



Research Paper

Chronic pain management among people who use drugs: A health policy challenge in the context of the opioid crisis

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ABSTRACT

Background: In Canada, the rise in prescription opioid (PO) overdoses and addiction is a major public health concern. Various health authorities have recently recommended that physicians use caution when prescribing opioids, especially to people with histories of substance use. As a result, fewer therapeutic options are available for people who use drugs (PWUD) and suffer from chronic non-cancer pain (CNCN). This paper examines how PWUD describe their experiences with CNCN management in the context of the opioid crisis.

Methods: This qualitative study is based on in-depth interviews with Montreal (Canada) PWUD experiencing CNCN for 3 months or more.

Results: Most of the 25 participants (27–61 years; 10 women, 15 men) were polysubstance users (cocaine, opioids, amphetamine, etc.) suffering from CNCN for several years, with multiple additional health and social problems. The majority were unsatisfied with their CNCN management. They felt labelled as “addicts” and stigmatized within the healthcare system. Many participants had been denied PO, even those with severe CNCN and those who were not opioid-dependent. Participants expressed a desire to access non-pharmacological CNCN therapies, but these were often too expensive. Some PWUD were offered methadone to relieve CNCN and found this inappropriate. As a last resort several participants reported self-medicating CNCN with street drugs, increasingly known to be laced with fentanyl.

Conclusion: PWUD with CNCN are affected by two opioid crises: the PO crisis and the street-opioid crisis. The lack of a coherent policy that addresses their pain management produces reoccurring problems when seeking CNCN relief. Restrictive prescription measures implemented in response to the PO crisis may have consequences similar to prohibitionist policies: they heighten overdose risks for PWUD by increasing exposure to street drugs laced with fentanyl. Improving access to diverse CNCN management options for PWUD can help reduce harms related to street-opioid use.

Introduction

Canada has the second highest level of opioid prescription in the world after the United States (Fischer, Gooch, Goldman, Kurdyak, & Rehm, 2014; Fischer, Jones, & Rehm, 2014; Fischer, 2015). From the 1980s onward, researchers, clinicians and policymakers considered that opioids were a safe and efficient resource for treating chronic non-cancer pain (CNCN) (Meldrum, 2016), until severe opioid-related harms

were identified (Fischer, Rehm, & Tyndall, 2016). In the past decade, several studies have underlined the consequences of opioid over-prescription in North America, showing positive correlations between rates of opioid prescription and prevalence of addiction and overdose mortality involving prescription opioids (PO) (Fischer, Nakamura, Urbanoski, Rush, & Rehm, 2012). Consequently, health authorities and governments now question the relevance of PO for CNCN. The most recent Canadian medical guidelines recommend that physicians use

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caution when prescribing opioids, and monitor abuse and overdose risk factors for all patients treated for CNCP (Busse et al., 2017). Many Canadian physicians are increasingly reluctant to prescribe opioids to people suffering from CNCP, concerned that the latter could develop problematic opioid use (Allen, Asbridge, Macdougall, Furlan, & Tugalev, 2013; Roy et al., 2016). A major change in opioid-related health policy is afoot: the current PO overdose crisis brings a new paradigm based on opioid-pharmacovigilance (Knight et al., 2017).

People who use drugs (PWUD) have long been identified as a population at risk of PO addiction and overdose death (Fischer, Gooch et al., 2014; Fischer, Jones et al., 2014; Gagné et al., 2014; Leclerc et al., 2016; Popova, Patra, Mohapatra, Fischer, & Rehm, 2009). In the current context of increasing restrictions on opioid prescription, CNCP management for PWUD may become progressively more problematic, thus raising a new major public health issue. PWUD suffering from CNCP could be among the most affected by physicians' growing reluctance towards opioids and by enhanced monitoring promoted in new guidelines. The Canadian Guidelines for Opioid Therapy and Chronic Noncancer Pain published in 2017 recommend against prescribing opioid painkillers to patients with histories of substance use, even when non-opioid pharmacotherapies are ineffective (Busse et al., 2017). This reduces the number of therapeutic options available to PWUD suffering from CNCP, and could exacerbate pain management problems for a population already facing many difficulties accessing pain relief services.

Some qualitative studies among healthcare providers report a phenomenon of undertreatment of pain for PWUD, caused by a tendency to underestimate PWUD's levels of pain (Baldacchino, Gilchrist, Fleming, & Bannister, 2010; McCreaddie et al., 2010; Sheu et al., 2008). Physicians and nurses often see their patients who use drugs as "drug-seeking addicts" (Baldacchino et al., 2010; Bell & Salmon, 2009; McCaffery, Grimm, Pasero, Ferrell, & Uman, 2005; McNeil, Small, Wood, & Kerr, 2014; Merrill, Rhodes, Deyo, Marlott, & Bradley, 2002; Monks, Topping, & Newell, 2013; Morley, Briggs, & Chumbley, 2015; Neale, Tompkins, & Sheard, 2007). Such reluctance can lead to mutual mistrust between PWUD and healthcare providers (Merrill et al., 2002; St. Marie, 2016).

Though several epidemiological studies suggest a significantly higher prevalence of CNCP among PWUD than in the general population (Clark, Stoller, & Brooner, 2008; Heimer, Zhan, & Grau, 2015), little is known about their pain management experiences. Only a few qualitative studies have documented CNCP experiences of opioid users (Voon et al., 2018), methadone patients (Karasz et al., 2004) and HIV patients with substance use disorders (Isenberg, Maragh-Bass, Ridgeway, Beach, & Knowlton, 2017). Researchers raised the issue of self-medication with street drugs, suggesting that chronic pain could increase illicit substance use among methadone patients (Karasz et al., 2004) and could lead opioid users to inject PO purchased on the street (Voon et al., 2018). The present study intends to augment this developing body of literature by looking at how PWUD with CNCP describe their experiences and problems with pain management within the current context of the opioid crisis. There is a need to address the issue of CNCP management for PWUD, given that their difficulties accessing pain relief could be intensified by restrictive guidelines recently instituted to solve the PO overdose problem. Furthermore, PWUD's overdose risks associated with CNCP self-medication with street drugs can be increased due to the presence of fentanyl-laced substances on the street drug market. Our study presents an opportunity to discuss challenges associated with opioid-related health policies.

Methods

This paper stems from a qualitative study carried out by social science and health researchers looking at CNCP experiences of PWUD in downtown Montreal, Canada. The study took place within the Canadian institutional setting. When research was conducted, Canada and the province of Quebec were facing major challenges to ensure access to

health care for socioeconomically disadvantaged populations. According to Quebec's ministry of health, 20% of the population did not have access to a dedicated family physician in March 2018. Canadian provincial governments provide a range of free healthcare services (family medicine and hospital consultations) to residents registered with public medical insurance boards. Additionally, Quebec has implemented a public drug insurance program, available to low-income individuals. However, many services are still only available within the private sector, causing major inequalities in access to health care.

We conducted in-depth interviews of PWUD suffering from CNCP between July 2017 and May 2018. To be eligible to the study, participants had to have used cocaine and/or opioids (with or without any other drug) at least once a week in the past 3 months, and to report CNCP lasting 3 months or more. They also had to be at least 18 years old, speak French and be able to give informed consent. Participants were recruited in three harm reduction community-based services, and through an ongoing prospective cohort study of people who inject drugs in Montreal (the HEPSCO cohort, which examines CNCP prevalence and correlates among PWUD). Recruitment in community-based services was facilitated through referrals by staff members or peer-helpers who helped identify PWUD suffering from CNCP. Eligible cohort participants were told about the study, and those who wished to participate were scheduled for an interview. Before the interview, the researcher asked brief questions about pain duration and substance use to confirm the person met study inclusion criteria. Participants were offered monetary compensation for their time (CAN\$25). The research was approved by the Centre Hospitalier de l'Université de Sherbrooke and the Centre Hospitalier de l'Université de Montréal Ethics Boards.

Interviews were conducted by the first author (LD) using a semi-structured guide that included open questions about CNCP experience and evolution since onset, CNCP management techniques, healthcare trajectory for CNCP management, and lifetime drug use trajectory. Interviews took place in harm reduction services or on cohort study premises. They lasted 40–90 minutes and were digitally recorded and transcribed. Data analysis was performed in conjunction with the interviews so the questions and selection criteria could be iteratively diversified within a sampling method drawn from grounded theory (Glaser & Strauss, 1967; Corbin & Strauss, 2015). After several interviews, we chose to recruit a few individuals who had used cocaine or opioids but had stopped for more than 3 months, to better understand pain relief difficulties for people with histories of past substance use.

Data were analysed using NVivo 9 software within a thematic analysis framework (Miles, Huberman, & Saldana, 2014). All interview transcripts were coded by the first author (LD) while the fourth author (NA) coded the first six (25%) to ensure consistency. Both LD and NA have significant experience in qualitative research. They carried out the coding process inductively, with no predetermined grid. Double coding the first six interviews led the authors to identify a preliminary set of themes (Berends & Johnston, 2005), which was enriched and refined iteratively during the analysis process. Memos were written to identify emerging patterns from participants' narratives (Miles et al., 2014). Many discussions about data interpretation took place among all authors throughout the analysis process. A professional translator familiar with qualitative research among PWUD translated the participants' quotes cited in this paper from French to English.

Results

After a brief description of the study sample, this section analyses barriers to adequate pain management for PWUD suffering from CNCP, using the framework of health inequalities (Arcaya, Arcaya, & Subramanian, 2015). Discrimination in the healthcare system and lack of appropriate pain relief alternatives have led to many deleterious consequences.

Table 1
Characteristics of study participants.

	<i>n</i>
Total number of participants	25
Age	
< 30	2
30–39	7
40–49	9
≥ 50	7
Gender	
Male	15
Female	10
Current substance use (within the past 3 months)	
Polysubstance use (2 substances or more)	18
Cocaine/crack	14
Heroin	8
Unprescribed pharmaceutical opioids	11
Prescribed pharmaceutical opioids	1
Methadone/suboxone (prescribed)	10
Amphetamine	6
Cannabis	11
Alcohol	9
Past substance use (over 3 months prior)	
Polysubstance use	25
Cocaine/crack	5
Heroin	9
Unprescribed pharmaceutical opioids	5
Prescribed pharmaceutical opioids	3
Methadone/suboxone (prescribed)	1
Amphetamine	3
Cannabis	5
Alcohol	4
CNCP location	
Multiple sites (2 sites or more)	9
Back	12
Knee	5
Legs/feet	5
Womb	3
Hand	2
Shoulder	1
CNCP duration since onset	
< 1 year	1
1–4 years	6
5–9 years	7
≥ 10 years	11
Occupational status	
Social welfare	17
Employed	8
Experience of homelessness	
Present	2
Past	16 ^a

^a For 6 participants, we could not collect information about past experiences of homelessness due to the sensitivity of the topic.

Characteristics of participants

A total of 25 participants were recruited, 11 from community-based programs and 14 from the cohort study. As seen in Table 1, 10 were women and 15 were men, aged 27–61. All but one were Caucasian, which is congruent with the characteristics of PWUD using harm reduction services in Montreal. Most were regular polysubstance users (e.g. cocaine/crack, opioids, amphetamines used several times a week in significant amounts). Ten participants were on methadone or suboxone treatment, sometimes with other co-occurrent substance use. Participants' CNCP resulted either from accident, illness, assault, complications of substance use (e.g. injuries following non-fatal overdoses), or difficult conditions typical of street life (e.g. repeatedly sleeping on

the street during winter). In addition to CNCP and drug use, most participants had complex health problems (e.g., HIV, hepatitis C, mental health problems) and social issues (e.g., homelessness, poverty, sex work). Further sample characteristics are summarized in Table 1.

Drug use: a major obstacle to pain management

During their trajectories within the healthcare system, several participants felt labelled as addicts and discriminated against. Whether they were users of cocaine, heroin or any other drug, the experience of stigma and discrimination was similar. They reported that many physicians tended to attribute pain to the consequences of drug use. PWUD were consistently referred to specialized addiction care services, where their other health issues and pain problems remained ignored:

When drugs became part of the mix, it was easy. Doctors just said, 'Of course, if you use drugs, that has to be the reason'. Once you're labelled a drug user, any pain you have is because of what you do with your body. We're the ones who caused the problem, so their answer is, 'We're not specialists in that area'. Then, they send us back to the methadone doctor. In my case, and like many people I've talked to, no one takes the problems of people who use drugs seriously. (Lucile, 46 years old)

Being a PWUD carries a stigma that can lead to pain management disruptions or problems. For example, Laure (27 years old) blamed her former family physician for shortening their meetings deliberately because he did not want to "have drug addicts as clients". She thought this obstructed the diagnostic process for her back pain since the physician examined her back only for a few seconds, saying he had no idea what could be causing the problem. Several participants felt that having the term "drug use" in their medical records was detrimental to their whole healthcare trajectory. Participants who had told physicians about their substance use regretted having done so, and wished they could have hidden their use so they would be treated like any other patient suffering from CNCP.

Opioid prescription denials: feelings of injustice and stigma

Difficulties accessing pain management because of physicians' prejudices towards addiction were exacerbated when it came to consideration of prescribing opioids to relieve CNCP, even for participants who had never been opioid-dependant or had stopped using opioids for a long time.

We're labelled from the start. That's for sure. As soon as they see that you inject, they decide they can't give painkillers. It's like they make that connection right away. But you know, in my case, cocaine doesn't take the pain away. (Karine, 36 years old)

PWUD are suspected of trying to get these medications for non-medical or commercial use. Almost all participants described times they were denied PO for pain relief. The phenomenon can go so far that those who had integrated the identity of addict and the attached stigma did not dare ask for PO because they anticipated physicians would deny them access.

Interviewer: Have you ever asked a doctor for painkillers or anything like that?

Participant: What? I'm an addict. Of course, they won't give me any. I've never dared ask. With my record? No way! They wouldn't want to. (Cathy, 50 years old)

Many participants thought being constantly denied PO was unfair, especially in the case of severe persistent pain. This intensified their feelings of powerlessness towards CNCP management. In their view, physicians felt that PWUD should not experience pleasure from pain medication. Physicians equated prescribing opioids to PWUD with providing substances for recreational use, which they viewed as

contradicting their healthcare mission. One participant stressed the absurdity of denying pleasure to PWUD, weighing it against the benefits of effective pain relief. He felt condemned to suffer because of his past heroin addiction.

The medications that relieve pain are opioids. It's not my fault. The others don't work. The problem is I'm an ex-heroin addict, and it seems that we have to live in pain. Because we've taken heroin, that's the end of it. We have to be in pain. We don't have the right to get medications. [...] Anyway, what's it to the doctor if they give me Dilaudid®, my back pain goes away and I feel a little high? What's important is that I don't have back pain anymore and I get on with my life. But for them, it seems that as soon as you get a bit of pleasure out of it, that's the end of it. I can't get medication and feel good at the same time? It's like eating chocolate, and having to not like it, you know? It's hard! Of course I'd like it, Dilau, but what I'd really like is not to have back pain anymore. (Mathieu, 46 years old)

Some participants' experiences with PO denials occurred prior to the overdose crisis. However, all participants felt that recent restrictive measures intensified denials. They reported that physicians now expressed concerns about PO addiction and overdoses by invoking legal barriers to prescription, arguing they "don't have the right" to prescribe opioids to PWUD:

My doctor, with overdoses and all that's going on, he can't prescribe more... he doesn't want to give me anything more than Empracet® because I'm an ex-addict. There've been too many overdoses or... you know. They don't give Fentanyl for that. But I wanted Dilaudid® or something like that, and they don't want to give it to me. (Silvio, 44 years old)

Ambivalence towards PO and poor access to other pain relief solutions

Participants' opinions about using PO for CNCP relief varied. Many were ambivalent about being prescribed opioids. Most of them perceived PO as the very last solution for intractable pain. Though participants wished they had the opportunity to try PO when nothing else relieved pain, these medications were rarely described as a first choice. Participants were aware of overdose risks and worried about becoming addicted to their medication or relapsing into dependence. Some understood physicians' decision not to prescribe because of the associated risks:

I know that if I took a Dilaudid® 4, I'd have no pain. But I have a history of taking it, of injecting it. So, they don't want to give me any. I understand why. It's normal because I might want to inject it. But still. I stopped injecting four years ago. (Norbert, 56 years old)

Generally, participants preferred non-pharmacological therapies with long-term effects, such as surgery or physiotherapy. Many wanted the problem to be permanently solved and not only masked by medication:

[Medication] is a short-term solution and doesn't always work. I would've liked a long-term solution. Something that lasts. A cure. (Bertrand, 39 years old)

However, non-pharmacological treatments were often unavailable for financial reasons, given that almost all participants had no private insurance. One participant looked for strategies to access a physiotherapist for free and concluded the only solution would be to have an accident and be admitted to a public hospital (in Quebec, public insurance only covers physiotherapy for hospitalized patients). Another participant explained he went to an acupuncturist only when he could borrow money from his family. He deplored not having acupuncture treatments as frequently as he wished.

I try not to think about pain, and I do the exercises doctors showed

me when I used to have physiotherapy. Because I don't have money to pay for physiotherapy. When I manage to get a little money, when my father helps me sometimes, then I go find an acupuncturist. Acupuncture's helped me a lot." (Julian, 40 years old)

Methadone for CNCP relief: not a panacea

Several PWUD were offered methadone to relieve their pain. For those who were already on methadone maintenance therapy, some physicians increased the dosage to relieve CNCP. Some participants reported that they will take methadone during their entire life because it does relieve their pain effectively. For some others, methadone did not relieve pain, even at high doses. Finally, a majority of participants on methadone maintenance treatment were very apprehensive about lowering their dose, since they were afraid that CNCP would get worse. They were unsure if physicians would give them pain medication when should the methadone treatment be stopped:

I told my doctor, 'Listen. The day I cut down on methadone, for sure you're going to prescribe some other painkiller for my legs. If I quit methadone, you'll prescribe another painkiller for me'. But she's not a doctor who prescribes [other] painkillers, you know, because she has an addiction [maintenance treatment] clinic. (Randy, 43 years old)

In other cases, methadone was not prescribed for opioid addiction treatment but was offered to relieve CNCP only. Participants found this inappropriate. Matthieu had stopped methadone maintenance treatment after 17 years and was offered it again for back pain, though he was no longer opioid dependent. One of his friends had died from a methadone overdose, so he thought it was absurd that his physician was offering methadone but refusing to prescribe other opioids. Several participants also mentioned the constraints methadone posed, such as having to see the pharmacist every day.

My doctor is recommending I go back on methadone... It took me 5 years to quit methadone. And I'm going to start again? That doesn't make sense. I was on methadone for 17 years. I won't go back on it. I'm really tired of being dependent on the pharmacist. [...] If you want me to go back on methadone, first, why don't you give me Dilau? It's much easier to carry around a container of Dilau than bottles, and... a friend of mine died from drinking out of my [methadone] bottles. He wasn't on methadone, and he drank the whole bottle and died. That wouldn't have happened with Dilau, because Dilau wouldn't have been in the fridge. So, I won't go back on methadone. (Matthieu, 46 years old)

Relieving pain with street drugs: a solution of last resort

Participants who reported using street opioids, heroin or cocaine to relieve CNCP often did so as a last resort, when pain became unbearable and no efficient legal alternative was available. Karine deplored that lack of CNCP relief, in addition to other difficulties in her life, contributed to augmenting her cannabis and cocaine use:

What I find makes things worse for me is not having effective pain medication, because I'm always in pain. So, like it or not, I smoke a lot of pot because of that. If I had medication for that, maybe I'd smoke less. I'd be less inclined to use, even coke, because like it or not, sometimes we use because of feeling exasperated with everything that's going on in our lives. So sometimes, I'm just like, 'fuck it, when I do that, I don't feel pain anywhere!' (Karine, 36 years old)

Pain self-management with street drugs is also driven by defiance towards the healthcare system and physicians. This was especially the case for participants who had experienced poor healthcare in the past. For example, after Didier was denied medication for an acute pain

problem, he decided not to see a physician anymore, preferring using street opioids and cannabis. He stated that he preferred self-managing his health problems because he did not trust physicians any longer.

Some participants using street drugs to self-medicate their CNCP expressed concerns about overdose risks due to fentanyl-laced substances. One participant explained that physicians' growing reluctance to prescribe opioids to any CNCP patient had led to a shortage of PO on the black market. She turned to heroin instead, though she knew it was more dangerous because of the presence of fentanyl:

It wasn't too hard for a year and a half. I got Dilau [on the black market]. Then I don't know if it's because... There was an item on Radio-Canada a few months ago on opioid medications. They said that the College of Physicians was recommending not to prescribe Dilau, hydromorph anymore. Lots of people I know on the street had their prescriptions cut. So, they don't even have any for themselves. They can't sell it anymore either. So, for the past 3 or 4 months, it's really been hard to find any. The big problem for us is that we're addicted. So, we turn to heroin. That's what's happened. And with heroin and fentanyl right now, it's really stressful. (Laure, 27 years old)

Discussion

This qualitative study is one of the first to address experience of CNCP management among PWUD recruited outside of clinical settings. PWUD with CNCP are at the crossroads of several public health and social issues. They face recurrent problems when seeking relief for CNCP, and could be affected by two “opioid crises”: the PO crisis and the street-fentanyl overdose crisis. So far, this population has been neglected in pain management and addiction health policies.

This paper highlights the inequalities that PWUD face in their attempts to access CNCP relief. PWUD are a stigmatized group, as defined by Link and Phelan (2001): the structural discrimination they face because of their socially disqualified habit leads to individual harmful consequences such as poor pain management. Notions of labelling and stigma are highly useful to understand PWUD's trajectories in the healthcare system. Due to the “addict” label, PWUD with CNCP are systematically referred to addiction management settings. They experience difficulties accessing other services, even for health problems unrelated to substances. Many of their health issues are then interpreted through the prism of substance use, which can be detrimental to their medical follow-up. Although some studies recommend developing pain relief care within opioid addiction treatment services to improve PWUD's pain management (Barry et al., 2014; Clark et al., 2008; Heimer et al., 2015; Potter, Prather, & Weiss, 2008), our study suggests that this solution is not appropriate for all PWUD. Indeed, subordinating PWUD's pain management to their status as drug users may further stigmatize them. They still could not access the same services as other patients suffering from CNCP.

Our findings support concerns raised in some previous studies about the use of methadone to manage PWUD's CNCP (Karasz et al., 2004; Voon et al., 2018). CNCP can be a barrier if patients wish to stop their methadone maintenance treatment (Karasz et al., 2004). According to Voon et al. (2018), when methadone is used to treat both opioid addiction and CNCP, it is more often the physician's choice than the patient's one. Our study results also suggest that physicians' preference to manage CNCP with methadone would not be related so much to its pharmacological properties but rather to its associated monitoring procedures (e.g., daily distribution, drug testing) which are perceived as effective ways to prevent abuse among PWUD. Studies on physicians' perspectives about these issues are clearly needed.

Our study highlights that PWUD are sometimes offered methadone to treat CNCP while they are not currently using opioids. To our knowledge, this finding had never been reported before. Pain management within methadone maintenance treatment clinics implies that

PWUD are seldom recognized as patients suffering from CNCP; instead, the “addict” status remains at the forefront. Social science studies on chronic illnesses and pain have shown how hard it is for a person to accept chronicity: the process involves making major changes in daily life and grieving the loss of prior health (Good, 1994; Hardy, 2013; Kleinman, 1988; Strauss, 1975). In the present study, PWUD compelled to take methadone for CNCP find it even more difficult, since they need to deal with the socially stigmatized status of “addict” as long as their pain persists.

PWUD face a major scarcity of resources for appropriate CNCP relief. Our data emphasize that lack of access to pain management is a problem for PWUD whatever substance they use. It does not affect opioid users only. Socioeconomic barriers are important factors at stake as PWUD often face unemployment and poverty. As Knight et al. (2017) previously reported, in North America, medication is the most accessible health resource to relieve pain for persons with limited financial means. Non-pharmacological treatments are expensive and therefore difficult to access for people in deprived socioeconomic situations. This study shows that unlike other economically disadvantaged people living with CNCP, being PWUD rarely enabled participants to access the only resource they could afford: medication, especially PO. Greater clinical vigilance brought on by the recent PO overdose crisis has left physicians with little or no resources to relieve PWUD's pain (Knight et al., 2017) thereby increasing inequalities when compared to other CNCP patients who do not use illicit drugs. Clinical trials assessing the efficacy of pharmacological agents other than methadone or opioids are clearly needed to improve the condition of PWUD with CNCP. New health policies should also focus on improving affordability of non-pharmacological modalities such as physiotherapy. Such policies would represent a step forward in line with the stated needs of PWUD with CNCP.

Our study also shows that public policies designed to reduce opioid prescription in the current overdose crisis context are a double-edged sword. Policies may inadvertently encourage PWUD with CNCP to turn to street drugs for relief. A few studies of street opioid use have noted that a person can use these substances alternatively to relieve pain, to counter heroin withdrawal symptoms, or for recreational purposes (Davis & Johnson, 2008; Roy, Richer, Arruda, Vandermeersch, & Bruneau, 2013). Our data indicate that PWUD suffering from CNCP may turn to street drugs intentionally to relieve CNCP when medication is denied (this was also reported by Ti et al., 2015; Voon et al., 2015) or when no alternative therapeutic option is available. Although this situation alone can increase overdose risks, our results suggest that the risks are even greater in the current context where fentanyl-laced substances can circulate on the street drug market. In another recent study, participants considered opioid prescription as a potential harm reduction solution to avoid heroin overdoses (Voon et al., 2018). As our study reveals, PWUD suffering from CNCP might feel compelled to take heroin when PO are unavailable on the black market. Restrictive measures regulating opioid prescriptions currently being deployed in response to the PO overdose crisis may have unintended consequences similar to prohibitionist drug policies. Prescription decreases may intensify the risks for PWUD by increasing their exposure to street fentanyl overdoses. Policies currently responding to the PO crisis may exacerbate the street-fentanyl crisis. Risks could intensify for all PWUD, but those suffering from CNCP are even more exposed because of difficulties accessing adequate pain management. This is a paradoxical effect of a policy meant to protect people with CNCP from PO overdoses. Improving access to diverse, affordable CNCP management options for PWUD can thus help reduce harms associated with street-opioid use.

Study limitations and strengths

Like any study, the present one has limitations. First, the study was conducted with PWUD in Montreal (Canada), and it is important to

consider the impact of the local context (e.g. CNCP management services, substance use trends) to appreciate the situation of PWUD suffering from CNCP. However, Montreal is probably not unique, but perhaps exemplary of the lack of affordable alternatives to pharmacological approaches for CNCP management. This situation is more the norm than the exception in North American healthcare systems. Second, the risk of recall or social desirability biases is a concern with self-reported data. Hence, all interviews were conducted by a single interviewer, trained in qualitative methods and familiar with the topic and the population.

Despite its limitations, this research represents a major contribution to the social study of CNCP and substance use. The sample consisted of PWUD recruited in the community who had multiple health and social problems. Few studies have documented their plight. Furthermore, the sample included non-opioid users and thereby provided a broad analysis of pain management problems among PWUD. Another important strength of the present study is the use of qualitative methods, which provide a deep understanding of PWUD's perspectives about their CNCP management. We believe that more research is needed in this area. It would be highly relevant to replicate this study in other settings, possibly using mixed-methods designs, to bring broader perspectives to problems encountered by PWUD who suffer from CNCP.

Conclusion

This study reveals structural problems experienced by PWUD suffering from CNCP, caused by the lack of a coherent pain management policy for this population. Current health policies remain blind to inequalities in access to CNCP management faced by PWUD. Moreover, use of street drugs for pain relief often results from insufficient alternatives. This may have dramatic consequences in the context of the opioid crisis. New health policies are needed to recognize CNCP as a real issue for PWUD, just as for any patient, and to develop diverse pain management options adapted to this population's structural and individual specificities.

Conflict of interest statement

There are no conflicts of interest to declare.

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References

- Allen, M. J. M., Asbridge, M. M., Macdougall, P. C., Furlan, A. D., & Tugalev, O. (2013). Self-reported practices in opioid management of chronic noncancer pain: A survey of Canadian family physicians. *Pain Research & Management*, *18*(4), 177–184.
- Arcaya, M. C., Arcaya, A. L., & Subramanian, S. V. (2015). Inequalities in health: Definitions, concepts, and theories. *Global Health Action*, *8*. <https://doi.org/10.3402/gha.v8.27106>.
- Baldacchino, A., Gilchrist, G., Fleming, R., & Bannister, J. (2010). Guilty until proven innocent: A qualitative study of the management of chronic non-cancer pain among patients with a history of substance abuse. *Addictive Behaviors*, *35*(3), 270–272. <https://doi.org/10.1016/j.addbeh.2009.10.008>.
- Barry, D. T., Savant, J. D., Beitel, M., Cutter, C. J., Schottenfeld, R. S., Kerns, R. D., et al. (2014). The feasibility and acceptability of groups for pain management in methadone maintenance treatment. *Journal of Addiction Medicine*, *8*(5), 338–344.
- Bell, K., & Salmon, A. (2009). Pain, physical dependence and pseudoaddiction: Redefining addiction for “nice” people? *The International Journal of Drug Policy*, *20*(2), 170–178. <https://doi.org/10.1016/j.drugpo.2008.06.002>.
- Berends, L., & Johnston, J. (2005). Using multiple coders to enhance qualitative analysis: The case of interviews with consumers of drug treatment. *Addiction Research & Theory*, *13*(4), 373–381. <https://doi.org/10.1080/16066350500102237>.
- Busse, J. W., Craigie, S., Juurlink, D. N., Buckley, N., Wang, L., Couban, R. J., et al. (2017). Guideline for opioid therapy and chronic noncancer pain. *Canadian Medical Association Journal*, *189*, E659–666.
- Clark, M. R., Stoller, K. B., & Brooner, R. K. (2008). Assessment and management of chronic pain in individuals seeking treatment for opioid dependence disorder. *The Canadian Journal of Psychiatry*, *53*(8), 496–508.
- Corbin, J., & Strauss, A. L. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Los Angeles: Sage.
- Davis, W. R., & Johnson, B. D. (2008). Prescription opioid use, misuse, and diversion among street drug users in New York City. *Drug and Alcohol Dependence*, *92*(1–3), 267–276.
- Fischer, B. (2015). Prescription opioid use, harms and interventions in Canada: A review update of new developments and findings since 2010. *Pain Physician*, *18*, E605–E614.
- Fischer, B., Nakamura, N., Urbanoski, K., Rush, B., & Rehm, J. (2012). Correlations between population levels of prescription opioid use and prescription-opioid-related substance use treatment admissions in the USA and Canada since 2001. *Public Health*, *126*(9), 749–751. <https://doi.org/10.1016/j.puhe.2012.04.010>.
- Fischer, B., Gooch, J., Goldman, B., Kurdyak, P., & Rehm, J. (2014). Non-medical prescription opioid use, prescription opioid-related harms and public health in Canada: An update 5 years later. *Canadian Journal of Public Health*, *105*(2), 146. <https://doi.org/10.17269/cjph.105.4143>.
- Fischer, B., Jones, W., & Rehm, J. (2014). Trends and changes in prescription opioid analgesic dispensing in Canada 2005–2012: An update with a focus on recent interventions. *BMC Health Services Research*, *14*(1), 90.
- Fischer, B., Rehm, J., & Tyndall, M. (2016). Effective Canadian policy to reduce harms from prescription opioids: Learning from past failures. *CMAJ*, *188*(17–18), 1240–1244. <https://doi.org/10.1503/cmaj.160356>.
- Gagné, M., Dubé, P.-A., Perron, P.-A., Langlois, É., Légaré, G., Sirois, M.-J., et al. (2014). *Décès attribuables aux intoxications par opioïdes au Québec, 2000 à 2009*. Institut national de santé publique du Québec.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Good, B. J. (1994). *Medicine, rationality and experience: An anthropological perspective*. Cambridge - New-York: Cambridge University Press.
- Hardy, A.-C. (2013). *Travailler à guérir*. Rennes: ENSP.
- Heimer, R., Zhan, W., & Grau, L. E. (2015). Prevalence and experience of chronic pain in suburban drug injectors. *Drug and Alcohol Dependence*, *151*, 92–100.
- Isenberg, S. R., Maragh-Bass, A. C., Ridgeway, K., Beach, M. C., & Knowlton, A. R. (2017). A qualitative exploration of chronic pain and opioid treatment among HIV patients with drug use disorders. *Journal of Opioid Management*, *13*(1), 5–16. <https://doi.org/10.5055/jom.2017.0363>.
- Karasz, A., Zallman, L., Berg, K., Gourevitch, M., Selwyn, P., & Arnstein, J. (2004). The experience of chronic severe pain in patients undergoing methadone maintenance treatment. *Journal of Pain and Symptom Management*, *28*(5), 517–525. <https://doi.org/10.1016/j.jpainsymman.2004.02.025>.
- Kleinman, A. (1988). *The illness narratives: Suffering, healing, and the human condition*. New York: Basic books.
- Knight, K. R., Kushel, M., Chang, J. S., Zamora, K., Ceasar, R., Hurstak, E., et al. (2017). Opioid pharmacovigilance: A clinical-social history of the changes in opioid prescribing for patients with co-occurring chronic non-cancer pain and substance use. *Social Science & Medicine*, *186*, 87–95. <https://doi.org/10.1016/j.socscimed.2017.05.043>.
- Leclerc, P., Roy, E., Morissette, C., Alary, M., Parent, R., & Blouin, K. (2016). *Surveillance des maladies infectieuses chez les utilisateurs de drogues par injection: Épidémiologie du VIH de 1995 à 2014 - Épidémiologie du VHC de 2003 à 2014*. Retrieved from Institut national de santé publique du Québec <http://deslibris.ca/ID/10050978>.
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*(1), 363–385. <https://doi.org/10.1146/annurev.soc.27.1.363>.
- McCaffery, M., Grimm, M. A., Pasero, C., Ferrell, B., & Uman, G. C. (2005). On the meaning of “drug seeking”. *Pain Management Nursing*, *6*(4), 122–136. <https://doi.org/10.1016/j.pmn.2005.08.002>.
- McCreadie, M., Lyons, I., Watt, D., Ewing, E., Croft, J., Smith, M., et al. (2010). Routines and rituals: A grounded theory of the pain management of drug users in acute care settings. *Journal of Clinical Nursing*, *19*(19/20), 2730–2740. <https://doi.org/10.1111/j.1365-2702.2010.03284.x>.
- McNeil, R., Small, W., Wood, E., & Kerr, T. (2014). Hospitals as a ‘risk environment’: An ethno-epidemiological study of voluntary and involuntary discharge from hospital against medical advice among people who inject drugs. *Social Science & Medicine*, *105*, 59–66. <https://doi.org/10.1016/j.socscimed.2014.01.010>.
- Meldrum, M. L. (2016). The ongoing opioid prescription epidemic: Historical context. *American Journal of Public Health*, *106*(8), 1365–1366. <https://doi.org/10.2105/AJPH.2016.303297>.
- Merrill, J. O., Rhodes, L. M., Deyo, R. A., Marlott, G. A., & Bradley, K. A. (2002). Mutual mistrust in the medical care of drug users. The key to the Narc Cabinet. *Journal of General Internal Medicine*, *17*, 327–333.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis. A methods sourcebook* (3rd ed.). Sage Publications.
- Monks, R., Topping, A., & Newell, R. (2013). The dissonant care management of illicit drug users in medical wards, the views of nurses and patients: A grounded theory

- study. *Journal of Advanced Nursing*, 69(4), 935–946. <https://doi.org/10.1111/j.1365-2648.2012.06088.x>.
- Morley, G., Briggs, E., & Chumbley, G. (2015). Nurses' experiences of patients with substance-use disorder in pain: A phenomenological study. *Pain Management Nursing*, 16, 701–711.
- Neale, J., Tompkins, C., & Sheard, L. (2007). Barriers to accessing generic health and social care services: A qualitative study of injecting drug users. *Health & Social Care in the Community*, 16(2), 147–154. <https://doi.org/10.1111/j.1365-2524.2007.00739.x>.
- Popova, S., Patra, J., Mohapatra, S., Fischer, B., & Rehm, J. (2009). How many people in Canada use prescription opioids non-medically in general and street drug using populations? *Canadian Journal of Public Health*, 100(2), 104–108.
- Potter, J. S., Prather, K., & Weiss, R. D. (2008). Physical pain and associated clinical characteristics in treatment-seeking patients in four substance use disorder treatment modalities. *The American Journal on Addictions*, 17(2), 121–125. <https://doi.org/10.1080/10550490701862902>.
- Roy, É., Richer, I., Arruda, N., Vandermeerschen, J., & Bruneau, J. (2013). Patterns of cocaine and opioid co-use and polyroutes of administration among street-based cocaine users in Montreal, Canada. *International Journal of Drug Policy*, 24(2), 142–149. <https://doi.org/10.1016/j.drugpo.2012.10.004>.
- Roy, É., Thibault, C., Dubé, P.-A., Hamel, D., Labesse, M.-E., & Coté, R. (2016). Opioid abuse and dependence among patients with chronic non-cancer pain: A training challenge in pain management for Québec family physicians. *Presented at the joint ISAM & CSAM-SMCA meeting*.
- Sheu, R., Lussier, D., Rosenblum, A., Fong, C., Portenoy, J., Joseph, H., et al. (2008). Prevalence and characteristics of chronic pain in patients admitted to an outpatient drug and alcohol treatment program. *Pain Medicine*, 9(7), 911–917.
- St. Marie, B. (2016). The experiences of advanced practice nurses caring for patients with substance use disorder and chronic pain. *Pain Management Nursing*, 17, 311–321. <https://doi.org/10.1016/j.pmn.2016.06.001>.
- Strauss, A. L. (1975). *Chronic illness and the quality of life*. Saint Louis: Mosby.
- Ti, L., Voon, P., Dobrer, S., Montaner, J., Wood, E., & Kerr, T. (2015). Denial of pain medication by health care providers predicts in-hospital illicit drug use among individuals who use illicit drugs. *Pain Research & Management*, 20(2), 84–88.
- Voon, P., Callon, C., Nguyen, P., Dobrer, S., Montaner, J. S. G., Wood, E., et al. (2015). Denial of prescription analgesia among people who inject drugs in a Canadian setting. *Drug and Alcohol Review*, 34(2), 221–228.
- Voon, P., Greer, A. M., Amlani, A., Newman, C., Burmeister, C., & Buxton, J. A. (2018). Pain as a risk factor for substance use: A qualitative study of people who use drugs in British Columbia, Canada. *Harm Reduction Journal*, 15(1), 35. <https://doi.org/10.1186/s12954-018-0241-y>.