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Trusting the source: The potential role of drug dealers in reducing drug-related harms via drug checking

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ABSTRACT

Objectives: Drug checking technologies (DCTs) have been implemented as a response to the ongoing opioid overdose epidemic. We examined the level of trust people who use drugs (PWUD) have in their drug dealers as well as their perspectives on the potential for drug dealers to use DCTs to provide knowledge of drug contents to their customers.

Methods: We conducted one-to-one qualitative semi-structured interviews with 20 PWUD in Vancouver, Canada's Downtown Eastside. Participants were purposively recruited from ongoing cohort studies of PWUD and were required to currently be using stimulants and/or opioids.

Results: Most participants discussed having a high level of trust for their drug dealers based on length of relationships, drug supply consistencies, and communication. Given this, participants did not identify drug checking as a priority. However, participants discussed a lower level of trust when buying drugs from an unfamiliar source. Participants also discussed how DCTs would provide knowledge to drug dealers about drug contents and how communicating test results to customers could be a risk reduction measure. Participants described privacy concerns that drug dealers might experience as well as the lack of concern that some drug dealers have about their drug supply.

Conclusions: Future drug checking programming should consider ways to engage drug dealers to test their supplies and develop communication strategies to more accurately inform PWUD of drug contents and avert risks associated with using them. Additionally, drug policies that address the effects of criminalization should be considered to lessen potential barriers to DCT use by drug dealers.

1. Introduction

North America is currently in the midst of an opioid overdose epidemic. In 2017, opioid overdose accounted for 21.7 deaths per 100,000 individuals in the United States and 10.9 deaths per 100,000 in Canada, with the province of British Columbia (BC) reaching 29.6 deaths per 100,000 (Ahmad et al., 2018; British Columbia Coroners Service, 2018; Special Advisory Committee on the Epidemic of Opioid Overdoses, 2018). The continued increase in overdose mortality across multiple settings is largely due to the proliferation of illicitly manufactured fentanyl and its related analogues poisoning street drug markets across North America (Allingham, 2017; Carroll et al., 2017; Ciccarone, 2017; National Institute on Drug Abuse, 2018; U.S. Department of Justice Drug Enforcement Administration, 2017). Given the magnitude of this overdose crisis, multiple strategies are being implemented in a range of settings, including overdose prevention sites (Bardwell et al., 2018a; Boyd et al., 2018), naloxone training and distribution (Bardwell et al., 2018c; Fairbairn et al., 2017; Marshall et al., 2017), and drug checking programs (Bardwell and Kerr, 2018; Karamouzian et al., 2018; Krieger et al., 2018a; Tupper et al., 2018).

There are a variety of drug checking technologies (DCTs) that allow people who use drugs (PWUD) to test their drugs and identify its contents (e.g., fentanyl test strips, thin layer chromatography, capillary electrophoresis). However, the accuracy and amount of information available from each technology varies greatly (Harper et al., 2017; Kerr and Tupper, 2017). Until more recently, drug checking as a harm reduction strategy was mostly utilized in dance club and nightlife settings (Kerr and Tupper, 2017; Murray et al., 2012; Winstock et al., 2002). However, multiple settings are considering this public health intervention as one response to the epidemic for other populations,

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including for people who inject drugs (Hungerbuehler et al., 2011; Karamouzian et al., 2018; Krieger et al., 2018b; Lysyshyn et al., 2017; Sande and Šabić, 2018; Tupper et al., 2018).

While drug checking programs are being implemented in some jurisdictions, little is actually known about the effectiveness of drug checking for people who inject drugs (Bardwell and Kerr, 2018). Feasibility studies suggest a high willingness for people who inject drugs to use drug checking programs in some settings (Kennedy et al., 2018; Krieger et al., 2018b). A recent study in Greensboro, North Carolina found that approximately 75% of the study sample (n = 125) used fentanyl test strips prior to drug consumption and that these have the potential to change drug use behavior such as using less than usual or doing a test shot (Peiper et al., 2018). Another study with PWUD across three American cities (n = 335), found that 85% of respondents wanted to know about the presence of fentanyl in their drugs before their use and 70% said that knowing this information would modify their drug uses (Sherman et al., 2018). However, findings from drug checking programs at supervised consumption sites (SCS) in Vancouver, Canada found that only 1–2% of total client visits included a utilization of these services (Lysyshyn et al., 2017; Tupper et al., 2018). The potential reasons for the lack of uptake of drug checking services have been examined elsewhere, and include factors such as time dedication, discrepancies in measurements, and accessibility of DCTs (Bardwell et al., 2018b).

Despite the low numbers of PWUD currently utilizing these services in our study setting, there may be other ways for communities to benefit from drug checking programs and address the harms associated with contaminated drug markets (e.g., overdose risk). Recent studies in Rhode Island and New York City have demonstrated that using a trusted and reliable drug dealer was seen as a harm reduction strategy by PWUD (Carroll et al., 2017; McKnight and Des Jarlais, 2018), though this approach did not always ensure positive outcomes (McKnight and Des Jarlais, 2018). Given this reality, there may be an opportunity in other settings for drug dealers to use DCTs and communicate information regarding drug contents to their customers, and avert risks associated with contaminated drugs while also addressing the harms associated with the criminalization of drugs, as evident in multiple settings (Mimiaga et al., 2010; Sarang et al., 2010).

In this study, we draw on qualitative interviews with PWUD to examine the level of trust participants have in their drug dealers and their drug supply as well as their perspectives on the potential for drug dealers to utilize DCTs to provide more accurate knowledge of drug contents to their customers.

2. Methods

Participants were recruited from two ongoing cohort studies with PWUD: the Vancouver Injection Drug Users Study (VIDUS) and the AIDS Care Cohort to Evaluate Exposure to Survival Services (ACCESS). In brief, these are community-recruited prospective cohort studies comprised of PWID, including those living with HIV, and have been operating for more than twenty years. These studies have been described in more detail elsewhere (Strathdee et al., 1997; Wood et al., 2003). This linked qualitative study received ethical approval from the University of British Columbia / Providence Health Care Research Ethics Board.

Individual qualitative semi-structured interviews were conducted between December 2017 and February 2018. Study eligibility requirements included current use of opioids, stimulants, or both. We purposively recruited twenty participants and used a recruitment checklist to ensure demographic diversity (see Table 1). For example, six of the first seven participants were white, and therefore, we prioritized recruiting racialized/Indigenous participants to ensure diversity. Similarly, six of the first eight participants had not experienced an overdose in the last year. Therefore, we prioritized recruiting participants who had experienced at least one overdose in the last year. Participants were flagged by VIDUS/ACCESS research staff. Interviews were conducted by the lead author in a research study office located in Vancouver's Downtown Eastside, a neighborhood disproportionately affected by poverty and drug-related harms (Linden et al., 2013). Participants provided written informed consent and received $30 (CAD) cash honoraria. A guide was used to facilitate the interviews and included questions regarding street-level drug supplies, overdose risk, and potential use of several DCTs. Interviews were audio-recorded and transcribed verbatim by a professional transcription service. These were later checked for accuracy by the lead author.

Table 1
Sample characteristics.

Sample Characteristics (n = 20)	
Age	26-65
Range	
Gender	
Women	9
Men	10
Two-spirit	1
Ethnicity	
White	14
Racialized/Indigenous	6
Preferred drug*	
Cocaine	5
Crack cocaine	3
Crystal methamphetamine	3
Heroin	10
Marijuana	1
Drug use	
Daily	15
3 to 4 times per week	5
Overdosed in last year	
Yes	8
No	12
Sold drugs in the last 30 days	
Yes	8
No	12

* All participants were poly-substance users.

In consultation with the senior author, the lead author developed the data coding framework using both a priori and emerging themes from the interview data. Examples of a priori themes included "willingness to use drug checking," "overdose risk," and "accessibility," while "trusting dealer" and "DCT use by dealers" were included in the list of emerging themes. Since the study's primary objective was to determine potential use of a variety of DCTs, themes and subthemes regarding drug dealers were unexpected. These themes emerged through the utilization of an inductive and iterative process during data coding (Corbin and Strauss, 2015). We used NVivo 11 software to organize and code the interview data into themes and subthemes for analysis.

3. Results

Of the twenty study participants, 75% used drugs daily, while the remaining used drugs three to four times weekly. Additionally, 40% said that they sold drugs in the last 30 days. See Table 1 for other demographic details. Against the backdrop of drug criminalization, participants discussed their experiences with drug use, and described their relationships with their drug dealers, the contents of their drug supplies, as well as the potential for drug dealers to use DCTs.

3.1. Trust, consistency, and communication

Participants overwhelmingly discussed a high level of trust they had for people who supplied their drugs. Trust functioned as a measurement for a supplier's drug contents and quality in terms of providing them with accurate information regarding drugs contents (e.g., if participants

were buying heroin cut with fentanyl from their dealers, they would trust that they were being sold heroin cut with fentanyl). Trust was often based on the length of their relationship, as seen in the following excerpts: *"I guess we've known each other for a long time and they've always had a good supply and treat me with respect"* (Participant 16, Indigenous woman, mid-20 s), and *"I have been buying off of him for 15 years or better. I'm a long-time customer. I trust my dealer"* (Participant 19, white man, mid-50 s). Trust was also based on the consistency of the drug supply: *"I trust them. I see what it is I'm doing and it's usually the same stuff 'cause I've done it before"* (Participant 2, white woman, early 40 s), and *"I trust the product. It's been consistently safe. And these people are safe, but I'm still careful and cautious"* (Participant 7, white man, mid-50 s).

Participants also discussed the open communication that their dealers had with them regarding the contents of their drug supply and how this was an important element of their trusting relationship. For example: *"I usually buy from the same person and it's always the same. If it isn't the same, they'll tell me"* (Participant 11, white woman, early 60 s). Other participants described having conversations with their dealers about any changes to their drug batches, as seen in the following excerpt:

If I've been dealing with a guy constantly, you know, after a while I can just tell from the texture and the look and the taste of the drug, I know immediately if there's been any changes. And usually the guy will be honest and straight with me, saying if it's a better batch or something. They'll give me the head's up. Most of them are pretty good. They don't want to lose a good customer, right ? (Participant 10, white man, mid-60 s)

While some participants described having conversations with their dealers about their drug supply, questions about drug contents are not always well-received by dealers thereby affecting their trust. For example:

It's usually the dark purple stuff [i.e., heroin cut with fentanyl (*Meuse, 2017*)] *that I get from him and I like that stuff. If it's different then I get a little bit sketchy. Like, why is it different? And I start to question him and then he starts getting mad at me. But I'm like, I'm not gonna start to do shit that I don't know. I'm an old-fashioned kind of person. If it's not something I'm used to, then I won't do it.* (Participant 6, white woman, early 30 s)

Having open communications with drug dealers about their products, when possible, allowed participants to gain knowledge and make more informed choices regarding their drug use. These informed choices relied on trust, which sometimes was compromised depending on any consistency issues.

3.2. Checking drugs as futile

Given the amount of trust that many participants expressed having in their drug dealers and their drug supplies, the use of DCTs by some participants was not considered a priority. For example:

Like if I'm getting from the same dealer, I'm not gonna check my dope at all unless he says 'oh it's super strong. A lot of people have gone down from this, be careful.' Say if he said just be careful it's really strong, well I would just do a little tiny bit then to see how strong it was. (Participant 14, white woman, mid-30 s)

Participants believed that they would always receive the same drugs from their dealers and minimized the need or frequency for drug checking. This belief was based on their dealers' word as well as past experiences with the drug strength and steady supply. For example: *"I'd test it once maybe because I'm always going to the same people and it's consistent, the drug I get"* (Participant 20, white man, late 50 s), and *"If they always bought off the same person, they would probably [test] it like maybe once, right, and then just expect it to always be the same"* (Participant 13, white woman, early 40 s). Given this high level of trust that participants had in their regular dealers, some did not see the point in using DCTs, as seen in the following excerpt:

"If you're only picking up a point well they're not going to go give up a half point every time and travel just to test their dope. If you got a long-term addict, trust me, they know their dealers" (Participant 3, white man, late 50 s).

3.3. Unfamiliar sources

While participants discussed a high level of trust when it came to buying drugs from their regular dealers, some identified trust issues when they bought drugs from someone else or when there were perceived unknown contents. For example:

If he's not around then I have to go see somebody else, and then it gets a little bit sketchy. Because people can cut it, right? You get that carfentanil shit, which is making people trip out, right? But like you just can't trust anybody nowadays. (Participant 6, white woman, early 30 s)

While participants did discuss communicating with dealers about their supplies, some participants also said that you cannot always trust every dealer, as seen in the following quote:

Regardless if you know that dealer…you don't know where that dealer per se always gets his stuff from. He may tell you one thing but it doesn't necessarily mean he's telling you the truth, you know? And that's one thing I learnt about even our dealer. (Participant 18, white man, early 50 s)

While participants discussed a lack of trust when it comes to unfamiliar sources, they also noted that drug dealers also may not always know all of the contents of their drugs, as seen in the following excerpt: *"Sometimes accidents happen, or whenever they give something that's not right, but I don't think they do it to rip you off. I just think they do it because they don't know"* (Participant 13, white woman, early 40 s).

3.4. Lack of concern for drug contents

Participants overwhelmingly expressed having trusting relationships with their drug dealers; however, some described the lack of responsibility some less familiar dealers had for their customers. Participants discussed how many dealers do not care about what they are selling and may be less likely to utilize drug checking services. For example:

You would think they would try to [test their drugs]. That would be beneficial to everyone, I guess. He could talk to his clients properly. You know, most of them just don't give a shit, you know? They don't care what they sell. (Participant 8, Indigenous woman, mid-60 s)

Other participants discussed that many drug dealers' primary concern is making money, not the contents of their drugs, as illustrated in the following excerpt:

You see, we've gotta remember, the people on top of the food chain, they're in it for the money. We're not their friends. The money's their friend. So, I think it'd probably be one in a thousand who would actually care. Because they're not moral people. They're criminal. (Participant 7, white man, mid-50 s)

3.5. DCTs providing knowledge to drug dealers

Participants described a variety of reasons why drug dealers would use DCTs. Having drug dealers test their drugs was discussed as providing knowledge to both the dealer and to the customer. One participant, a former drug dealer, said that he would have used DCTs to ensure he knew what he was buying, and, in turn, selling to others:

If you buy, you wanna know what you buy. If you put 5 grand, 10 grand, for the dope, you want to know what you buy with that 5, 10 grand. Don't want to buy any garbage or buy fentanyl if you want down [i.e., heroin] … Like me, the time I dealt dope, I would've used that machine every single day. (Participant 5, white man, late 40 s)

Other participants discussed the benefit to providing accurate information to customers. For example:

Because a lot of dealers do care about their product and what they're selling…If they tell a customer this is whatever it is, then they know they're

not lying. They know they're not fucking people over…They're going to have better business. (Participant 13, white woman, early 40 s)

Overall, drug checking was discussed as a way to provide greater knowledge to PWUD and drug dealers alike.

3.6. Drug checking as potential risk reduction for drug dealers

In addition to providing knowledge on the contents of drugs, participants also discussed the responsibility that some drug dealers feel for those using their drugs and how using DCTs would benefit the lives of PWUD, as evident in the following quote:

[If people checked their drugs] Then people wouldn't be dropping dead. Like, 'oh, buddy died over night. I'd better bring that down.' You don't want any people dying. Or you're going to get a mob of people after your family. Can you imagine? [DCTs] would save lives. (Participant 4, Indigenous man, early 40 s)

Participants also discussed how the use of DCTs not only would provide accuracy in terms of drug strengths and contents, but also how some dealers may not sell their drugs depending on its contents. For example:

They don't want people to die. I've known some dealers that had a bad batch, [and said] 'hold on, give me an hour and I'll come back.' They are just not selling what they had because it was too strong, too weak, too something. Not many, but some I have known to do that. (Participant 19, white man, mid-50 s)

The ability to test the contents of drugs by dealers was described as a harm reduction measure to potentially prevent drug-related risks (e.g., overdose).

3.7. DCTs and privacy concerns

While participants discussed the multiple benefits to the use of DCTs by drug dealers, some described concerns related to surveillance and exposure implicated in drug checking services, particularly given the criminalization of drug use and trafficking. For example: *"I don't think they'd go into some government building, take out all their dope, and then put it on [the DCT]" (Participant 17, Indigenous woman, mid-20 s), and "Yea. They'd want to make sure their privacy is protected. Nobody wants to go to jail"* (Participant 12, white man, late 30 s). Privacy was also discussed as important for dealers, as some customers may see their use of DCTs as showing their lack of confidence in their own supply, as evident in the following excerpt:

I also think there should be a home kit for the dealers that don't want to be known for taking their stuff into a public place. To get tested, they wouldn't publicly do it. They'd want people to know who've used [their drugs] to have confidence in their dope. (Participant 2, white woman, early 40 s)

While providing drug checking services to drug dealers may be beneficial in a variety of ways, protecting their anonymity was seen as integral.

4. Discussion

In summary, most study participants discussed having a high level of trust for their drug dealers based on the length of their relationships, consistency in drug supplies, and communication. However, they did highlight a lower level of trust when buying drugs from an unfamiliar source, and some felt that no dealer could be fully trusted. Given the level of trust that many participants expressed for their regular dealers, most did not identify drug checking as a priority. However, they did discuss how DCTs could provide knowledge to drug dealers about drug contents and how communicating test results to customers could be beneficial. Although criminalization, surveillance, and issues of privacy for drug dealers were also highlighted as a concern, leading some to question whether dealers would actually make use of DCTs.

Our findings are consistent with previous research whereby PWUD demonstrated trust in their drug dealers (Soukup-Baljak et al., 2015; Taylor and Potter, 2013), and similar to other studies, their use of a trusted drug dealer was considered a viable harm reduction strategy (Carroll et al., 2017; McKnight and Des Jarlais, 2018). However, assessments of trust of dealers varied given that participants also bought drugs from unknown sources or dealers who they perceived as only caring about money. As highlighted by previous studies, when there are issues between drug dealers and their clients (e.g., quality or content of drugs), there are no formal means for dispute resolution (Jacobs and Wright, 2006; Jacques et al., 2014). This is a direct result of criminalization, which leaves both clients and dealers with limited options for addressing issues related to drug purchases and can sometimes lead to violence (Jacques et al., 2014; Small et al., 2013).

While relationships and levels of trust may vary from dealer to dealer, being able to provide accurate knowledge of drug contents is integral to reducing drug-related harms (e.g., overdose). Similar to other research from Vancouver (Mayer et al., 2018), a recent study of PWUD in another fentanyl-saturated setting, discussed how PWUD utilize visual cues and/or taste to discern the contents of their drugs. However, the study calls for a more advanced public health strategy, including drug checking programs, to better inform PWUD of drug contents prior to use (Ciccarone et al., 2017). Some public health strategies have involved providing drug alerts on tainted drug supplies to PWUD, although whether or not individuals consider the information and change their use is debatable (Kerr et al., 2013; Miller, 2007; Soukup-Baljak et al., 2015). One study, however, suggests that messaging should nevertheless be informed by the community of PWUD (Soukup-Baljak et al., 2015). Peer-led messaging regarding drug contents does exist in other jurisdictions (SOLID, 2018), but little is currently known about its effectiveness. Regardless, given the high level of trust that participants in our study placed in their drug dealers, opportunities for the dissemination of drug checking results via dealers is worthy of further exploration.

The fact that drugs, the people who sell them, and those that use them, are criminalized is important to consider, given the risks associated with surveillance and policing (DeBeck et al., 2017). While some jurisdictions have taken a public health policy approach to the issues of drug use, law enforcement still continues to target drug dealers (Small et al., 2013). Therefore, as identified by our study participants, privacy and anonymity are integral in order to explore the potential role of drug dealers in utilizing DCTs. With the exception of fentanyl test strips, which are more widely available, drug checking programs in our study setting exist at a local SCS (Tupper et al., 2018), which operates under a federal exemption protecting PWUD (Kerr et al., 2017) – though the risk of arrest for drug dealers when leaving these sites is an important factor to consider, as police have been known to operate in close proximity to SCS, making some reluctant to use these services (Bennett and Larkin, 2018). Additionally, knowing that their drugs contain fentanyl may put drug dealers at greater risk of criminal liability with the potential for manslaughter or murder charges as a result of fatal overdoses from their supplies, as demonstrated in both Canada and the United States (Fisher, 2017; Tierney, 2018). Accordingly, further remedies are needed to reduce the potential legal risks associated with the provision of DCT programs. In the absence of larger structural changes including the decriminalization of drugs and drug trafficking as well as access to a regulated and safer drug supply, DCT policy and programmatic changes can still be enacted to circumvent the risks associated with criminalization. These could include the implementation of de facto decriminalization zones (Jesseman and Payer, 2018) in neighbourhoods disproportionately affected by drug criminalization. In addition, drug checking programs could expand their services by offering mobile DCT access similar to other harm reduction strategies catered toward hard-to-reach PWUD such as mobile needle and syringe distribution or housing-based in-reach naloxone services (Bardwell et al., 2018c; Hebert et al., 2008). These would greatly reduce the risks of criminalization that may make dealers hesitant to access DCTs elsewhere.

This study has its limitations. First, the views of study participants may not be applicable to all PWUD in our research setting (e.g., recreational drug users), nor to those in other jurisdictions. Second, all study participants were over the age of 26, so the results may not be applicable to youth in Vancouver. Third, while some participants said that they have recently sold drugs, their perspectives may not be similar to other drug dealers in our study setting.

In conclusion, our study demonstrates that most PWUD place a high level of trust in their drug dealers. Therefore, having drug dealers utilize DCTs to test their supplies and more accurately inform PWUD of the contents of their drugs, may have potential as a harm reduction strategy. However, it remains unclear whether dealers would actually use DCTs if they were made available and accessible to them, particularly given the effects of prohibition that increase risk of arrest and penalization. Future qualitative research with different levels of drug dealers is needed to examine which DCTs would be most worthwhile; which settings would be most beneficial for DCTs (e.g., housing environments, SCS, mobile services), including days and hours of operation; how to address sample inconsistencies across batches of drugs; how to develop an effective drug knowledge dissemination strategy; how to ensure anonymity and protection; and address existing limitations of drug checking. While engaging dealers in DCT programming appears to offer a range of benefits, there are potential legal implications that should also be explored, including instances when overdoses occur after a particular source has been tested and deemed to be free of contaminants. Given the constraints of prohibition during an ongoing overdose crisis and the presence of illicitly-manufactured fentanyl and its related analogues in local drug supplies, future drug checking programming should consider ways to engage drug dealers to test their supplies and develop communication strategies to more accurately inform PWUD of drug contents as a means to reduce overdose risk and death.

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Contributors

GB and TK developed both the interview guide and the coding framework and conceptualized the manuscript. GB conducted the interviews, coded the data, conducted the literature review, and wrote the first draft of the manuscript. All authors contributed to editing, manuscript development, and approved the final version.

Conflicts of interest

None.

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