24–66)
Race and ethnicity	
Indigenous	<5
White	23 (59%)
Black	7 (18%)
Other (Hispanic, multiracial)	5 (13%)
Gender	
Women	15 (38%)
Men	24 (62%)
Housing type[1]	
Tent	13 (34%)
Hotel or motel	12 (31%)
Shelters or transitional housing	7 (18%)
Couchsurfing	7 (18%)
Other (e.g. car, unsheltered)	6 (15%)
Length of time unhoused	
Mean	6.6 years (range: 2 months – 35 years)
Drug use (30 days prior to interview)[1]	
Cocaine	18 (46%)
Crack cocaine	26 (67%)
Crystal methamphetamine	19 (49%)
Heroin	19 (49%)
Fentanyl	18 (46%)
Opioids (extra-medical)	9 (23%)
Benzos	13 (34%)
Other (e.g. hallucinogens, GHB)	5 (13%)
Overdoses in the past year	
None	19 (49%)
One	6 (15%)
Two	7 (18%)
Three or more (range: 3 – 10 overdoses)	7 (18%)
Forms of income in last 30 days[1]	
Full time work	<5
Part time work	5 (13%)
Panhandling	13 (34%)
Sex work	5 (13%)
Social assistance	13 (34%)
Drug selling	<5
Reselling goods	11 (28%)
Other	5 (13%)

[1] Responses are not mutually exclusive.

accounts of the COVID-19 pandemic and associated risks were framed in relation to participants' structural vulnerabilities (Quesada et al., 2011; Rhodes et al., 2012) and multiple aspects of social identity (e.g., gender, race, socioeconomic status). The intersectional risk environment extends the traditional risk environment framework (Rhodes et al., 2012) to demonstrate the relational effects of social identities and environments, including how social identities are simultaneously shaped by, and shape, environmental factors in ways that influence health outcomes (Collins, Boyd, Cooper, et al., 2019a). Importantly, this framework also elucidates how aspects of social identity overlap with systems of oppression and discrimination in ways that impact health and produce differential health outcomes given one's level of structural vulnerability. Drawing on the intersectional risk environment allowed us to examine larger social and structural factors and oppressions (e.g., socioeconomic marginalization, stigma) that impacted social contexts of risk and risk management among unstably housed PWUD, and how these overlapped with broader public health approaches (Rhodes et al., 2012).

Results

Contextualizing the pandemic and COVID-related risk

'Stronger' than COVID-19

Participants situated COVID-related risks by drawing on their previous experiences of the overdose crisis and structural vulnerabilities

(e.g., housing instability). While COVID-19 was often viewed as a risk to the broader public, several participants emphasized their 'invincibility' in relation to the pandemic – that is, that they would not necessarily experience harm because of their experience of surviving the ongoing overdose crisis. One participant, 'Robert,' who had experienced three overdoses in the last year, including the week prior to his interview, explained how he learned about COVID-19:

> *I think my mom told me about it. I wasn't* [nervous] *because at first it was saying like old people are getting it and I'm old but I'm not an old person. But I wasn't nervous at all. I said, 'I fucking OD'd' you know what I mean? This Corona's not gonna fucking kill me if I survived that. That's my way of looking at it.* [Robert, 47-year-old white man]

Prior overdose experiences were thus positioned as a measure of resilience that reduced participants' risk of contracting COVID-19, experiencing severe disease, or dying of COVID-19. 'Jonathan,' who had experienced numerous overdoses, including three in the last year, shared his views on COVID-19:

> *I mean, to be honest, when I first heard about it I literally said like, 'If that's what's gonna take me out then, hey.' I literally came back* [from an overdose] *like six times, so if that's what's gonna do it, it is what it is. I mean don't get me wrong, I don't wish that upon anybody…like it's a real thing.* [Jonathan, 33-year-old white man]

It was within this context of having continued to survive an existing public health crisis that participants came to understand risk associated with the COVID-19 pandemic. Notably, how participants contextualized COVID-19 also underscores how risk was socially situated, at times overlapping with performative gendered constructs. By drawing on socially constructed gendered stereotypes associating hegemonic forms of masculinity with 'strength' ("*This Corona's not gonna fucking kill me*") and 'invincibility' ("*I literally came back like six times*") in relation to risk (McNeil, Shannon, Shaver, Kerr, & Small, 2014; Peralta, 2007)—stereotypes which are also particularly prominent within street-based drug scenes (Bourgois, 2003; Collins et al., 2020)—participants who were cisgender men positioned themselves outside of those 'at risk' of contracting COVID-19. Such performative gendered discourse thus allowed some participants to reinforce their perceived safety and assert agency within an uncertain health event.

In addition to COVID-19 being contextualized in relation to overdose experiences, others described it as having a minimal impact on their daily lives, despite its impacts on the broader community. For these participants, the risk of COVID-19 was weighed in relation to other immediate risks (e.g., criminalization, overdose risk, finding a place to sleep) they had to manage in their daily lives to survive. 'Russell,' a 58-year-old white man, explained: "*I live on the streets, you know? I mean, COVID's a word – it's not a reality. I mean…a cold? We all have colds. Every one of us. That's what it comes down to.*" Here, Russell underscores how unstably housed PWUD were negotiating a complex terrain of risk, framed by their ongoing structural vulnerabilities. In doing so, Russell draws attention to how the pandemic was often viewed as a 'lesser' risk amid more immediate concerns of survival.

COVID-19 as an impediment to meeting basic needs

Despite broader narratives of COVID-related changes (e.g., working from home, travel restrictions), many participants' experiences were centered on the now "*10,000 hoops*" they had to navigate due to business closures and changes to bureaucratic processes (e.g., digital vs. in-person services) amid the pandemic. While on outreach, we frequently observed individuals asking outreach workers for support with booking online appointments, requesting transit passes online due to office closures, updating their phone numbers for their benefits, and help coordinating COVID-19 tests to get into shelters. Notably, managing these bureaucratic processes were already challenged by participants' structural vulnerabilities (e.g., housing instability, socioeconomic marginalization, lack of access to digital services) and were further intensified

under COVID-19. This culminated in viewing the pandemic more as an inconvenience or impediment than a risk:

> The [shelter] *won't let you in till you get tested. And then you've gotta call CES* [coordinated entry services] *and if you call CES and there's no beds available there, I can't afford to go to* [a shelter in another town]…*Bus don't leave early enough - 5 o'clock in the morning I gotta be at work. …And I'm still fighting trying to get a counselor. I keep getting told, 'We're not taking on no new clients cause of COVID,' and you know, what the fuck? How am I supposed to get anything done? They're not taking on no new clients cause of COVID? Ok. Well I have no access to any resources now.* ['Michael,' 39-year-old white man]

However, in describing the impacts of COVID-related service changes, some participants questioned the legitimacy of the pandemic. For these participants, mistrust of the government (both state and federal) was a key feature in how they perceived the pandemic and whether it was a serious concern. One participant explained:

> *First off, COVID-19 is bullshit. …Whatever the government's doing, they have COVID on the left hand for us to watch so we don't see what the right hand is doing. But in the meantime, you're making our lives much harder than it already is. You have practically cut out a lot of access to the homeless. Now we're just out here with nothing. We have no opportunities for assistance, for help. …The COVID-19 has put a strain on a lot of stuff right now, so we just make do and do the best we can.* ['Sherry,' 42-year-old multi-racial woman]

The framing of the pandemic as a 'distraction' from other pressing concerns was positioned as a way the government was reinforcing inequities faced by people who were unstably housed as it restricted their ability to access needed social support systems (e.g., inability to get food assistance or housing). Mistrust thus became a critical feature in shaping participants' perceptions of COVID-related risk, especially when contrasted to the overdose crisis which they had been experiencing—and surviving—for years.

Worry, fear, and concerns of COVID-19 exposure

Some participants expressed significant concerns about contracting COVID-19, with these concerns largely situated in relation to their co-occurring health conditions (e.g., HIV, chronic kidney disease, chronic obstructive pulmonary disease [COPD]) that participants knew increased their risk of severe COVID-19 outcomes. Fear of COVID-19 among some participants was pervasive during interviews and fieldwork, with participants often referencing physiological ailments (e.g., runny nose, cough, headache) that they thought could be symptoms of SARS-CoV-2 infection. During fieldwork, participants also regularly pointed out peers who they thought had a current positive COVID-19 diagnosis or had experienced COVID-19 to the lead author, describing the ongoing stress they experienced from staying in nearby encampments. One participant, 'Mark,' who had respiratory and cardiovascular conditions, explained how communal living increased exposure risk:

> *It makes me very, very worried cause I got the runny nose. I'm wearing a mask, but my nose bleeds. I mean, it bleeds for no apparent reason. I'm coughing. So it makes me worried, but I've been tested like 20 times. Every single one so far came back negative – knock on wood. …But the* [shelter] *is first come, first served. And they've been tested over there and so you might walk in and think you're safe, but you're getting sick. You're getting this disease.* ['Mark,' 51-year-old white man]

Participant narratives frequently illustrated the compounding risks unstably housed PWUD faced when trying to meet their basic needs and underscored a pervasive sense of uncertainty of their peers. Because of this, social isolation was viewed as a necessity in that it offered participants increased protection from contracting the virus from others. One participant who had been couch-surfing with a friend during the pandemic due to her co-occurring health conditions explained:

> *COVID is – I just don't want to be out there and be at risk. You know? I barely leave this house. Like when I get my check on Fridays, I'll leave, cash my check, come home. I don't wanna go anywhere. I don't go into any stores with her* [friend] *because I'm high risk. I have a pacemaker, I've had open heart surgery, I got COPD, I got injuries, like you know. It's very scary.* ['Laura,' 46-year-old white woman]

However, participants' structural vulnerabilities (e.g., housing instability, socioeconomic marginalization) and co-occurring health concerns simultaneously resulted in the need to weigh meeting their basic needs with reducing COVID-19 risk. While conducting fieldwork, we talked with individuals who were concerned about the pandemic, but also needed to interact with peers to meet their needs. Often, we observed the same small groups of individuals, in what was later characterized by a participant as her "*pod,*" socializing and supporting each other during fieldwork. This support included pooling money to buy and share food, cigarettes, and alcohol, as well as sharing tents.

Other participants' concerns about the virus were driven by having family members impacted during the pandemic. This resulted in participants increasing their social isolation to minimize potential COVID-19 exposure risk. One participant explained:

> *I got the test done. I get it done like every couple of weeks just cause I'm scared. Like, we're outside. I'm scared to death of catching it from someone. Someone comes over coughing and you don't know if they have it nowadays cause one of the symptoms is coughing, you know? My whole family got COVID – the whole house. The kids, everything. It was bad. …I try to stay away from people.* ['Nicole,' 33-year-old Hispanic woman]

Although social isolation was enacted to reduce COVID-19 exposure, it simultaneously led to what some participants characterized as adverse mental health outcomes (e.g., increased stress and anxiety) due to persistent COVID-related fear and worry.

Finding control in the COVID-19 pandemic

Engaging with public health measures

While many participants reframed COVID-19 in relation to prior experiences, which at times meant they did not view themselves at risk, others described being "*scared*" of contracting the virus and were at times uncertain as to the best way to manage potential exposure. This inability to control what was occurring during the pandemic manifested in various ways among participants as they sought to exercise agency amid the implementation of COVID-related public health response measures. Participants readily described how they were adversely impacted by some COVID-19 response measures due to their housing instability and described efforts to actively resist some these public health approaches. One participant who was staying outside explained how city-mandated curfews implemented during the first wave of the pandemic were not useful for people who were unhoused:

> *I'm outside – COVID had nothing to do with nothing. The only thing is the availability of going inside somewhere. Like, that one time when they was gonna do the curfew? It didn't apply to me. I live outside. So what's my curfew? Like, I'm sitting outside and the police are riding by like, 'You gotta go.' Go where? So I rolled right on out* [i.e. laid down]. *Nobody gonna tell me no – it's a public place.* ['Kyle,' 51-year-old Indigenous man]

Similarly, 'Thomas,' described how he thought hotel-implemented policies aimed at reducing COVID-19 exposure actually increased his risk of COVID-19 resulting in him not following the stated rules, particularly around smoking:

> *I don't socialize that much. But I'll go out and have a cigarette. But they* [hotel] *just want to put everybody down to the end there outside, like in one area. …So I don't go down there. I go around the other way. They're trying to prevent COVID spread in the hotel, but you want us to*

all congregate in one smoking area? Yeah, ok, makes sense. ['Thomas,' 56-year-old Black man]

In resisting city-implemented (e.g., curfews) and service-implemented (e.g., designated smoking areas) measures, participants were not only able to reassert agency over their lives but also highlight the disparate ways in which public health measures impacted certain populations. Notably, most participants who described actively resisting public health measures were cisgender men, further illustrating the ways in which particular situated gendered performances (e.g., discourses of resistance and invincibility) were enacted to navigate COVID-19 risks and public health measures.

For some participants, engaging in regular COVID-19 testing was viewed as one of the few options through which they could reassert agency during the pandemic as it provided them access to services needed for survival (e.g., shelters, recovery housing, inpatient treatment) that were otherwise inaccessible during the pandemic. While most participants were willing to access COVID-19 testing—a requirement for admittance to residential and inpatient programs—we regularly observed challenges people faced to securing appointments during fieldwork. Because residential and inpatient treatment facilities did not provide testing on-site, outreach workers regularly had to coordinate COVID-19 testing appointments and transportation. Outreach workers underscored how these testing gaps reinforced barriers unstably housed PWUD faced and undermined their access to treatment services as admittance was regularly delayed (or denied) due to not having a recent COVID-19 test or test results quick enough to hold their space in the program.

However, participants staying in certain temporary hotel programs described experiencing mandatory weekly COVID-19 tests, temperature checks, and screening questions which were required to stay there and happened on-site. Despite the mandatory nature of these practices, many participants still viewed them as useful as it provided them greater access to services and supports that met their basic needs, including temporary housing and food services. Furthermore, participants regularly contrasted their willingness to engage in COVID-related risk reduction strategies (e.g., willingness to mask, social distancing) to illustrate that they were more responsive than their peers, thereby challenging broader narratives of 'riskiness' often imposed on PWUD related to assumptions of decision-making and personal autonomy that obscure how health and drug-related risk (e.g., syringe sharing, using drugs alone) is socially and structurally situated (Collins et al., 2020; Moore, 2004):

I just, I don't know, I don't go near a lot of people because of it you know? Because I don't know who knows [if they have it]. *People could have it and give it to you and like everything else, some people just don't care.* ['Scott,' 53-year-old white man]

While positioned as a risk reduction strategy related to potential COVID-19 exposure, many participants' social distancing was a necessary practice to survive and minimize risk of harm (e.g., theft, incarceration) within the context of housing instability.

Blame, targeting, and engagement in involuntary measures

While participants viewed their COVID-related risk reduction practices as 'sensible,' it was simultaneously perceived as acknowledging or admitting that they had engaged in a behavior considered to be "*bad*," such as socializing with other people. One participant explained:

I think I'm bound to catch it walking around everything, not having nowhere to go, smoking with people, you know, it's like I don't know where their mouths been. …But I felt like it affects me bad if I don't get out. It's going bad, I heard…unless they get their shots and vaccines. Everybody's telling me they're getting sick. So it's like, I don't know. I did like a swab with my nose the other day and I don't know, it just made me feel like I did something bad. ['Peyton,' 24-year-old white man]

Although 'Peyton' described his risk of COVID-19 as seemingly inevitable due to his housing status, he simultaneously compared his 'responsible' actions (getting tested) with what he saw on the news (people not getting vaccinated) to counter negative assumptions. This responsibility was further elucidated by 'Jeremy' (a 33-year-old Indigenous man) who described COVID-19 testing as necessary to minimizing putting his family at risk:

You lose the people close to you because they feel like you might have COVID. I could have stayed with my little sister…but my grandmother is with her…They say 'You can't come in' – people are scared because I'm out here. There's nothing I can do about that…I took the COVID test, the thing up the nose four or five times. I didn't have it…then I went to prison. I took the two tests. I got quarantined in the block. I did all of that stuff. It still didn't matter. Even though I did all that, it still didn't mean anything to them, because there's no vaccine. They're like, 'You still might have it.' And they say it comes and goes. Once they said all that stuff, the people that have poor people in their family out there, they have to distance themselves from them.

Here, participants perceived COVID-19 testing as important to engage in while simultaneously feeling like they were blamed or perceived to be 'risky' due to their structural vulnerabilities.

These sentiments were reiterated by participants who described feeling subjected to what was perceived as involuntary COVID-related procedures (e.g., COVID-19 testing), which they felt was due to their marginal housing status. While conducting fieldwork, one man who was unhoused described being regularly admitted to the emergency department's "*drunk tank*" (i.e., psychiatric unit for intoxicated patients) where he is given a COVID-19 test and a blood test. He continued, explaining that he had never been provided with any results or reason as to why these tests occurred, but is required to have them each visit. In these instances, participants viewed testing as challenging their individual choice and restricting their agency:

Every time I go to the doctor [they test me]. *And you know what? I hate it because I don't understand why suddenly every time you go to the doctor they know you ain't got it but have to stick that thing up your nose. And they sent me somewhere to do the test and then I had to go to another doctor…they had to do it all over again. …She stuck it up there to me so far I had tears in my eyes. If they keep stickin me I'm gonna kick somebody. …I think that it's against the law. If I had my way, I'd have em all locked up.* ['Tonya,' 58-year-old Black woman]

Here, 'Tonya' described COVID-19 testing at the clinic as involuntary and a breach of her rights ("*I think it's against the law*"). Notably, this participant's perceptions of COVID-19 testing suggest that it was viewed as an extension of systems that regulate and restrict the agency of women who use drugs—particularly women of color—in ways that are gendered, racialized, and classed (Campbell & Herzberg, 2017; Knight, 2015).

The benefits of vaccination

For a few participants, vaccination was perceived as a mechanism through which they could assert more control, not only in relation to reducing COVID-19 risk but also to lessen the impact of public health measures on their daily lives. One participant, 'Victor,' described vaccines as one of the few actions people could take to address the impacts of COVID-19 on people's mental health:

I think we're running in a state of depression. I know that society's kicking us in the butt because someone caused this disease to kill people and our family member are dying because of it. …I was like struggling with depression, anxiety and there's nothing we can do about them except take the vaccine. [Victor, 51-year-old white man]

Here, Victor conceptualized the COVID-19 vaccine as a 'responsible' way of exerting more control within the pandemic as it could have significant impacts on others as well as offer increased protection for him-

self. However, participants' efforts to engage in risk reduction strategies were at times undermined by unequal vaccine access when they were first made available in the state:

> They're all worried about this section of groups getting the vaccines. No. Get enough vaccines where everybody can get vaccinated. I still haven't been vaccinated and I have COPD and HIV. So I'm twice as much to get it than anybody else in this state. …They should be doing this by medical purposes. …They were giving [hospital] employees the vaccine and they weren't even supposed to get it. That vaccine could have probably went to somebody that has it worse than I do. But no, they took it upon themselves. ['Terri, 42-year-old white transgender woman]

As illustrated, the state's approach to vaccine distribution was viewed as reinforcing inequities faced by structurally vulnerable PWUD and increasing their harm as they managed co-occurring conditions.

Discussion

This research explored how unstably housed PWUD conceptualized and responded to COVID-related risks. In doing so, we illustrate the dynamic ways in which PWUD sought to reassert control and agency amid overlapping public health crises. Despite varying levels of risk tolerance, participants actively challenged broader narratives of 'risk-iness' associated with PWUD in their daily environments. However, ongoing uncertainty related to the pandemic intersected with – and reinforced – participants' structural vulnerabilities as they navigated a complex terrain of survival. As a result, the management of co-occurring risks was complicated and required regular complex nego-tiations, which often increased participants' risk of health and social harms.

Amid increasing fatal overdose rates in the US (Ahmad, Rossen, & Sutton, 2021), our study shows that COVID-related risks were perceived within a context of meeting daily needs (e.g., food access, managing withdrawal symptoms, finding somewhere to sleep) and continual sur-vival of a decades-long overdose crisis. Because of these situationally dependent priorities, the pandemic—and associated public health re-strictions—was thus experienced as an additional impediment partic-ipants had to contend with. Research has documented how risks and 'risk-taking' behaviors are often weighed in relation to other pressing needs (Bayat et al., 2020; Bourgois, 1998; Connors, 1992; Moore, 2004). This body of work has been critical for situating health outcomes, like overdose or HIV transmission, in relation to other daily risks (e.g., physical or sexual violence, incarceration, withdrawal, poverty) that frame the lives of structural vulnerable PWUD (e.g., Bayat et al., 2020; Collins, Boyd, Cooper et al., 2019a; Collins, Boyd, Mayer, et al., 2019b; Collins et al., 2020; Ivsins et al., 2013; Rance, Rhodes, Fraser, Bryan, & Treloar, 2018). By underscoring how risk is situationally dependent, this work has problematized the individualization of risk to elucidate how risk is framed by social environments and structural factors (e.g., criminalization, poverty) thereby necessitating a constant negotiation of priorities. Similarly, our work illustrated how overlapping public health crises led to a hierarchy of risks framed in relation to participants' broader risk environments and structural vulnerabilities. Targeted struc-tural interventions that address individuals' survival needs (e.g., uni-versal basic income, permanent affordable housing) are thus urgently needed.

This study also documented how pandemic-related policy responses and public health measures increased inequities for unstably housed PWUD, particularly related to service and resource access. Our find-ings illustrate how the roll-out of public health measures to address the COVID-19 pandemic unintentionally overlooked the various needs of unstably housed PWUD and created undue harm as many policy efforts (e.g., stay at home orders, social distancing) were at odds with their realities. This lack of awareness to the disparate impacts such public health measures would have among particular populations, and how these varied among and within unstably housed populations who use

drugs, shifted the burden of COVID-19 risk management from the state to the individual. This redistribution of risk responsibility and manage-ment led many participants to express mistrust and confusion at pub-lic health response measures. Despite these challenges, participants ac-tively sought ways to reassert their agency by socially isolating or regu-lar testing, which afforded them access to services otherwise not avail-able, like temporary housing. It is important to note that Rhode Island has continued to experience some of the highest rates of COVID-19 per capita in the nation (Mandavilli, 2021; New York Times, 2022), which led to the rapid implementation and scale-up of testing infrastructure starting in April 2020 (Office of the Governor and Rhode Island, 2020). However, access to testing and rapid receipt of testing results was dif-ficult for unstably housed PWUD, often creating additional barriers to inpatient and residential treatment programs. Our findings illustrate the need to increase accessibility of critical health and social services within communities most impacted to improve connections to care and other basic services. However, efforts to scale up health and ancillary sup-ports must be responsive to and address intersecting health and social inequities, including those driven by housing policy and drug use crim-inalization.

Our results elucidate how the pandemic, as a "big event" (Friedman et al., 2009) structured participants' risk environments in ways that exacerbated adverse health outcomes. This work demon-strates the need for broad housing reforms that increase the housing stock in Rhode Island, as well as increase access to affordable housing for PWUD more broadly. Participant narratives detailed the health and social risks associated with housing instability amid co-occurring pub-lic health crises, that significantly heightened their risk of harm as they sought to manage their COVID-19 exposure and mental health. Here, housing would serve as a safer environmental intervention (McNeil & Small, 2014; Rhodes et al., 2006) where people would be afforded in-creased agency over their health and safety. Increased access to housing should also be paired with housing-based overdose prevention inter-ventions (e.g., access to harm reduction supplies, supervised consump-tion services) and physical and mental health supports to better address the co-occurring needs of PWUD. Community-based organizations else-where have implemented innovative programming during the COVID-19 pandemic to support the health and social needs of structurally vul-nerable populations (Hyshka et al., 2020; Parkes et al., 2021; San Fran-cisco AIDS Foundation, 2020). Direct state aid to support community-based organizations in undertaking similar tactics should be prioritized in Rhode Island to address inequities faced by unstably housed PWUD. Future research should also examine programmatic preferences, accept-ability, and implementation considerations of housing-based services among PWUD.

This study has several limitations that should be noted. Data were collected during multiple waves of the COVID-19 pandemic in Rhode Island. This limited fieldwork locations during pandemic 'peaks' as re-searchers had to abide by institutional and community organization regulations. This included the inability to conduct fieldwork in some temporary hotel programs that had a restriction on guests due to the pandemic. Participants were recruited while conducting fieldwork with outreach workers and by word-of-mouth. As such, these findings may represent perspectives of people somewhat engaged with services and may not be representative of other marginally housed PWUD. Further, women, transgender, and non-binary persons were underrepresented in this research, which may obscure their specific experiences of COVID-19 and overdose risk.

Overall, our study underscores the significant and disproportion-ate ways in which unstably housed PWUD have been impacted by the COVID-19 pandemic and sought to manage risks that resulted. As we continue to experience an increasing number of big events due to climate change and macroeconomic factors (Friedman et al., 2009), it is impera-tive that we develop and implement low-barrier supports and programs that address drivers of harm for PWUD and increase the agency of un-stably housed people.

Ethics

All study activities were approved by the Institutional Review Board at the Brown University School of Public Health.

Disclosures

None.

Declarations of Interest

No conflicts to declare.

Acknowledgments

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