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Why are some people who have received overdose education and naloxone reticent to call Emergency Medical Services in the event of overdose?

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Abstract

Background—Overdose Education and Naloxone Distribution (OEND) training for persons who inject drugs (PWID) underlines the importance of summoning emergency medical services (EMS). To encourage PWID to do so, Colorado enacted a Good Samaritan law providing limited immunity from prosecution for possession of a controlled substance and/or drug paraphernalia to the overdose victim and the witnesses who in good faith provide emergency assistance. This paper examines the law's influence by describing OEND trained PWIDs' experience reversing overdoses and their decision about calling for EMS support.

Methods—Findings from two complementary studies, a qualitative study based on semi-structured interviews with OEND trained PWID who had reversed one or more overdoses, and an on-going fieldwork-based project examining PWIDs' self-identified health concerns were triangulated to describe and explain participants' decision to call for EMS.

Results—In most overdose reversals described, no EMS call was made. Participants reported several reasons for not doing so. Most frequent was the fear that despite the Good Samaritan law, a police response would result in arrest of the victim and/or witness for outstanding warrants, or sentence violations. Fears were based on individual and collective experience, and reinforced by the city of Denver's aggressive approach to managing homelessness through increased enforcement of misdemeanors and the imposition of more recent ordinances, including a camping

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Conflict of interest

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ban, to control space. The city's homeless crisis was reflected as well in the concern expressed by housed PWID that an EMS intervention would jeopardize their public housing.

Conclusion—Results suggest that the immunity provided by the Good Samaritan law does not address PWIDs' fear that their current legal status as well as the victim's will result in arrest and incarceration. As currently conceived, the Good Samaritan law does not provide immunity for PWIDs' already enmeshed in the criminal justice system, or PWID fearful of losing their housing.

Keywords

Good Samaritan law; Opioid overdose; Calling emergency medical services (911); Policing; Homelessness

In August of 2009, the Harm Reduction Action Center (HRAC), a local Denver Community Based Organization offering harm reduction services to persons who inject drugs (PWID), began a memorial to clients who died from a heroin-related overdose. Photographs and brief notes provided by friends and families, were hung on a wall. By the summer of 2015, the memorial included more than 60 photographs. Between 2002 and 2014, Colorado witnessed a 68% increase in rate of drug overdose deaths (Keeney & Bailey, 2016). In the city of Denver, the age adjusted rate of death exceeded more than 20 per 100,000 residents in 2014, a rate that is among the highest in the nation (National Centers for Health Statistics, 2016). This paper describes the center's effort to address this local manifestation of a national epidemic through the implementation of an Overdose Education and Naloxone Distribution (OEND) intervention. Specifically, this study examines why OEND trained PWID, despite being instructed to summon emergency medical services (EMS) in the event of an overdose, were unlikely to have done so even though Colorado's Good Samaritan law provides both the witness and victim a degree of immunity from prosecution. Findings are based on in depth qualitative interviews with PWID who received training and reversed an overdose, and an on-going ethnographic study examining HRAC clients' self-identified health issues.

Background

Community-based programs providing naloxone, an opioid antagonist, and education about overdose to PWID and other persons who might be present at an opioid overdose have become an integral part of the public health response to this decade-long health crisis (Wheeler, Davidson, Jones, & Irwin, 2012). By June 2014, 644 local programs in 30 states and the District of Columbia were responsible for the distribution of over 152,000 naloxone kits and more than 26,000 overdose reversals (Wheeler, Jones, Gilbert, & Davidson, 2015). In addition to teaching participants how to administer naloxone, programs instruct trainees to recognize an overdose, to attempt to stimulate the victim, to lay the victim on their side and clear their airway, to begin rescue breathing, and to call 911, the nationwide phone number for emergency medical assistance. OEND trainings include this step because the half-life of naloxone is short relative to heroin and other opioids; victims may be at risk of repeat respiratory depression hours after naloxone administration (Boyer, 2012; Hawk, Vaca, & D'Onofrio, 2015).

Studies have reported that significant percentages of PWID do not call or delay calling EMS (Clark, Wilder, & Winstanley, 2014). These include studies of PWID who have witnessed an overdose (Banta-Green, Kuszler, Coffin, & Schoeppe, 2011; Follett, Council, Piscitelli, Parkinson, & Munger, 2014; Galea et al., 2006; Pollini et al., 2006; Tracy et al., 2005) as well as studies with OEND trained PWID (Enteen et al., 2010; Doe-Simkins et al., 2014; Seal et al., 2005).

Studies conducted prior to the implementation of Good Samaritan laws found that in addition to not having a phone (Seal et al., 2005), the most frequently reported reasons PWID do not call for emergency medical assistance are because they do not think it is necessary (Bennett, Bell, Tomedi, Hulsey, & Kral, 2011; Bohnert et al., 2011; Pollini et al., 2006; Tobin, Davey, & Latkin, 2005; Tobin, Sherman, Beilenson, Welsh, & Latkin, 2009; Tracy et al., 2005; Wright, Oldham, Francis, & Jones, 2006) and/or fear of the police (Baca & Grant, 2007; Bennett et al., 2011; Bohnert et al., 2011; Davidson, Ochoa, Hahn, Evans, & Moss, 2002; Enteen et al., 2010; Follett et al., 2014; Lankenau et al., 2012; Maher & Dixon, 1999; McGregor, Darke, Ali, & Christie, 1998; Moore, 2004; Pollini et al., 2006; Seal et al., 2005; Sergeev, Karpets, Sarang, & Tikhonov, 2003; Sherman et al., 2008; Tobin et al., 2005; Tracy et al., 2005; Wright et al., 2006; Zakrison, Hamel, & Hwang, 2004). Additional reasons PWID do not call 911 include negative experiences with EMS personnel (Sherman et al., 2008; Enteen et al., 2010), fear of losing custody of their children, the risk of damaging a relationship with an employer (Follett et al., 2014), concern about jeopardizing their housing, and fear of breaching parole or probation (Follett et al., 2014; Wright et al., 2006).

Fear of police as a primary reason PWID do not call for emergency medical services in the event of overdose is consistent with the large body of research demonstrating the influence of criminal justice systems and policing in producing environments conducive to drug-related harm including overdose (Aitken, Moore, Higgs, Kelsall, & Kerger, 2002; Broadhead, Kerr, Grund, & Altice, 2002; Blankenship & Koester, 2002; Burris et al., 2004; Cooper, Moore, Gruskin, & Krieger, 2005; Darke and Ross, 2002; Dovey, Fitzgerald, & Choi, 2001; Kerr, Small, & Wood, 2005; Maher and Dixon, 1999; McLean, 2016; Rhodes et al., 2012; Sarang, Rhodes, Sheon, & Page, 2010; Small, Kerr, Charette, Schechter, & Spittal, 2006; Small et al., 2011; Wagner, Simon-Freeman, & Bluthenthal, 2013). For PWID, policing is a constant concern that “acts as an indirect force of structural violence” affecting their ability to avoid harm (Rhodes et al., 2012). PWID are fearful of arrest, and in some cases, fearful of physical mistreatment. These fears are amplified in situations of intensive policing and continuous surveillance (Bohnert et al., 2011; Cooper et al., 2005; Sarang et al., 2010), for homeless PWID who spend a great deal of time “on the streets” in public space (Bourgois & Schonberg, 2009; Kerr, Small, Moore, & Wood, 2007; Moore, 2004), for PWID with outstanding warrants (Kerr et al., 2007; Koester, 1994; Moore, 2004), and/or in violation of parole or probation (Follett et al., 2014; Wright et al., 2006).

To address PWIDs’ fear of police and encourage them to call 911, 34 states have implemented Good Samaritan laws providing some degree of immunity from prosecution for drug possession to both the witness and overdose victim (Davis & Chang, 2016). In a few states, the law includes immunity for possession of drug paraphernalia, and in some

states, the law includes provisions for the Good Samaritan's response to be considered as a mitigating factor in sentencing (Davis & Carr, 2015; Davis & Chang, 2016).

In 2012, Colorado became the ninth state to enact a Good Samaritan law (Colorado Revised Statute § 18-1-711). The statute provides witnesses who in good faith attempt to provide emergency assistance to an overdose victim immunity from criminal prosecution for possession of a controlled substance and/or drug paraphernalia. This same immunity is extended to the victim. The individual providing medical assistance receives immunity "as long as: the person remains at the scene of the event until a law enforcement officer or an EMT arrives or the person remains at the facilities of the medical provider until a law enforcement officer arrives; the person identifies himself or herself to, and cooperates with, the law enforcement officer, EMT, or medical provider; and the offense arises from the same course of events from which the emergency drug or alcohol overdose event arose." (Colorado Revised Statute § 18-1-711).

A year after the passage of a similar Good Samaritan law in Washington state, 88% of heroin users surveyed reported that they would be more likely to call EMS in the event of an overdose (Banta-Green et al., 2011). Yet, our experience with OEND trained PWID in Denver has been that they rarely called EMS in the overdose events they intervened in. Our study explores why, after the passage of Colorado's Good Samaritan law, this is the case.

Methods

This paper combines findings from two complementary qualitative studies conducted with PWID in Denver. The first study was a community-academic partnership research project entitled *Let's talk about life*: *Empowering our community to prevent deaths from overdose*. This study was initiated and funded as a community-academic partnership grant with HRAC. The study's purpose was to learn about OEND through the experiences of trained PWID who had intervened in an overdose. Semi-structured interviews for the *Let's Talk about Life* study were conducted with 13 participants. between October 2013 and July 2014. To triangulate our findings and more fully explore themes that emerged from the *Let's Talk about Life* interviews we drew on the first author's on-going fieldwork-based study examining the heath concerns of PWID who access HRAC's syringe exchange program. Findings included here are from fieldwork conducted intermittently May through December 2015.

To be eligible for the *Let's Talk about Life* study, participants had to be PWID 18 years of age or older. A purposive sampling plan was used to ensure that all participants had completed OEND training and used naloxone to reverse an overdose. The thirteen participants included five women and eight men. One man was African American; the other participants were white. Participants were between 26 to 50 years of age. Two participants identified as poly-drug users, the others identified heroin as their primary drug. Ten participants had overdosed at least once, and all had witnessed multiple overdoses. All but four participants were homeless.

OEND training was conducted with small groups of PWID by HRAC staff. Training included a discussion on the physiology of an opioid overdose, a demonstration of the steps involved in reversing an overdose, and concluded with participants practicing an overdose reversal. Upon completion, participants were given an overdose kit containing naloxone.

Interviews for the *Let's Talk about Life* study were conducted by the first and second authors. Interviews lasted approximately one hour. Because he had intervened in several overdoses, and to take advantage of the iterative nature of qualitative research, one participant was interviewed three times over the course of data collection. Participants were given a $25 grocery store gift certificate as compensation for their time.

The interview guide for the *Let's Talk about Life* study was exploratory. Questions were aimed at eliciting detailed information specifically about the most recent overdose event a participant had witnessed. Queries focused on how trained PWID applied the training, the contextual factors that influenced their response, and how reversing an overdose affected the participant. Probes were used to learn about the circumstances of witnessed overdoses, including information about the victim, the setting, the steps taken to reverse the overdose, and the decision about calling 911. Along with research staff, HRAC staff and PWID advisory board members were involved in developing and implementing the study and in interpreting the findings.

Interviews were recorded and transcribed; coding and analysis was facilitated using ATLAS.ti. A priori codes reflected the areas of interest in our interview guide. These included the circumstances of the last witnessed overdose, steps taken in response to the overdose, including whether they called 911, and ideas for improving OEND training based on the participant's experience responding to an overdose. Additional codes emerged as the research team reviewed and discussed the transcripts. We then compared coded transcripts and identified themes. A theme that seemed particularly salient was trained PWIDs' reticence about calling 911.

The fieldwork based study combines multiple qualitative methods including intermittent participant observation and qualitative interviews with PWID and persons who regularly interact with PWID. Initially participants study were recruited from the HRAC using convenience sampling. As we identified themes and patterns our recruitment became more targeted toward PWID who were likely to provide confirming or disconfirming information about the Let's Talk about Life findings. Eligibility requirements include current injection drug use and being 18 years of age or older. During the summer and fall of 2015 open-ended interviews were conducted with 24 HRAC syringe exchange clients. Participants included 17 white men, two African American men and one Latino. Four white women and one Latina were interviewed. Participants ranged in age from 19 to 60. All the participants were homeless or had experienced recent episodes of homelessness. Twelve participants were interviewed multiple times.

The first author's on-going fieldwork based study examining the health concerns of PWID who access HRAC's. All interviews were conducted by the study PI, an anthropologist. Ten-dollar grocery store coupons were provided for open-ended interviews. No compensation

was provided for informal conversations that occurred during fieldwork. Interviews and fieldnotes were recorded and transcribed. Transcripts were coded using Microsoft Word. Data management and analysis followed the same recursive process as the *Let's Talk about Life* study.

Both studies were reviewed and approved by the Colorado Multiple Institutional Review Board (COMIRB). A Federal Certificate of Confidentiality was obtained for the *Let's Talk about Life* study.

Conceptual framework

Our analysis of the disconnect between OEND training, the Good Samaritan law's limited protections and PWIDs' reticence about calling 911 is guided by the critical theoretical perspective emphasizing how structural conditions (social, political and economic arrangements within society that contribute to inequality) affect health and illness (Baer, Singer, & Susser, 2003; Bourgois, 1998; Bourgois & Schonberg, 2009; Epele, 2008; Nguyen & Peschard, 2003; Singer, 1995; Singer 2007). Contrary to behavioral approaches emphasizing individual-level factors as determinants of health, a critical perspective views health and illness as the embodiment of these structural inequalities. In explaining drug-related harm, this perspective is conveyed through the structural risk environment framework (Rhodes, Singer, Bourgois, Friedman, & Strathdee, 2005; Rhodes, 2009), an elaboration of the risk environment framework (Rhodes, 2002) that incorporates the theoretical concepts of structural violence and structural vulnerability (Rhodes et al., 2012).

The risk environment framework counters behavioral models that view 'risky practices' as individual choices by instead emphasizing the broader social context within which risk behavior occurs. The framework draws attention to the social situations, structures and places in which risk, or more precisely, harm is produced (or reduced). Risk environments are constructed through the interplay of social and structural factors operating at multiple levels, and "where political–economic factors play a predominant role" (Rhodes et al., 2005, p. 1026). At the macro-level these include features of the global economy that increase or maintain social and economic inequality, government policies, and gender and racial inequalities that are culturally and structurally embedded. At the local level these structural conditions may be expressed in neighborhood disintegration or gentrification, access to social services, healthcare and drug treatment, forms of governance and policing, and stigma and discrimination. These in turn, have both direct and indirect effects on the immediate physical and social environments in which PWID carry out their daily lives; they affect their social relationships, group norms and rules, as well as the social and physical settings in which drugs are used (Moore, 2004; Rhodes et al., 2005; Rhodes, 2009; Rhodes et al., 2012).

Structural violence informs the risk environment framework by denoting the historically entrenched, and often invisible, asymmetries in political and economic power within a society that translate into unequal health outcomes and harm (Farmer, 1996; Farmer et al., 2004; Galtung, 1990). That is, it directs attention to the way that impersonal social structures systematically place certain social groups in harm's way, suggesting that harm itself is the

"biological expression of social fault lines" (Farmer, 1999, p. 5). The concept of "structural vulnerability" provides a window for understanding how risk environments are experienced and embodied in PWIDs' everyday lives. It redirects attention from the broader social structures that place individuals in harm's way to focus more on the strategies individuals use to maneuver within such structures (Horton, 2016). It refers to "a positionality or location within a hierarchical social order and networks of power that makes an individual or social groups prone to suffering the effects of structural violence" (Quesada, Hart, & Bourgois, 2011). To paraphrase Thomas Leatherman (2005), structural vulnerability provides a window for examining how people perceive their situation and respond, and how their response oftentimes (re) produces their vulnerability.

By underscoring structural conditions and their impact on people's lives, the structural risk environment framework provides a model for identifying how drug-related harm is produced over time, and how local level conditions reflect the broader political economy. Recent studies detailing how high intensity policing in the United States creates situations conducive to drug-related harm detail as well how these policing strategies reflect fundamental changes in the nation's economy and shifts in governance (Bourgois, 2003; Bourgois & Schonberg, 2009; Cooper et al., 2005; McLean, 2016). This same perspective guides our analysis and discussion of why PWID in Denver are hesitant to call 911 even with the protections offered by the state's Good Samaritan law.

Results

Findings from interviews conducted with OEND trained PWID who had reversed an overdose reveal the seriousness with which they embraced this task, as well as their capacity to do so even in extreme circumstances. Participants reported conducting reversals in apartments, at a city park, at homeless encampments, in an alley and in cars. In cases where there were other witnesses, participants described their effort to stay focused amid chaos. Trained PWID described successful reversals in which they checked the victim's airway, began rescue breathing, filled the syringe with naloxone and injected the victim. In some cases, they were assisted by another PWID. The most frequent deviation from the training was regarding calling 911. Only two of the 13 trained PWID called or had another person call 911 in the overdose episodes they intervened in. In two other cases, a 911 call was made but not at the request of the individual administering naloxone. Participants' apparent disregard of this component of the training seems somewhat perplexing given the emphasis of OEND training on the need for medical follow up after a victim is resuscitated to avoid the possibility that the victim will relapse into overdose, and the protection offered by Colorado's Good Samaritan law. As described below, participants described a variety of reasons for not calling 911.

Ability to reverse the overdose without medical help and supervise recovery

Initially, when asked why they did not call 911, participants often replied that they did not see a need to because they could reverse the overdose themselves. As a woman who had reversed a few overdoses explained,

> We didn't call 911. I mean we would have if he wouldn't have started coming out of it, but I've never had to call 911.

Other participants echoed this sentiment, but indicated they would call 911 if their own attempts at reviving the person failed. As a participant explained,

> … with overdoses just cause you get a person back at the moment they can go back into it … I mean once you use that second bottle of naloxone if they go back into overdose you don't have anything else to give them. So you have to call an ambulance right away.

As this quote suggests, participants were aware that their limited supply of naloxone is short acting, and that it is essential to monitor, or stay with the overdose victim after they regain consciousness. A participant described how, after giving her friend both vials of naloxone, she watched her for two hours, and another participant explained that after administering naloxone to his friend,

> … he got up and he walked with us. He went with us for the rest of the day so he was fine. Like, I've never administered it and then left somebody, you know, right away in case they didn't come … cause it says it only lasts for like 30 minutes.

When questioned further, participants explained additional reasons for taking care of their own and not calling 911 to report an overdose. These included the likelihood of prying questions and perceived insults from EMS personnel, the seemingly unnecessary burden of a hospital trip and possible financial obligation an EMS response would impose on the victim, the loss of anonymity and personal fallout that might result, and for PWID with housing, the possibility of losing it. Most frequently and ardently, mistrust of the police, and specifically, fear of arrest and incarceration for outstanding warrants, or for violating their parole or probation was cited as a reason for not calling 911. Importantly, these concerns were for the overdose victim as well as themselves.

To avoid interacting with EMS personnel

Some participants alluded to judgmental or stigmatizing attitudes on the part of some EMS personnel. A PWID who now trains others to administer naloxone and who calls 911 when he intervenes in an overdose event, explained that "sometimes they [EMS personnel] have a smug attitude because it's a heroin overdose and they see you're homeless …," but he added, "Whatever attitude they have towards us as being junkies or homeless is fine. It ain't no big deal. You still going to do your job to see this guy is taken care."

A staff member of one of the city's two syringe exchanges confirmed the apparent disdain some EMS personnel may show when responding to an overdose. He recalled a recent overdose incident in the agency's bathroom and the "brutal stigmatizing language" the EMS personnel used in referring to the victim.

To avoid an unnecessary and costly EMS intervention

Two participants mentioned the cost of an EMS intervention as a disincentive to call 911, particularly when it seems unnecessary. As one explained,

> I didn't call them because they came out of it, you know, so there was no reason to call it. Why make more … how can I say it, more bills for the guy that's fallen out. That's all it's going to wind up being. He's going to be charged for that 911 call, you know, and maybe not the call itself, but the ambulance and all that is going to be. It's going to be put on his credit. He's homeless already …

Another participant reinforced this view by telling the story of someone she knew who overdosed and was taken to the hospital. As she explained, "The hospital didn't do anything for her. They didn't monitor her. They didn't … they gave her oxygen but that's it." Although PWID are routinely billed for hospital care, including an EMS call, it is unlikely they would pay for it. As the first participant explained, "He's homeless already."

To avoid unwanted attention and the repercussions that might follow

PWID often take great pains to be inconspicuous (Koester, 1994; Langegger & Koester, 2016); the public spectacle of an EMS intervention conflicts with the anonymity they value. Calling 911 all but guarantees that anyone who witnesses the event will be aware of who was involved. A particularly dramatic example of this concern was described by a participant who acted as a "connect" or middleman for a couple looking to buy heroin. After injecting in the bathroom of a fast food restaurant, the male overdosed in the backseat of the car. His niece was driving. Although the OEND trained PWID was willing to call 911, the niece wanted no part of it. The trained PWID was incredulous when telling the story:

> … what really got me about this whole situation, it was home boy's niece and she wanted to throw him out of the car. She didn't want to take care of him. She's like I've been clean for three years. I can't have this. If my, you know, husband finds out, he'll divorce me. Yeah, but she didn't want to do it [call 911], so I told her to drive, you know, we've got to get him to the hospital. And I told her, I said look, I told her about the 911 Samaritan Act. I said even if we've got dope on us, we're not going to get in trouble, I said but if you throw him outside this car right now, you're going to jail. It's manslaughter if you didn't try anything to save his life. And truthfully, I don't know if that's true, but …

Fear of losing housing

None of the four OEND trained PWID who had housing called 911 in the overdoses they intervened in. A couple and a single woman explained that they had Federally funded rent support through Section 8 housing and that they could face eviction if they were found to be involved in any drug related activity. The woman who reversed an overdose in her apartment explained:

> If he wouldn't have come around after the second shot, I would have had to call 911 and I would have just said, I think this man has OD'd, it's at [XXXX street], whatever. Yeah, I have Section 8 housing here. I could have lost that. I mean I just didn't want it to get that bad that's why I had to move as fast as I did and that's why I made him talk to me because he could have went out again and I didn't want that to happen cause I didn't have to call 911, you know?

She explained that she had mixed emotions toward the victim; while she was glad that he trusted her, she was unhappy because he jeopardized her housing:

> … I mean people could look at me like how come they had the cops here and ambulance here. What happened? What's going on? People around me would ask, you know. And since ··· I mean not everybody here is Section 8. There's only me and one other person that's Section 8, so, you know, I've got to keep my cool and be careful about what goes on, you know, and what happens and it just kind of made me mad.

This same participant described another overdose she recently reversed. A friend called explaining that someone was overdosing in his apartment. He pleaded with her to come because she had been trained and had naloxone. He lived fifteen to twenty minutes away by car. Since she did not have a car he drove to her apartment, picked her up and took back to his apartment to administer naloxone. She explained that her friend was too afraid to call 911. "I'm like all you gotta do is tell them the address and hang up the phone. Tell them I got this guy here at this …. I think this person is ODing and hang up the phone, at such and such an address, hang up the phone. He's like no, I don't want to do that." Remarkably, when she arrived at the apartment well over a half hour later, she reversed the overdose and the victim survived.

A couple believed they would lose their housing if they called 911. They added that if they thought the person was going to die they would do so anyway, but as the female partner explained, they would first get the victim out of their apartment.

Fear of arrest and incarceration due to current involvement in the criminal justice system

The following interview excerpt with an OEND trained, homeless PWID illustrates how the prospect of withdrawal affects his decision to call 911. In this case, he is describing administering naloxone to an overdose victim in a public park. He did not call 911, someone else did, but as he explains, he did not wait for the ambulance to arrive because he feared arrest and the prospect of going through withdrawal in jail.

> Somebody already called them [EMS] before I got over there and I didn't stick around because I had a warrant out.
>
> I didn't want to go to jail and it's not that I can't handle jail, or I was going to do any big time, but it's the sickness. You know, everybody is scared of that sickness that we get when we don't have our issue anymore. You know, cause we can't function without it. You know, heroin it controls your body, you know. Your body needs it to operate. If you don't have it, you get really sick.

When asked if he would call 911 in the event he was on the scene of another overdose he replied:

> If I needed to, yeah I would. I would call them. Would I stick around? That would be depending on if I had another warrant against me. But I'm not just going to walk away. I mean I'll make sure there's somebody there that don't have a warrant that can wait, you know, wait for the ambulance and the cops to show up.

When asked if the Good Samaritan law would have made a difference he explained,

> Actually it wouldn't have because they still would have run my name and that's going to come up that I have warrants and then I go to jail. The difference between that … is that if I didn't have the warrants, it would make a difference because I know they're not going to sit there and try to charge me with a murder charge, you know? Or, attempted murder charge.

In another illustration, an OEND trained PWID who reversed an overdose in a motel room explained that he did not call 911 because:

> Well, first of all I know … you know, I knew exactly what was wrong with her having done that class and having been trained so well, I knew what was going on as long as her respiratory system is working … there's nothing the ambulance is going to do to her anyway other than, you know, probably get somebody put in jail. One of them two I imagine. That's why I didn't call.

When probed he explained: "Well because, you know, there were obviously drugs there. I don't know if … I think they both had cases that they had not gone to court on … " And when asked about the potential consequences of calling 911 for himself, he responded, "That's not important to me. I mean I'd much rather somebody be alive than not, you know. I haven't had anything over a misdemeanor …" In this quote the PWID expresses concern about both the presence of drugs at the overdose scene, and the fact that the victim and witnesses had pending legal cases as reasons he did not to call for EMS.

Another participant described a past overdose experience that poignantly and tragically illustrates how the fear of legal consequences influences PWIDs' decision to call 911. He told the story of a close friend who had just gotten out of prison; "He was with his ex-old lady and they had just gotten high and she was so scared of getting him in trouble by calling 911, and she was so scared, he ended up dying."

Distrust of police and the legal system

A participant knowledgeable of the Good Samaritan law was, nevertheless, distrustful of how the police would respond. "I haven't had to deal with it yet, so I don't know, but you know there's … you just don't know what they're [the police are] going to do." She explained that she had left the scene of another overdose when the paramedics arrived because she had a warrant. She then added, "That's probably another reason I didn't want to call the cops. You know, I didn't want to go to jail."

Another OEND trained PWID explained his reticence about calling 911 by telling the story of a friend who overdosed in a neighboring county. His girlfriend called 911 and he ended up in jail. "He had three empty baggies on him. They gave him three months for empty baggies." Whether this story is entirely accurate is beside the point. Instead, it suggests that PWID may not have confidence that the Good Samaritan law's promise of immunity from prosecution for drugs and/or paraphernalia will be respected by the police and courts.

Some participants underscored their concern of police involvement explaining that they had agreements with other PWID on whether to call 911 in the event either of them overdosed. A

PWID explained that he did not call 911 in either of the two overdoses that occurred in his apartment because he knew the victims would not want him to.

Participant: Oh man, every time someone new would come over, I'd always have Narcan [naloxone] set out. Dude, if you OD in my apartment and if I didn't know, I'm like I'm calling 911 and you're getting Narcan'd.

Interviewer: That was something you would tell people up front?

Participant: Yeah, up front unless of course they said, don't call 911 whatever you do, like Jesse* (the overdose victim he reversed).

Interviewer: And that's what he said to you, don't call 911.

Participant: Yeah.

Interviewer: Why?

Participant: They don't like cops … They're always scared of cops.

Interviewer: Did you call 911 on any of those overdoses?

Participant: Not those ones. They didn't want me to. They didn't want me to.

Another OEND-trained participant explained that he had an agreement with his wife that if he overdosed she was not to call 911:

> The agreement is that unless it's a life-threatening situation she wouldn't call 911 and have me taken in an ambulance because they'd run my ID and find out I had a warrant and I would get arrested. It wasn't like a piddly little warrant for a ticket or something, it was a major felony warrant so …

He added however, that if he overdosed and did not respond to naloxone he expected she would call 911.

Other PWID confirmed the concerns raised by OEND trained PWID about a possible police response to a 911 call. When asked if he thought calling 911 was a problem for people who use drugs, a PWID replied, "It's a really big problem," and that even if people do call, they'll leave before the EMTs arrive if they have warrants. When told that the Good Samaritan law provides the witness who calls and stays with the victim as well as the victim immunity from prosecution for drug or paraphernalia possession related to the overdose, this same PWID replied, "That's nothing. You can ditch the dope and hide all the shit before they get there. It may help the guy who ODed if he has drugs on him." Other PWID confirmed this assessment explaining that going through the victim's pockets and getting rid of the drugs and paraphernalia is a standard procedure in the event of an overdose.

As these interview excerpts demonstrate, the most immediate concern with regard to calling for EMS and having the police respond was not the fear that police would arrest the victim or the witness for drug and/or paraphernalia possession, but the far more likely scenario that

the police would run identification checks leading to arrest for outstanding warrants, or in the case of those already under correctional control, incarceration for violating the terms of their alternative sentence, probation or parole.

The extent to which fear of police and potential legal consequences influence PWIDs' decision to call 911 are further illustrated by two participants' recent experiences, and the advice given in the OEND training on what to say to the 911 operator. The two participants expressed a willingness to call 911 because of their involvement in recent overdose reversals that were attended to only by paramedics and fire department personnel. It appears that in Denver the police are less likely to respond if the person who calls for assistance does not mention that the emergency involves a drug overdose. A staff member at the HRAC explained that based on the recommendation of the national Harm Reduction Coalition they advise OEND trainees to tell the 911 operator that the victim is not breathing, but not to volunteer that the emergency is a drug overdose (Harm Reduction Coalition, 2012). As a OEND trained PWID advised, "What people need to learn is what Natalie teaches, a script, a dialog with certain words you can say and ones you can't say. 'My friend is not breathing. Get someone here now.' If they ask why, or if they used drugs, you answer, 'I don't know, he's not breathing.' If you mention dope, they'll send the cops."

PWIDs' fear of police is also due to a legacy of mistrust; 'laws on the books' and policies and procedures for maintaining order, and the actions of individual police officers on the streets are not always synonymous (Burris et al., 2004; Koester, 1994). An OEND trained PWID explained PWIDs' reluctance to call 911 even with the Good Samaritan law saying, "There's no trust. Look what they did with the harm reduction cards. They don't even respect that." The cards he was referring to identify the cardholder as a client of one of the city's two sanctioned syringe exchange programs. It exempts the cardholder from being cited for violating the city and state laws against syringe possession, a petty misdemeanor. The PWID only needs to disclose that he or she is holding a syringe when stopped by a police officer. A few months after the SEPs opened in 2012 the City and the police department agreed to this arrangement. At the time, PWID were routinely being arrested or cited for syringe possession. It was not uncommon for PWID to get 8–10 days in jail. Even after the agreement however, police continued to cite and arrest PWID for syringe possession. If jailed, the PWID would end up being released days later without charges; if they received a citation they could only have it dismissed if they appeared in court with a letter from the SEP verifying their client status. Otherwise, the citation would turn into a warrant for failure to appear (FTA). By late 2016 citations for syringe possession were rare in Denver, but still common in surrounding counties.

For PWID interactions with police almost always carry some degree of risk, and for PWID with outstanding warrants (including petty misdemeanors), on parole, probation or involved in an alternative sentencing program, interactions with police frequently result in arrest and incarceration. Incarceration, even for brief periods, has serious consequences for PWID. It upsets what little stability marginalized PWID may have. Social relationships are disrupted, and jobs, housing and possessions are frequently lost when doing jail time. Upon release, PWID are at elevated risk of overdose (Binswanger et al., 2007). The most immediate concern however, is the prospect of being "dope sick" – going through withdrawal in a jail

cell – an experience that PWID describe as being extremely unpleasant, and in some cases life threatening. In May 2015, a heroin user arrested in Adams County, one of five counties within the Denver metropolitan area, for three outstanding misdemeanor warrants for minor traffic offenses went into severe withdrawal in jail, and after two days died of dehydration. A nurse at the detention facility had refused his requests for intravenous fluids (Washington Post, October 21, 2015).

The prospect of going to jail holds the same fear of painful withdrawal for PWID receiving methadone maintenance treatment, and can jeopardize their continued treatment. In the metropolitan area, only Denver County provides methadone to incarcerated individuals on methadone programs. And, if incarcerated for more than a few days, PWID risk being terminated from methadone treatment upon release—a consequence that is magnified by limited access to treatment.

Discussion

OEND-trained PWID in Denver have successfully and willingly reversed the opioid related overdoses of their compatriots, and in most cases, their descriptions of actual reversals mirror steps outlined in the OEND training apart from calling 911. Although most participants initially mentioned calling 911 as unnecessary in the overdoses they intervened in, they also expressed concern about the consequences of calling 911 for both themselves and the victim. Importantly, none of the naloxone trained PWID interviewed simply “walked away” after administering naloxone. They either stayed with the victim or had assurances from others that they would. Nevertheless, OEND trained PWIDs’ apprehension about calling 911 is disconcerting because of the possibility the victim may overdose again after being resuscitated due to the short half-life of naloxone compared to opioids.

As our findings suggest, the limited protections offered by Colorado’s Good Samaritan law are not enough to persuade PWID to call 911 in the event of an overdose. The law is predicated on the assumption that what prevents PWID from calling 911 and remaining with the overdose victim is fear of arrest for drug paraphernalia and/or drugs. Instead, we found that for PWID generally, and especially for those enmeshed in the criminal justice system, the more immediate concern was the possibility that a police response would subject themselves and the victim to an identification check leading to arrest and incarceration. Reinforcing this concern is an individual and collective experience-based mistrust of the police, and the corresponding belief that regardless of the Good Samaritan law’s provisions there is no guarantee the police would abide by them. The degree to which PWID have embodied these concerns is evident in the statements by some PWID that they tell people they inject with not to call 911 in the event they overdose.

The reticence expressed by Denver PWIDs about calling 911 in the event of an overdose reflects their structural vulnerability, and their explanations for not calling 911 serve as indicators of the risk environment that shapes their lives. As Moore (2004) found in his ethnographic study of a neighborhood drug scene in Melbourne, Australia, overdose prevention based on theories of rational choice and assuming a social context of order and stability ignores the complexities, multiple risks and competing demands of PWIDs’ daily

lives, and how these realities produce an alternative cultural logic. In the case of the PWID who participated in our studies this alternative cultural logic is shaped by individual and collective experiences with the criminal justice system, insecure housing status, and the city's punitive response to its burgeoning homeless population—features of the city's risk environment that undermine the progressive intent of Colorado's Good Samaritan law.

As Bourgois and Schonberg note in their ethnography of homeless heroin users in San Francisco, "law enforcement [is] the most pervasive destabilizing force in the lives of people on the street" Bourgois and Schonberg (2009, p. 219). As adversaries in the War on Drugs street-based PWID have been subject to targeted policing strategies and harsh mandatory sentences. This decades-long conflict has disproportionately affected poor and minority communities (Alexander, 2012; Bluthenthal, Lorvick, Kral, Erringer, & Kahn, 1999; Cooper, 2015; Corva, 2008; Flath, Tobin, King, Lee, & Latkin, 2017; Moore & Elkavich, 2008; Wacquant, 2009, 2010). Beginning in the late 1980s and early 1990s, the War on Drugs was augmented by Broken Windows and zero tolerance policies for policing poor communities —strategies that rely on controlling space and preventing an escalation in crime through increased surveillance and vigorous enforcement of minor offenses (Mitchell, 2010; Smith, 2001). In Denver these strategies have included unannounced neighborhood sweeps and the aggressive enforcement of petty misdemeanors (Koester, 1994).

Although some studies suggest that policing is moving away from strategies based on aggressive enforcement to more responsive problem-solving frameworks for dealing with the socially marginalized (Green et al., 2013), a broad array of recent laws, ordinances and regulations aimed at America's growing homeless population suggest this is not necessarily the case (Beckett & Herbert, 2009; Fischer, Turnbull, Poland, & Haydon, 2004; Herbert & Brown, 2006; Mitchell, 2003). In addition to relying on the enforcement of misdemeanor offenses, what some have called "crimes of homelessness," cities are adopting civility or quality of life ordinances and area restrictions to spatially control their homeless populations (Beckett & Herbert 2008, 2010; McNeil, Cooper, Small and Kerr, 2015).

In Denver the availability of affordable housing has been rapidly declining since the 1990s as inner city neighborhoods have been gentrified (Hoffer, 2006; Langegger & Koester, 2016), and over the past 20 years the city has experienced a 600% increase in residents without homes (Robinson, 2017). In response to this crisis the city has implemented a number of regulatory codes and ordinances aimed at spatially controlling its growing population of residents without housing, and in effect, denying their 'right to the city' (Langegger & Koester, 2017). Recently implemented ordinances restricting homeless persons' use of public space include a camping ban, a sit and lie ordinance, an ordinance against food sharing, move on orders, and area restrictions that allow the police to banish individuals from the city's commercial district and drug marketing locations (Robinson, 2017). By making it illegal to lie down anywhere in the city with any kind of covering including a blanket or jacket, the camping ban essentially makes it ilegal for homeless people to sleep unless they are in a homeless shelter (Robinson, 2017; Langegger & Koester, 2017).

Combined with the aggressive enforcement of misdemeanors these anti-homeless ordinances all but guarantee that a homeless person will break some law (Adcock et al., 2016, p. 11). A 2012 survey of 512 homeless Denver residents found that in the first six months after the passage of the city's camping ban, 62% of respondents had been approached by the police, and of these, over half reported more than five police contacts. Of those contacted by the police, 71% were checked for warrants and 26% were cited or arrested at least once. The most common citations were for park curfew violations, panhandling and sleeping/sitting in public (Robinson, 2017).

For the 70% of HRAC's 6100 clients who at intake identified themselves as having insecure housing (HRAC personal communication, May 2017), these recent codes and ordinances, and stepped up enforcement of existing misdemeanors combine to create an environment in which surveillance and the threat of a citation or arrest are ever present. Unable to hide from the stigma of homelessness, these PWID do not enjoy the anonymity that most urban residents take for granted (Langegger & Koester, 2016). Instead, they are at elevated risk of police stops and warrant checks, and ultimately being caught up in a carceral cycle of citations, warrants, arrests and incarceration.

Interactions with police do not always include an ID check, a citation or arrest; they often conclude with a warning or command to "move on." Whether a person is arrested at the time of an offense, issued a citation or simply warned is up to the discretion of a police officer. If a person is issued a citation but does not appear in court or pay a court ordered fine a warrant is issued for failure to appear (FTA). At this point, any contact with the police becomes an invitation to jail. The unpredictability of police encounters makes avoiding the police an everyday priority for street-based PWID, and as we contend, reinforces their reticence about calling 911 to report an overdose.

Finally, the concerns about making a 911 call as expressed by three OEND trained PWID with housing appear well founded. In Denver the demand for affordable housing is extreme, and the Federal program that subsidizes low income households' rent through Section 8 housing vouchers is woefully inadequate. To obtain a voucher low income households apply to take part in the Denver Housing Authority's annual lottery. In October, 2016 several thousand households applied for the 300 vouchers available for the 2017 program. But even a voucher does not guarantee housing. Due to demand, many landlords refuse to accept vouchers, and even if they do, the cost of rent is often too high (Greigo, 2017).

Obtaining and keeping Section 8 housing is particularly problematic for households whose members use drugs. During the 1980s and 1990s, as part of the War on Drugs, a series of statutes and legislation aimed at 'drug related activity' added civil penalties to Federal housing laws. Because these statutes were deemed 'civil' by Federal courts they are exempt from many of the constitutional protections that accompany criminal law (Silva, 2015). Families and individuals can be denied, evicted and banned from Section 8 Federally subsidized housing if a local Public Housing Authority (PHA) "determines that any household member is currently engaging in the illegal use of a drug" or the "PHA determines that it has reasonable cause to believe that a household member's illegal drug use or a pattern of illegal drug use may threaten the health, safety, or right to peaceful enjoyment

of the premises by other residents" (Code of Federal Regulations, 24 CFR § 982.553, 2016). There is no statutorily mandated standard of proof required, and a household may be evicted if a family member is deemed to have engaged in criminal activity whether or not an arrest or conviction has occurred (Curtis, Garlington, & Schottenfeld, 2013). According to the Denver Housing Authority's administrative plan participants can be terminated from the Section 8 program if drug- related activity is engaged in on, near or away from the premises by the participant, their family member or their guest (Denver Housing Authority, 2016). These possible consequences help explain the logic behind housed PWIDs' refusal to call for EMS.

Some of the perceptions expressed by the PWID who participated in this study may not be entirely accurate, or may represent a worse case experience. For example, a key informant explained that a reason PWID choose to avoid hospitals is because they believe they will be checked for outstanding warrants. We know of no evidence to support this claim. However, given the city's strategy of aggressively policing homelessness and drug use, and the very real prospect of going through withdrawal in a jail cell it seems reasonable for PWID to harbor this fear. Goffman (2009, p. 353) makes a similar claim in her recent ethnography of poor, young black men in Philadelphia, contending that the overwhelming presence of the criminal justice system in these men's lives encourages them to avoid "dangerous places, people and interactions entirely". In an analysis of two national surveys, Brayne (2014) came to a similar conclusion, finding that individuals who have been stopped by the police, arrested, convicted, or incarcerated are less likely to interact with surveilling institutions, including medical institutions, than their counterparts who have not had criminal justice contact, a pattern she calls, system avoidance.

Conclusion

Our sample of OEND trained PWID who successfully responded to an overdose event is small. By including data from on-going fieldwork with homeless PWID we added a confirmatory and explanatory dimension to the *Let's Talk about Life* interviews. Although qualitative studies are not generalizable, the findings reported here can provide insight into why PWID, even in locations with Good Samaritan laws, are hesitant about calling for emergency medical assistance to attend to an overdose. The structural conditions that shape Denver PWIDs' risk environment are not exceptional. Throughout the United States cities are implementing new policies to spatially control marginalized populations — a process that as our case study shows reinforces PWIDs' "system avoidance." The carceral cycle of a citation becoming a warrant that eventually leads to arrest and incarceration is not unique to Denver, nor is the absolute fear of going through opioid withdrawal in a jail cell. Likewise, policies aimed at discouraging drug use in public housing are federally mandated.

Cautioning PWID on what to say to a 911 operator as well as appeals for more comprehensive guidelines to protect PWID from overly aggressive policing when assisting in an overdose reversal are indicative of the on-going challenges inherent in providing harm reduction amid a prolonged policy of aggressively policing drug use in poor communities. As demonstrated with bloodborne disease transmission, the criminalization and intensive policing that exemplifies the War on Drugs has created and exacerbated drug-related harm

and contradicts public health efforts aimed at reducing drug-related harm (Burris et al., 2004, 2009). Likewise, legislation aimed at preventing overdose deaths may be undermined by more recent policies aimed at controlling America's burgeoning homeless population.

As others have pointed out, addressing the heroin overdose epidemic may be partly contingent on shifting from punitive policing policies that further marginalize PWID to more compassionate policies aimed at reducing harm and improving the health and well-being of PWID (Burris & Burrows, 2009). These have included calls for legislation establishing comprehensive immunity for individuals calling 911 and responding to an overdose (Burris et al., 2009) as well as working with law enforcement to implement guidelines and procedures aimed at protecting PWIDs from police harassment, arrest, and other legal consequences when assisting in an overdose reversal (Beletsky et al., 2011; Burris et al., 2009; Davidson et al., 2002; Davis, Webb & Burris, 2013; Seal et al., 2005; Tracy et al., 2005). Burris et al. (2009) recommends reallocating current police functions to agencies that are better able to address health issues, and Follett et al. (2014) suggest limiting police attendance at routine overdose calls. Our findings suggest the wisdom of such proposals while also suggesting the need to change the policies that current policing practices enforce. The historical legacy of criminalization and ongoing efforts to spatially control the poor are embodied in the strategies PWID employ to survive.

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