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# Impacts of the COVID-19 pandemic on supervised consumption service delivery in Vancouver and Surrey, Canada from the perspective of service providers

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**Abstract**
Following the onset of the COVID-19 pandemic, an ever-increasing number of people have died from the toxic drug supply in Canada. Emerging evidence suggests that reduced access to harm reduction services has been a contributing factor. However, the precise impacts of the pandemic on supervised consumption service (SCS) delivery have not been well characterized. The present study sought to explore the impacts of the pandemic on SCS delivery in Vancouver and Surrey, Canada. Between October 2021 and March 2022, in-depth, semi-structured interviews were conducted with staff from two SCS: SafePoint in Surrey (n = 12) and Insite in Vancouver (n = 9). Thematic analysis focused on key changes to SCS delivery after the emergence of the COVID-19 pandemic, with a focus on associated challenges and emergent staff responses. Participants described key challenges as: capacity restrictions hindering service access and compromising care quality; exclusion of frontline staff perspectives from evolving SCS policy and practice decision-making; intensified power dynamics between staff and service users; and modified overdose response procedures, combined with a rise in complex overdose presentations, undermining service accessibility and quality. Emergent staff responses to these challenges included: collective staff organizing for changes to policy; individual frontline staff non-compliance with emerging policies; and staff experiencing burnout in their roles. This study highlights how COVID-19-related changes to service delivery produced challenges for SCS staff and service users, while identifying strategies employed by staff to address these challenges. Additionally, the findings point to opportunities to improve care for people who use drugs during intersecting public health crises.

**Keywords** Harm reduction · Substance use · Drug toxicity · Supervised consumption · COVID-19 · Healthcare work

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## 1 Background

More than 40,000 people died from opioid and stimulant toxicity between January 2016 and June 2023 across Canada [1]. The primary proximal contributor to this crisis is a toxic, unregulated drug supply composed of synthetic fentanyl, fentanyl analogues, benzodiazepines, xylazine and other sedatives, as well as other substances that have become increasingly difficult to classify [2–4]. British Columbia (BC), Canada's westernmost province, is among the regions most affected by the drug toxicity crisis. The crisis has continued unabated since the province declared a public health emergency in 2016 [3]. More than 14,000 people died in BC from drug toxicity between April 2016 and January 2024 [3, 5].

The volatility of the drug supply continues to be fuelled and shaped by prohibitionist policy frameworks that are rooted in the interconnected power relations of settler colonialism and racial capitalism [6–9]. Settler colonialism is a form of dispossession, where an external power violently removes Indigenous Peoples from their land, and supplants a new population, with a collective aim of extracting value from the same lands [10]. Settler colonial power can function distinctly across geographies and time [11]. Racial capitalism is an understanding of capitalism that traces racial injustice as co-constitutive of economic power, rather than as discrete, historical and ongoing developments [12]. Health policies rooted in colonial power and racial capitalism tend to have negative impacts toward the general public, with the exception of beneficiaries at the top of this hierarchy of power [6, 7, 12]. These intersecting systems of politics and power have enabled the toxic drug crisis to emerge and to persist [9, 13–15]. Moreover, the violence of these twinned stratifications of power are quantified in a number of metrics, including disproportionately high toxic drug death rates among Indigenous Peoples, South Asian/Panjabi populations in regions where these deaths have been measured, and other racialized communities [6, 16–19]. Housing precarity and being the recipient of an income assistance payment are additional predictive factors for dying by drug toxicity in BC [3]. In June 2023, illicit drug toxicity became the leading cause of death among people 10 to 59 years of age in BC, accounting for more deaths than homicides, suicides, accidents and natural diseases (e.g., cancer, heart disease) combined [20]. Overall, the impacts of prohibitionist policies framed by settler colonial and racist systems have generated a prolonged toxic drug crisis, resulting in systemic harm stratified across class, race, Indigeneity, age, disability, gender, and sexuality. This harm extends to frontline workers, who have endured numerous stressors and challenges in addressing this ongoing, worsening crisis [21].

Supervised consumption services (SCS) have been implemented in some communities in Canada in response to the toxic drug crisis [22]. SCS are venues that provide safe, hygienic spaces in which people can use illicit and/or legally regulated drugs while observed by trained staff [22]. A large body of scientific evidence has demonstrated the effectiveness of SCS, including in reducing drug toxicity deaths and other health-related harms among people who use drugs [23, 24]. As of March 2024, 39 SCS were operating in Canada under exemptions from federal drug laws [25]. In BC, there were an additional 50 overdose prevention sites (OPS), which are less-medicalized SCS, as of March 2024 [22].

Drug toxicity-related deaths increased in Canada after the onset of the SARS-CoV-2 (COVID-19) pandemic [1, 26]. A study of coronial data found that, in the first month of COVID-19, drug toxicity deaths in BC more than doubled when compared to the same month of the previous year [26]. A number of social and policy factors appear to have contributed to the worsening of the crisis in the COVID-19 era. First, there was a significant rise in fentanyl concentration in the unregulated opioid supply in BC after the COVID-19 pandemic was declared an emergency [27], and this was linked to increases in population-level drug toxicity death rates over time [28]. There was also a doubling of benzodiazepines involved in drug toxicity deaths in BC, increasing from 6.7% of deaths in 2019 to 13.5% in 2020 [29]. Some have speculated that these drug market shifts were partly a supply and demand response to increased border control measures, although underlying causes have not been definitively established [30, 31]. Physical distancing and isolation measures, including quasi-legal guest bans in residential buildings, may have also contributed to more people using drugs alone, which increases risk of fatal overdose [3, 6, 32, 33].

Emerging evidence indicates that reduced access to key harm reduction services was likely another factor that contributed to the rise in drug toxicity deaths after the onset of COVID-19 [34–37]. Notably, there was a large decrease in the number of visits to SCS in some cities, including in Vancouver and Montreal [35, 37]. In Vancouver, people who use drugs perceived SCS as less accessible after the emergence of the pandemic [34, 35], and COVID-related SCS closures/reduced hours and long wait times were the most commonly reported reasons for experiencing difficulty accessing these services [34]. However, the precise impacts of the COVID-19 pandemic and associated response

measures on SCS delivery have not been well characterized. Drawing on the accounts of SCS staff in Vancouver and Surrey, Canada, the present study sought to explore key changes to SCS delivery after the onset of the pandemic, with a focus on associated challenges and emergent staff responses to those challenges. This study may provide useful evidence to inform policy and practice specific to SCS as part of current and future pandemic and toxic drug crisis response efforts.

### 1.1 Study setting

The present study focuses on the experiences and perspectives of service providers at two SCS: Insite and SafePoint. Insite is located in the Downtown Eastside (DTES) neighbourhood of Vancouver on the never ceded territories of the xʷməθkʷəy̓əm (Musqueam), sḵwx̱wú7mesh (Squamish) & səlilwətaɬ (Tsleil-Waututh) nations. The DTES is characterized in part by high levels of income insecurity, people living outdoors, inadequate and surveillance-oriented non-profit housing [38], as well as community driven systems of mutual aid and informal care [39, 40]. The DTES had the highest unregulated drug toxicity death rate in BC in 2023 (552.4 deaths per 100,000 population) [20]. Insite was one of ten SCS/OPS operating in the DTES as of May 2024 [21]. Canada's first and longest-running sanctioned SCS, Insite has been operating under a Section 56 exemption from Canada's *Controlled Drugs and Substances Act* since September 2003 [42]. This purpose-built, standalone facility has thirteen drug consumption booths and is typically open 18 h per day, 7 days a week. SafePoint is situated in the city of Surrey, which is located about 35 kilometres southwest from downtown Vancouver on the never ceded lands of the Semiahmoo, Katzie, kʷikʷəƛ̓əm (Kwikwetlem), Qw'?ntl'en (Kwantlen), and səlilwətaɬ nations. Surrey is BC's second most populous city, is home to a large Panjabi population [43], and had the second highest number of drug toxicity deaths in the province after Vancouver in 2023 [20]. Since June 2017, SafePoint has been operating under a federal exemption in an area of Surrey with a high concentration of homelessness and public drug use [44]. The site is housed within a portable structure that includes seven drug consumption booths, and is typically open 18 h per day, 7 days per week [25].

## 2 Methods

This research draws upon data from a qualitative study investigating the impacts of the COVID-19 pandemic on delivery, access and outcomes of SCS in Vancouver and Surrey. In-depth, semi-structured interviews were conducted with SCS users and service providers. The present analysis draws upon data from in-depth, semi-structured interviews conducted with 21 service providers at SafePoint ($n=12$) and Insite ($n=9$) between October 2021 and March 2022 (Table 1). Participant eligibility criteria included being aged 18 years or older, and having worked at either SafePoint or Insite after the COVID-19 public health emergency was declared in BC in March 2020. Purposive sampling was utilized to recruit

**Table 1** Participant demographics ($n=21$)

| | *n* |
|---|---|
| *Gender identity* | |
| Man | 5 |
| Woman | 13 |
| Non-binary or other gender | 3 |
| *Role classification* | |
| Managerial/executive | 1 |
| Support, mental health, or harm reduction worker | 11 |
| Nurse | 8 |
| Other | 2 |
| *Supervised consumption site of employment* | |
| Insite | 12 |
| Safepoint | 9 |
| *Identify as a 'peer'** | |
| Yes | 2 |

*Refers to identifying as having living/living experience of substance use

participants. Specifically, operators and managers at the two SCS were sent emails that they were asked to circulate to eligible staff. Interested staff contacted the study team by phone or email to schedule interviews. Interviews were conducted by four trained researchers over the phone as a precaution during the COVID-19 pandemic. An interview topic guide was used to facilitate interviews. The interview guide included questions regarding a range of topics including: (1) shifts in SCS policy, funding and social environment during the COVID-19 pandemic; (2) changes to SCS delivery during the pandemic; and (3) adaptations to COVID-19-related changes in service delivery. Interviews ranged from approximately 30 to 60 min in duration. All participants provided verbal informed consent prior to their interview. Participants were provided with a $40 cash honorarium upon completion of an interview (unless this was not permitted by participants' employer organizational policies in which case participants were not provided with an honorarium). The interviews were audio-recorded and transcribed verbatim.

Data were analyzed thematically using inductive and deductive approaches [45], guided by a framework set out by Braun and Clarke [46, 47]. Specifically, we developed an initial coding framework that drew on a priori categories extracted from the interview topic guide, such as COVID-19 related changes to SCS capacity, operational policies and procedures, as well as stressors experienced by staff. During data collection, study team members had debriefing sessions in which they discussed emerging patterns in interviews and generated preliminary ideas for codes, including service delivery challenges stemming from changes to the drug supply, and staff responses to changing policies and procedures. Interview transcripts were imported into NVivo R1, a qualitative data management software program, to facilitate data management and analysis. Drawing on Braun and Clarke's guidance for coding framework development, two team members (MCK and TSK) read and re-read a selection of interview transcripts in full, completed line-by-line coding to generate initial emerging codes, and organized codes into overarching themes. They then used the draft framework to code all transcripts, and refined themes and subthemes by reviewing coded data extracts within candidate themes. Our team met multiple times during the coding process to review and further refine the framework until the final thematic categories were established. Discrepancies in coding, themes and/or interpretation were resolved by reviewing interview excerpts, meeting virtually on an ad-hoc basis (TSK & MCK), and achieving consensus through discussion. We solicited further validation and feedback on our themes and our results from a long-time, experienced SCS staff member (TM) to enhance interpretive validity of findings and thematic description. To protect anonymity of participants, we omitted socio-demographic information that could potentially identify participants and only use participant ID numbers when presenting quotes in this paper. The study received ethical approval by the University of British Columbia Behavioural Research Ethics Board. All methods were carried out in accordance with relevant guidelines and regulations.

## 3 Results

Our findings centred on direct care workers' experiences of working at SCS after the onset of the COVID-19 pandemic during an ongoing drug toxicity crisis. This unique context altered service operations and dynamics between workers, management and users of the SCS. Specifically, our thematic analysis yielded two overarching themes: (1) challenges related to SCS delivery after the onset of the COVID-19 pandemic and (2) emergent worker responses. The first theme centres on the challenges related to the provision of services during the pandemic, including: capacity restrictions hindering access and quality of care, frontline staff exclusion from decision-making, intensified worker-client power dynamics, and challenges with changes to overdose response protocols and presentations. The second theme highlights collective and individual strategies utilized by staff to address emerging challenges, as well as staff burnout and disengagement.

### 3.1 Challenges with service delivery after the onset of COVID-19

#### 3.1.1 Capacity restrictions hindered SCS access and quality of care

To comply with social distancing orders implemented in BC after the COVID-19 public health emergency was declared in March 2020, both SCS temporarily operated their drug consumption booths at half capacity (for a period of several weeks at Insite and several months at SafePoint). The SCS then resumed operating consumption booths at full capacity as these were deemed to be "essential services." However, both SCS continued to operate with capacity restrictions for both the pre-consumption waiting rooms and post-consumption 'chill' spaces for clients for at least two years (including the full duration of the study period). Staff described how these capacity restrictions resulted in longer wait times for clients to enter the SCS, while also making the SCS less appealing for clients to access, which drove clients to use drugs elsewhere:

"[Clients are] *sometimes waiting 30 minutes, 45 minutes, when they would rather use, so there is a barrier there. And now if you start screening people at the front door, only letting a limited amount of people in, people are still sleeping in booths and the booth numbers are limited, and if it takes you an hour to get in to inject, you're going to use outside; you're not going to put up with that.*" (Participant 7)
*"They still do have a reduced capacity for how many people can be in the waiting room at a time and how many people can be in the chillout lounge at a time as well. Which, you know, when it's raining and things like that, if folks don't have somewhere dry and clean to wait for, I think people are less likely to wait to use that safe space.* (Participant 4)

Staff expressed concern about the potential harms resulting from clients using elsewhere, including increased risk of toxicity death if they were to use drugs alone:

*"Certainly since the pandemic started, huge increase in deaths and overdoses, and I think just with the decreased capacity everywhere, people are just kind of forced to use alone when they can't come into SafePoint.*" (Participant 11)

Staff also described how, prior to COVID-19, waiting and "chill" areas at the SCS served as "unofficial drop-in" spaces where staff could cultivate relational care with clients, assess health needs, and provide referrals and drug use equipment. As such, the reduced capacity of these spaces meant reduced opportunities for staff to provide support and care, which was perceived as contributing to increased unmet needs among clients:

*"If people aren't allowed to wait in the waiting room or just be in that space in general, if people are less likely, you know, to wait around to be seen or some folks don't feel comfortable asking for those services. So there are certain clients who, if I don't offer to do it, they're not going to ask for their wound care to be done. So if those opportunities aren't there, they're not engaging with health care services and are either doing wound care on their own or just not having it done at all. And kind of similarly with mental health concerns...*" (Participant 4)

#### 3.1.2 Frontline exclusion from SCS decision-making

Beyond capacity restrictions, participants described a number of key changes to SCS delivery after the onset of COVID-19, particularly in the early months of the pandemic, a time when policies, procedures, and staff responsibilities were characterized as "constantly changing." Some of these changes were described by staff participants as having beneficial impacts (e.g., staff providing COVID-19 education and vaccines to clients). However, as detailed below, many changes were characterized as primarily having adverse impacts on accessibility and quality of care at SCS, including changes to overdose response procedures, requiring SCS users to socially distance and wear masks, and imposition of capacity restrictions for waiting room and chill areas. A prominent theme in staff interviews was perception of general exclusion of frontline perspectives (both staff and service user) from decision-making regarding such changes in SCS delivery. Of note, study participants described how changes to policies and procedures after the onset of COVID-19 were typically imposed by the local health authority and managerial-level personnel without consultation with frontline staff or service users, which ultimately served to make staff feel devalued, disempowered, and unsupported in their roles:

*"It was like management made decisions and we really weren't* [listened to] *so we just had to follow through on them. Whatever the consequences were, whether it was backlash from the clients or not, we weren't given really an opportunity.*" (Participant 14)
*"The big decisions were like top-down and just not empowering, but all of the day-to-day things fell to us* [frontline staff]. *So it was just like, it felt like we were not very well supported.*" (Participant 7)

#### 3.1.3 Intensified worker-user power dynamics

Study participants described a sense of moral tension where, although they desired to create a welcoming environment for service users, they felt compelled to be "*policing*" service users to adhere to new COVID-related rules at the SCS, including mask wearing and social distancing rules. This served to intensify power dynamics between staff and clients, which shifted the culture away from community-orientation to a feeling of overmedicalization, and ultimately impeded staff ability to build therapeutic relationships with clients and created barriers to client access:

*"I felt like it's been a big barrier for me to build a rapport and connect with clients, because we're almost – a big part of my day feels like I'm policing people to keep their mask on, like pull your mask up over your nose, and I'm constantly sort of repeating those directions to people, so it can definitely come off as me, you know, nagging people, and acting more*

*authoritative than I would like to as their nurse... I've definitely had a lot of instances where people just say, 'I don't want to wear the mask. I'm not coming back here anymore. Like, this place sucks.' So, it definitely, I think, takes away from the experience for people, and makes people less comfortable…."* (Participant 7)

Similarly, with reduced capacity at the SCS, staff described how they often rushed clients through the sites to make room for other clients, which was perceived as making the SCS less welcoming and safe for a user population facing ongoing and historical discrimination from the healthcare system:

*"During the pandemic we were really pushing to have people move through the site faster than were before… I definitely feel like the space started to feel a bit more sterile and a lot more medical, which in my practice is not the goal I feel like the site has. And so it did feel a lot more like I would even say a production line, and we couldn't - we – the staff wasn't able to really check in with folks the way we were able to before."* (Participant 5)
*"I think it makes it harder for folks to access and, you know, people have – clients have told me that where they're like this doesn't feel the same. I feel like I'm being rushed out of here, which historically has not been the case… I think historically people felt that it felt a little bit more cooperative and I would say probably really emphasizes the power dynamics that exist there… A really important part of these spaces is the community and sense of safety that comes along with it and I think the more clinical and forceful those spaces feel the less likely people are to feel welcomed and safe in them… especially when historically people have negative experiences within the health care system and stigmatizing experiences. We don't want to be another point of that."* (Participant 4)

Some staff explicitly linked the enforcement of new rules and protocols at SCS to increased overdose death rates after emergence of COVID-19:

*"Our overdose rates have skyrocketed. A lot of people don't want to come into SafePoint anymore because like, we're literally like, okay you come in for 45 minutes- that's all you get. Keep your mask on, don't talk to anybody. Like you know you can't eat or drink or anything in there... And so it was really like that community sense and that has – that piece has gone and it's just like a ripple effect into like everything else."* (Participant 16)

#### 3.1.4 Challenges with evolving overdose response procedures

Participants discussed a number of challenges associated with COVID-19-related changes in overdose response protocols at the SCS. These challenges largely stemmed from tensions between emerging pandemic control practices and established best practices for overdose response at the SCS. Of note, staff described how early COVID-19 protocols at both sites included shifts to prioritizing the administration of naloxone (an opioid overdose reversal medication) before oxygen in response to overdose. This shift occurred because staff were required to evacuate all clients from the SCS before using oxygen through bag valve masks (BVM) due to the risk of aerosolizing and spreading COVID-19 if the overdosing client was infected. However, staff expressed concerns about increased use of naloxone with clients, including an increased risk of precipitated withdrawal:

*"We would administer more Narcan I think in the beginning so that we didn't have to bag somebody because in the event that we did have to bag someone, we would have to evacuate the rest of the site... Typically we don't like to use a whole lot of Narcan because in the event we were to give what would be maybe considered a little bit too much Narcan, it could put the participant or the individual into precipitated withdrawal… and that's just not a physiological state that's comfortable for anybody."* (Participant 3)

Participants also raised concerns about having to evacuate SCS and don (put on) full personal protective equipment (PPE) before responding to overdoses with oxygen, including how this delayed effective intervention for clients experiencing overdose while also creating both immediate and sustained barriers to SCS access for others clients:

*I think there was definitely a lot of concern from our nursing staff about our ability to provide appropriate care and how, you know, delaying providing things like high-flow oxygen or how delaying ventilating a client who was apneic could have significant poor outcomes for clients in that moment if we were waiting to evacuate a room or waiting for people to don PPE before performing those procedures.* (Participant 4)
*"That also, I mean, again, created a barrier to service as well just because participants knew that there was a possibility that if somebody overdosed, we had to evacuate everybody."* (Participant 3)

Participants highlighted not only challenges related to internal policies, but also external factors that changed the *types* of drug poisonings they were responding to and interactions they managed. In particular, there was an increase in diverse benzodiazepine analogues in the unregulated drug supply around the same time that COVID-19 started, which resulted in a coinciding rise in complex benzodiazepine toxicity events at the SCS. These were sometimes characterized by prolonged unconsciousness. Staff described how clients experiencing such reactions from the toxic drug supply were often monitored at the SCS for longer periods of time, which increased wait times for other clients due to an inadequate amount of space:

*"With the border closed, you know, the nature of the drugs that are coming in to Canada has changed. There have been a lot of benzos and that really changes the overdoses and the degree to which you have to monitor people because we can't reverse benzo overdoses, which means we're sometimes monitoring unresponsive people for hours, which is not something we're really very set up to do."* (Participant 9)

*"They* [people using benzodiazepines] *tend to stay longer in the consumption room… They're breathing, the stats are okay – the stats meaning their oxygen saturation and their respiration and heart rate is okay. They're all normal but they're out, they're sleeping, they don't know what is happening. We cannot give them naloxone because naloxone is for opioids so it will not reverse it. So what we do is we just let them sleep. Some of them go from four hours to six hours just staying in the consumption room until it wears off. And because they're still there, the person that needs to come in, if we're full, cannot come in because we have to make sure that the person that has already used and is sleeping inside is safe to go."* (Participant 18)

## 3.2 Emergent worker responses

### 3.2.1 Collective frontline staff action and organizing

Frontline staff participants described engaging in a number of collective action and organizing efforts in response to what they perceived as unethical and potentially harmful decision-making and policy changes during the pandemic. For example, frontline staff at Insite described how, in the very early stages of the pandemic, they pushed back against and ultimately ended up reversing a directive from public health officials to stop using BVM for overdose response because of equipment shortages:

*"I felt like I was put in a position where the direction that I was being given by management was to basically not intervene to help clients in a way that I felt was dangerous, so that I felt like either I'm being told to kind of disobey management and follow my ethical kind of morals, nursing, my ethics, or to basically cause harm to clients, so that's a thing that was there that caused a lot of distress to me and to other nurses there… I'm like what are we doing? I'm not going to do that."* (Participant 7)

Thereafter, frontline Insite staff began to have meetings without management involvement to discuss concerns and develop plans for staff responses to evolving COVID-19-related SCS policies and procedures:

*"There were several, you know, several kind of gatherings or meetings that were, I mean amongst staff. We gathered amongst ourselves to try and sort out what we were supposed to do. There was definitely a lot of conversation amongst staff and I think we raised a lot of concern to our leadership about the risks to clients… I think it kind of pushed our leadership to examine what those policies looked like and the impact that it was going to have on the clients that we were seeing."* (Participant 4)

Additionally, Insite staff co-authored an "open letter of protest" to the media that called on public health officials to address gaps in services in the context of dual public health emergencies:

*"The goal of that letter was just to bring light to the lack of planning around the essential need for services to address this kind of dual pandemic… I think it was very apparent to us that that's going to exacerbate things, and you push people out of spaces that are already pushed out of all of the spaces….of course overdoses are going to skyrocket."* (Participant 7)

Safepoint participants did not describe making their concerns public in the same way that Insite staff did. However, they likewise engaged in collaborative action when policies were perceived as having net negative impacts, including by implementing innovative strategies that were intended to balance concerns related to preventing COVID-19 transmission with the need to uphold SCS accessibility and care quality. For example, rather than continuing to evacuate the SCS before

responding to overdoses with BVM oxygen, SafePoint staff instead started warning service users that they were going to use oxygen and gave people the option of leaving or staying. This was soon after accepted by management as site policy:

> *"We would make the announcement* [that BVM was being used], *tell everyone and then let the participants make an informed decision as to whether they want to stay or not… It's like but I'm not going to delay providing life-saving services to this person if they're refusing to leave. I don't have time for that. So once we had kind of a couple of instances of it, the management agreed to allow us to do that. But it was kind of like the whole thing I said of like asking for forgiveness instead of permission."* (Participant 14)

#### 3.2.2 Individual-level non-compliance

Individual staff participants also used their discretion to selectively defy policies they perceived as potentially harmful. For example, several participants described how they stopped donning full PPE when overdoses occurred to reduce potential for harms stemming from delayed response:

> *"I'm never gowning or putting on the N95* [a type of surgical mask] *if someone's blue and not breathing. I don't take that time for myself and I think there's maybe two staff I've seen do it. The rest of them just jump in as per normal."* (Participant 10)

Frontline staff also often did not enforce client mask wearing rules because they wanted to provide a welcoming, supportive environment for service users:

> *"A lot of the regular staff sometimes deal with compromised PPE because they knew that that was a barrier for the participants… You could see that people actually deliberately doing that for the sake of the clients. I think most of the co-workers that I've had are really open about it so they say you know what, I just- I just did – I assessed a risk, I used my clinical judgement."* (Participant 6)

#### 3.2.3 "Super high turnover, super high burnout:" staff disengagement

Participants described how the numerous challenges they faced during the pandemic contributed to staff burnout and disengagement. Specifically, they described how stressors related to COVID-19 transmission, a worsening drug toxicity crisis, and top-down and potentially harmful, unpredictable decision-making regarding SCS delivery in a context of inadequate staff supports contributed to feelings of mental and physical exhaustion. These challenges ultimately led some staff to reduce their hours, take leaves of absence, or leave their positions entirely. For example:

> *"Super high turnover, and super high burnout. Yeah, it's not really – it's not really a site where I find we've been keeping nurses... I don't want to be there full-time… Because like mentally, and physically as well, like I just – like I can't handle doing ten ODs in a day, when it's me and one other person… Like it's definitely hard for us to keep going under these conditions of working through the opioid crisis as it is, on top of a pandemic."* (Participant 11)
>
> *"There is a reason why I was there for* [redacted amount of time] *and left after things kind of settled down in the pandemic… All my emotional energy at the point was like fighting the direction that we were getting from management and I didn't want that energy all to go there, and so when it was finally done, I was just kind of burnt out. And it was management that burnt me out, not the* [redacted amount of time] *of doing it down there and helping clients who were there that I cared about."* (Participant 7)

Staff disengagement had negative impacts for both staff and clients. For example, because of staff shortages, SafePoint sometimes had to operate the consumption room with reduced capacity, and some staff described taking fewer breaks or having to take on additional responsibilities, which further exacerbated stress, burnout and turnover among staff. One participant described:

> *"I find that we're a lot more short staffed… and that impacts our ability to – we have to reduce capacity from that point as well. I mean the stress of the pandemic has really taken its toll on staff... Like staff are just so worn out and just so burnt out because of everything. Because like living through a pandemic is stressful enough without having to work through it as well and then work through it like at reduced capacity and short staffed and like without breaks."* (Participant 14)

## 4 Discussion

In the present study, we found that the onset of COVID-19 pandemic added another layer of crisis to the multiple challenges that workers and service users at SCS were already contending with in the context of a prolonged drug toxicity public health emergency. Capacity restrictions implemented at the SCS after the onset of COVID-19 not only appear to have increased risk of drug toxicity-related harms by impeding service access, but also to have contributed to unmet care needs among clients. Frontline workers often felt they were in a position of policing service users to adhere to new COVID-related rules and protocols at the SCS, including regulations put in place to reduce the spread of COVID-19. This seemed to heighten worker-user hierarchies and power dynamics [48]. It also shifted the culture at SCS in ways that hindered staff ability to build therapeutic relationships with clients and exacerbated barriers faced by clients in accessing SCS, which were already failing to meet overall demand prior to the pandemic [49]. Changes to SCS overdose response procedures, including prioritizing naloxone over oxygen administration and evacuating SCS before using BVM oxygen, which occurred alongside a rise in complex benzodiazepine toxicity events at SCS, presented challenges for effective intervention and further hindered service access. Although frontline staff raised concerns about their exclusion from decision-making regarding changes to SCS policies and procedures after the onset of COVID-19, many engaged in collaborative and individual-level response efforts to selectively defy and adapt potentially harmful policies, address emerging challenges, and strive to uphold a supportive care environment. However, the numerous stressors and challenges experienced by frontline staff in the context of intersecting public health crises and inadequate staff supports contributed to burnout, which ultimately led some staff to disengage from their positions at the SCS.

The present study builds on past studies documenting increased barriers to SCS after the emergence of COVID-19 [34–36, 50, 51]. Extending on previous findings, we highlight how pandemic-related SCS capacity restrictions contributed to increased drug poisoning risks and unmet care needs among people at high risk of dying from the toxic drug supply. These findings reflect the sanctioned aspects of the crisis within governance and political frameworks rooted in racial capitalism and settler colonial power. For example, rather than opening additional SCS to address gaps in service access during a time of emergency closures and capacity reductions of existing SCS, people at risk of dying were instead excluded from these services. Establishing adequate sites to meet demand could include funding and supporting temporary SCS, which has been shown to be effective in rapidly supporting access to this form of intervention during public health crises [53]. After the toxic drug crisis was declared a public health emergency in BC in 2016, several different strategies were used to rapidly open low-barrier SCS/OPS—some of which were temporary—while the longer process of permits and infrastructure delayed the opening of federally-sanctioned SCS [54]. These strategies included establishing SCS tents and trailers, and integrating SCS within existing health, housing and community organizations [53, 55–57]. Such strategies should be considered to support continued access to SCS throughout future public health crises.

The global response to the COVID-19 pandemic included widespread implementation of universal mask mandates and physical distancing measures to reduce person-to-person transmission [57]. However, challenges associated with fostering compliance with these requirements and other COVID-19 prevention measures have been evident in a range of health and social service settings [57–60], including the specific service environment studied herein. In the present study, staff described feeling like enforcers against clients when requesting adherence to new COVID-19-related policies and protocols within SCS. This contributed to moral distress among staff and also appeared to have adverse impacts on the quality of care provided at SCS. Specifically, staff participants described how such enforcement served to intensify worker-user power dynamics, medicalize the service culture, and make SCS less welcoming and safe for a user population that commonly faces mistreatment and discrimination within healthcare settings, due in large part to settler colonial, racist and anti-poor sentiment and hate [39, 56, 61–65]. Future research should explore SCS client perspectives with respect to implementation and enforcement of COVID-related policies and prevention protocols at SCS, including how this may have shaped their experiences, utilization and outcomes from these services.

The apparent exclusion of frontline staff and client perspectives from decision-making regarding COVID-19 related policy and procedure changes within SCS seems to have not only adversely impacted quality of care at SCS and staff well-being, but also to have driven staff to adopt a reactive approach of engaging in collective and individual actions in attempts to mitigate potential harms resulting from these changes. These findings highlight the need for better incorporation of frontline perspectives in crisis response service planning, including those of service users and providers. Given the frequent interactions and close relations between frontline workers and

the communities they serve, as well as tendencies for harm reduction staff to be from these communities [21, 40], frontline staff are well situated to ensure that service delivery changes are responsive to community needs and do not compromise pre-crisis standards of care. Indeed, existing research indicates that involvement of frontline staff can foster more effective harm reduction interventions [66], while our findings highlight how staff can effectively leverage their expertise and problem solving skills to develop innovative solutions to address emerging service delivery challenges during intersecting public health crises. Service users should also be provided with opportunities to lead and influence service planning, as such meaningful community involvement is key to supporting positive outcomes from harm reduction services [66, 68–70], and is increasingly recognized in as a best practice approach for program planning [70, 71].

Study participants described some notable service delivery challenges stemming from the increased volatility and toxicity of the unregulated drug supply after the onset of COVID-19, including an increase in benzodiazepine toxicity events at SCS that were difficult for staff to manage and exacerbated barriers to access for clients. These findings, in addition to the high number of drug poisonings continuing to occur, reinforce the need for expanded access to a legally regulated safe supply of drugs as a strategy to prevent overdose-related harms by reducing reliance on the unregulated drug supply [3, 72, 73]. To date, safe supply interventions implemented in Canada have almost exclusively been prescriber-based programs that distribute a small set of prescription-based drugs, primarily tablet hydromorphone [3, 73, 74]. Providing prescribed alternatives to unregulated opioids has been shown to have wide-ranging benefits, including by reducing risk of drug toxicity death [75, 76]. However, medical safe supply programs have thus far reached a very small percentage of people who use drugs [3, 73]. Furthermore, government reports and studies have highlighted notable program engagement barriers, including weaker effects of prescribed versus unregulated drugs, and limited prescriber education and resources related to safe supply prescribing [76–78]. Further pursuit of non-medical safe supply approaches may help to address these limitations and support access at an appropriate scale [3, 79].

The COVID-19 pandemic has had profound and lasting impacts on healthcare provision in many jurisdictions worldwide, including by increasing strain on healthcare systems and resources, disrupting routine services, and intensifying workforce shortages and burnout [80–84]. Similar to studies of other harm reduction services in the COVID-19 era, participants in the present study framed their significantly increased stress and moral injury after the onset of COVID-19 as an addition to an already traumatic and exhausting labour context [80, 81]. These conditions contributed to significant burnout among SCS staff, which ultimately led some staff to disengage from their roles. As severe staffing shortages throughout the healthcare system persist [84] and workers face further stressors and trauma stemming from ongoing, intersecting public health crises [80, 85–87], further efforts are needed to improve working conditions and supports for frontline harm reduction staff. The aforementioned strategies of scaling up access to SCS and safe supply and meaningfully engaging frontline staff and community members in program decision making may help to mitigate key workplace challenges experienced by frontline staff identified herein [81]. Additional strategies to strengthen working conditions for frontline staff in the context of intersecting crises could include increasing funding and staffing for services, supporting access to human resources and psychosocial supports, and ensuring equitable compensation, job protections, benefits, and paid sick leave [21, 81].

## 5 Limitations

This study has limitations. First, participants included only a subset of staff from two SCS, and thus our findings may not be reflective of the experiences of all staff of these SCS or applicable to other SCS in Vancouver and Surrey. Additionally, the generalizability of findings to other jurisdictions may be limited due to the unique demographic, social-structural and health service contexts of Vancouver and Surrey. Second, neither ethnicity nor race of study participants was collected. Future studies should seek to explore these experiences, particularly in communities with racialized communities, such as Surrey, BC, where Panjabi and South Asian experiences are historically underrepresented in research [18, 19, 54]. We also interviewed few SCS staff in supervisory positions and few staff who identified as having lived/living experience of substance use and so their perspectives and experiences are likely underrepresented. Finally, the interviews were conducted at least 17 months after the COVID-19 pandemic was declared a public health emergency, so difficulties with recall may have impacted results.

## 6 Conclusions

This study highlights how changes to SCS delivery after onset of the COVID-19 pandemic produced a range of challenges for both SCS staff and service users. Capacity restrictions, staff enforcement of COVID-related rules, and challenges with changes to overdose response protocols and presentations added to already strained working conditions for staff and compromised SCS access and care quality for clients. The perceived exclusion of frontline staff and client perspectives from decision-making regarding key changes to SCS delivery drove staff to engage in various individual and collective efforts to address resulting challenges. The multitude of challenges experienced by staff in the context of intersecting crises contributed to burnout and disengagement among staff, further compromising working conditions for staff and care quality at SCS. These findings point to the need to improve care and supports for staff and users of SCS in the context of intersecting public health crises, including by supporting access to SCS and a regulated drug supply, meaningfully involving frontline staff and community members in service planning, and strengthening working conditions and supports for frontline staff.

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**Data availability** Data cannot be deposited in a public repository as this is not permitted under the parameters of our research ethics approval. Anonymized data may be available by request to the University of British Columbia Behavioural Research Ethics Board. Researchers who meet the criteria for access to this data may contact the research administration office of the British Columbia Centre on Substance Use (inquiries@bccsu.ubc.ca).

## Declarations

**Ethics approval and consent to participate** The study received ethical approval by the University of British Columbia Behavioural Research Ethics Board (# H21-01731). All participants provided audio-recorded verbal informed consent prior to their interview.

**Competing interests** The authors declare no competing interests.



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