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Addressing the Needs of People Who Inhale Opiates and/or Stimulants

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Abstract

Background: It has been just over a decade since communities in Canada recognized the impact of the opioid crisis. In 2019, funding expanded supervised consumption sites in Ontario. Attention has focused on injection drug use, with harm reduction programs providing free equipment to prevent blood-borne illnesses. In the changing landscape of substance use, more individuals are now smoking opioids and stimulants, and programs have been slow to adapt. By 2023, three out of four substance-related deaths in Ottawa, Ontario's second-largest city, showed evidence of inhalation. Compounding the complexity of the increasingly toxic and unregulated drug supply, Ottawa has been experiencing a housing crisis. One in six opioid-related deaths in Ontario involved people experiencing homelessness. Sandy Hill Community Health Center and Belong Ottawa Drop-in Centre partnered to study the needs of people experiencing homelessness who inhale stimulants and/or opioids.

Methods: A qualitative study using an ethnographic approach was conducted in the summer of 2024 in Ottawa and asked what are the health needs for individuals who are unhoused and using opiates and/or stimulants in urban Ottawa, and what are their barriers to care? Individuals who inhale substances, as well as community agency staff, were interviewed. Interview data were analyzed using thematic analysis, and survey data were analyzed using descriptive statistics. Findings were presented back to the community with the help of the community advisory group.

Results: Thirty interviews were conducted with service users who identified as homeless and inhaled opiates and/or stimulants, and 10 interviews were with service providers. Interviews ranged in length from 20-60 minutes and were transcribed. The majority of service users were not homeless before using drugs and approximately one third reported they did not trust health care providers. Themes were organized using an ecological model and included Early Trauma and Lost Connections, Systemic Rigidity, Erasure from Public Space, and Misplaced Blame and the Absence of Home.

Conclusions: The study findings are relevant for communities working with people who inhale stimulants and/or opiates, health care providers, and for moving towards greater systems-level organizational change.

Background

Since 2016, when drug surveillance was implemented by the Public Health Agency of Canada, there have been over 50 000 apparent opioid toxicity deaths, and in 2025, of all apparent opioid toxicity deaths, 68% also involved a stimulant. Many individuals, families and communities in Canada have been affected by the opioid crisis, and health care providers need to better understand how we can meet the needs of people using substances. Historically attention has focused on injection drug use with funding in 2019 to expand supervised consumption sites in Ontario. The landscape of substance use has shifted in recent years, with more individuals now smoking opioids and stimulants. Programs have been slow to adapt to address the needs and challenges of people who now predominantly smoke to consume substances. By 2023, three out of four substance-related deaths in Ottawa, Ontario's second-largest city,

showed evidence of inhalation. Compounding the complexity of the increasingly toxic and unregulated drug supply, Ottawa has been experiencing a housing crisis. One in six opioid-related deaths in Ontario involved people experiencing homelessness. The multitude of barriers to health care for people experiencing homelessness have been well studied, and include tangible barriers such as access to transportation, and access to technology for virtual care as well as intangible barriers such as stigma and trust. Trust in health care was eroded during the pandemic as shelters were locked down, and people locked out. Food insecurity reprioritizes healthcare as people have a more pressing issue to find adequate food sources in the community. Sandy Hill Community Health Center and Belong Ottawa Drop-in Centre partnered to study the needs of people in Ottawa experiencing homelessness who inhale stimulants and/or opioids with the aim to reduce barriers to care and improve health outcomes.

Methods

Data Collection. A community advisory group was formed which included two individuals with lived experience of substance use and unstable housing, as well as members of the research team, and Sandy Hill Community Health Centre and Belong Ottawa. The advisory group helped with recruitment, modifying the semi-structured interview questions and questionnaire, reviewing findings, as well as supporting dissemination of findings. This qualitative study used an ethnographic approach, including a questionnaire (developed for this study, see supplementary materials), semi-structured individual interviews and observations with field notes. Four research assistants were hired for the project, all nursing students, who helped with the ethics application, literature review, data collection, and two research assistants helped with data analysis. Data collection took place from June until August 2024, in the Sandy Hill neighbourhood of Ottawa, Ontario, Canada. The aim of the study was to understand the health needs of individuals who are unhoused and using opiates and/or stimulants in urban Ottawa, and their barriers to care. Participants were recruited using purposive and snowball sampling. Participants included both individuals who inhale substances, as well as community agency staff. Interviews were conducted by pairs of research assistants. Participants received a $CAD50 honorarium for their time (unless agency staff were completing their interviews during paid work time). This study received approval from the Algonquin College Research Ethics Board and adhered to the ethical principles involving human subjects outlined in the Declaration of Helsinki (2024-APR-BINCH). Informed consent was obtained from all participants.

Data Analysis. Interviews were transcribed using Otter AI, and verified for accuracy by the research assistants. Interview data and field notes were analyzed using thematic analysis described by Braun and Clarke. During regular research meetings, all transcripts were each read, familiarizing each member of the research team with the data, and preliminary themes were systematically recorded. This inductive approach led to coded extracts and consensus of the team creating definitions of themes to compare as new transcripts were added to the data set. Atlas TI was used to continue coding based on the agreed upon definitions, and to create network diagrams of participants experiences and visualize data. Data was deductively organized after themes were developed, using an ecological model. Questionnaire

survey data was analyzed using descriptive statistics in Excel. Findings were reviewed by the community advisory group.

Results

There were 30 interviews completed with service users who identified as being homeless and who inhaled opiates and/or stimulants. Interviews with 10 service providers were conducted with people who worked with service users. Forty survey questionnaires were completed. Over twenty field notes were recorded during the study period. Twenty seven percent of service user participants identified as Indigenous (First Nation, Metis, or Inuit). Nine service users (30%) did not have a valid health card, ten (33%) reported they did not trust health care providers and twenty-one service providers (70%) had a diagnosis of at least one physical or mental health condition. Twenty percent of service users did not feel they had a connection to or knew about a primary care provider in the community for help with a health issue. Eighty-seven percent of service user participants reported that they were not homeless before using drugs. Most participants described starting drug use before the age of 16. Service providers who participated included harm reduction workers, nurses, case managers, social support workers and community workers.

There were several themes that emerged from the data. By using an ecological framework[11], data was organized into ecological systems: microsystem (interpersonal), mesosystem (organizations), exosystems (community), and macrosystems (society and systems) (Table 1).

Table 1
Themes and Subthemes

System: Ecological Model	Themes	Sub Themes
Microsystem	Early Trauma and Lost Connections	• Trust is Lost • Trauma Intertwined in Drug Use
Mesosystem	Systemic Rigidity	• Services Need to Be Flexible
Exosystem	Erasure from Public Space	• No Safe Places to Smoke • We Don't Belong
Macrosystem	Misplaced Blame and the Absence of Home	• Fentanyl Is the Enemy, Not the People • Housing and More Housing

Early Trauma and Lost Connections. Service user participants discussed how the breakdown of relationships with health care providers, and the breakdown of relationships and trauma early in life resulted in a loss of connection as a barrier to care. Any stigmatization by health care providers towards

people using substances connected and compounded previous trauma, and trust was lost towards the social care system more broadly.

Trust is lost. Participants reported many instances of negative interactions with health care providers, and failures within the healthcare system stigmatizing people who use drugs.

They [the hospital] don't agree with this safe supply, so they cut your medication back, so you're dope sick the whole time in the hospital … I think they're actually trying to kill me

–SP

I've been in the hospital, and I have, look at the size of my ears. I have super hearing. I can hear what the nurses are saying out in the halls and what they're saying about their clients. It's rude… and prejudice and racist and bigotry, a lot of bigotry.

-Koala

Trust is a big word. What's their agenda you know? Is it a personal thing that they want to really help you, or is it doing their job? No [I would not voluntarily go to see a nurse] because there is stigma and you can feel when provider he or she is really there to really help you.

-Burgundy

Trauma intertwined in drug use. Many service user participants discussed early childhood trauma, substance use at a young age, or substance use as a strategy for managing on-going trauma, all contributing to further loss of connection.

I have seen way too much.

–MH

…On my 13th birthday my mom gave me … crack … because she said once we turn into teenagers, and then we can smoke some crack.

-BL

Systemic Rigidity. Participants discussed the difficulty prioritizing health while meeting basic needs. This theme at the level of the mesosystem, reflected directly on organizations within the community creating barriers, often unintentionally.

Services need to Be flexible. Participants discussed the challenges for people smoking substances in keeping strict appointment schedules while navigating food, shelter, and healthcare. Service user participants talked about how difficult it was to not only prioritize their health but keep up to the expectations around time and getting to different locations around the city for their various needs.

..a lot of that is my, my fault too. I procrastinate a lot miss appointments. Forget about appointments, sleep in…

-Sample

"I went and I got more fentanyl than I normally would, to compensate for my not getting my Kadian or methadone…"

-Bluelight

Erasure from Public Space. The intersection of homelessness and substance created situations where service users felt they did not have the support of the community to participate in spaces, and were seen as transient, and not full community members.

No safe places to smoke. Both service user and service provider participants discussed how there were no designated safe spaces for smoking, leading to use in public area. The public use often resulted in negative repercussions.

I see people OD [outside] all the time. Instead of people trying to help them out they'll go into their pockets...I keep reminding people to not do that. I don't like that.

-Orange

I always used to be that guy that was always on the nod in the corner somewhere and you could not wake up ever.

-Klein

Because as soon as the morning you wake up, you walk out the door [of the shetler] and you see people smoking and it makes you want to use you know, it's hard, especially if you're trying to stay clean.

-Frappe

We don't belong. Participants of both groups discussed how people who were homeless and living outside or in the shelter were seen as transient and therefore felt disconnected from their neighborhood and in turn the community not accepting people who use drugs as part of their neighbourhood. Several service user participants discussed moving to Ottawa but never feeling like they belonged to the community. This was often connected to living outside or in the shelter and hoping to move.

It's hard to work with someone who doesn't care anymore in the sense of care, but they just don't see the point when everyone around them is dying... I try to get people to respect a neighborhood when a neighborhood doesn't respect them, right? So they don't care if I go in someone's lawn and inject my crack, because they felt like that hopelessness is gone, that the belonging is gone, and the community is so fractured by death and whole generations of people gone. And this community did have a culture. This community did have social market to be and not to be, and that's disappearing.

–Leather (service provider)

Misplaced Blame and the Absence of Home. There was a recognition of fentanyl as the most common and potent drug, while advocating for compassion toward people who use it. Service users and providers discussed the societal stigma embedded in drug policy and public discourse. At this systems level, participants also discussed how generally people smoking substances used fewer drugs when housed but how some housing situations could worsen substance use, highlighting need for personalized, supportive housing.

Fentanyl is the enemy, not the people who use it. This theme brought together the complicated relationship of dependence on fentanyl: physically, psychologically and socially. Participants recognized their level of dependence on fentanyl as the most common and potent drug inhaled and often discussed how using opiates benefited their health in some way.

”So, like, I don't know. But without smoking fentanyl, I fucking scream in my sleep and cry in my sleep.”

-Bike

Participants recognized that they were tied to fentanyl even while knowing how dangerous it was to use, often expressing fear based on seeing many friends and family overdose and die.

But the thing with fentanyl is you don't know what you're getting. You don't know what, like, you could get a dose that's stronger than the next, or you could get something that's completely full of benzos. And Narcan doesn't bring you back from benzos. So, yeah, you wouldn't come back.

– Frappe

Housing and more housing. Many participants discussed how substance use smoking decreased when they were housed, but for some participants, housing could make use worse.

“I went to the viewing and they said, you want the room. I was like, does a bear shit in woods? Yes please. And since I got it like, my drug use has totally gone down, like, dramatically.”- KL

He went to inpatient treatment at the Royal doing absolutely fantastic. But when he was leaving, he had no where else to go to, other than his residence that was full crack…and then he relapsed.

-Pink (service provider)

Discussion

This study captured the experiences for people who are homeless and inhale opiates and/or stimulants in Ottawa, with implications for how we can best address the health needs of this community that has been disproportionately affected by the opiate and housing crisis. The findings aligned with levels of an ecological model: microsystem (interpersonal), mesosystem (organizations), exosystems (community), and macrosystems (society and systems). Although the study focused on people who are homeless who inhale stimulants and/or opiates, there is significant overlap with previous findings involving people with substance use disorder. The social exclusion of people who use substances has been suggested to be a form of trauma, and to begin addressing a person's concerns, we must look at how the degree of social exclusion is affecting presenting health needs. The findings of this study suggest that we need to talk about isolation, boredom and loneliness for people who are homeless and using substances and consider these health care priorities. While participants of this study did not report disclosure of personal health information or fear of negative consequences as a barrier in accessing health services, as has been suggested for some people who present to hospital and use substances, participants still described actions and interactions with health care staff that caused further marginalization and stigmatization. Participants indicated that positive interactions increase the likelihood of a person who inhales opiates and/or stimulants seeking help. As health care providers, we need to build trust between the hospital and community by offering training, rotations and developing compassionate mentorship communities to develop and ensure non-judgmental care. In response to the increasing rates of mortality related to inhalation of opiates and/or stimulants, this study underscored the need for safe places for people to smoke drugs and to include people who use drugs in ideas and solutions to create community. Participants of both groups talked about how there are places in our community to inject drugs, but there are no safe places to smoke drugs so people often resorted to use anywhere they could.

The sense of belonging in a community is associated with better health, both physically and psychologically[7]. We need to encourage activities that bring people who are homeless and inhale stimulants and/or opiates into the circle of community, even while in the shelters, because people have been excluded while they live in these "temporary" settings for months or years, and for some people this has resulted in an indifference to public inhalation. In looking at the needs of people who inhale stimulants and/or opiates, service users indicated the age addiction (not only use) started for most participants between the ages of 12 and 15 years old, and this suggests that we need to focus on identifying at risk youth, involve youth in treatment early, and retain youth in care with evidenced-based mental health supports. An area that participants focused on was the influence of the environment on inhalation substance use. Our findings suggest that post treatment housing and support needs to be discussed, and invested in, as much as plans for treatment. Housing transitions are an opportunity for change, and for many people who have been homeless, positive formal supports of case managers and

informal supports, such as friends and family, are critical to long-term housing retention. These supports need to be in place before treatment to ensure long-term success.

Strengths and Limitations. This study used a community advisory group to help inform the study from the stages of development, recruitment, analysis and dissemination. Findings have been presented at a community forum. Using a community advisory group helped ground the research plan and findings in community priorities and enhanced real-world applicability of the study. We need to recognize that inhaling opiates, inhaling stimulants, or inhaling both could represent very different perspectives that are not captured by combing these groups of people. Similarly, people who are unhoused may have different perspectives than people who are living in a shelter or precariously housed, but these groups were combined in this study in keeping with the Canadian definition of Homelessness.

Conclusions

This study demonstrates that people experiencing homelessness who inhale opioids and/or stimulants have healthcare needs that cannot be addressed through substance use treatment alone. People who inhale substances have unique needs, and the findings of this study suggest that social exclusion itself is a health crisis. Isolation and lack of community are intertwined with public substance use and poor health outcomes and must be addressed as health care priorities. The absence of safe inhalation spaces actively causes harm forcing people to use in public spaces and deepening marginalization. Positive interactions with health care providers will help prevent early hospital discharge and contribute to engagement in preventative care, and will only be realized with health care education and mentorship. The relevance of this study extends well beyond the City of Ottawa, as inhalation becomes the dominant mode of substance use across Canada. Health systems, communities and health care providers must adapt or continue to fail the very people they are designed to serve. Without investment and change, efforts to reduce overdose deaths will continue to miss some of the people at greatest risk.

Declarations

Ethics approval and consent to participate

This study received approval from the Algonquin College Research Ethics Board and adhered to the ethical principles involving human subjects outlined in the Declaration of Helsinki (2024-APR-BINCH). Informed consent was obtained from all participants for all aspects of the study.

Consent for publication

Not applicable

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

As a non-financial competing interest, at the time of the study Joanna Binch was employed casually as a nurse practitioner at Sandy Hill Community Health Centre. At the time of the study, Sheila Jewell was employed as a community worker at Sandy Hill Community Health Centre. All other authors declare that they have no competing interests.

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Authors' contributions

SJ was involved in data collection and helped analyze and interpret the transcripts. EM was involved in the literature review, data collection, and helped analyze early versions of the transcripts. VJ was involved in the literature review, data collection, and analysis of the transcripts. All authors read and approved the final manuscript.

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