

“No, my name’s not on the lease at all”: an interpretive phenomenological analysis of unstable housing and hepatitis C among people who inject drugs

Roisin McColl, Peter Higgs and Brendan Harney

Abstract

Purpose – Globally, hepatitis C treatment uptake is lower among people who are homeless or unstably housed compared to those who are housed. Understanding and addressing this is essential to ensure no one is left behind in hepatitis C elimination efforts. This study aims to explore peoples’ experiences of unstable housing and health care, and how these experiences influenced engagement in hepatitis C treatment.

Design/methodology/approach – Purposive sampling was used to recruit people with lived experience of injection drug use, hepatitis C and unstable housing in Melbourne, Australia. In-depth semistructured interviews were conducted and a case study approach with interpretative phenomenological analysis was used to identify personal experiential themes and group experiential themes.

Findings – Four people were interviewed. The precarious nature of housing for women who inject drugs was a group experiential theme, however, this did not appear to be a direct barrier to hepatitis C treatment. Rather, competing priorities, including caregiving, were personal experiential themes and these created barriers to treatment. Another group experiential theme was “right place, right time, right people” with these three elements required to facilitate hepatitis C treatment.

Originality/value – There is limited research providing in-depth insight into how personal experiences with unstable housing and health care shape engagement with hepatitis C treatment. The analyses indicate there is a need to move beyond a “one size fits-all” approach to hepatitis C care. Instead, care should be tailored to the needs of individuals and their personal circumstances and regularly facilitated. This includes giving greater attention to gender in intervention design and evaluation, and research more broadly.

Keywords Homelessness, Hepatitis C, Public health, Social research, Injecting drug use, Unstable housing

Paper type Research paper

Roisin McColl is based at the Disease Elimination Program, Burnet Institute, Melbourne, Australia and School of Public Health and Preventive Medicine, Monash University, Melbourne, Australia. Peter Higgs is based at the Disease Elimination Program, Burnet Institute, Melbourne, Australia and School of Public Health, La Trobe University, Melbourne, Australia. Brendan Harney is based at the Disease Elimination Program, Burnet Institute, Melbourne, Australia; School of Public Health and Preventive Medicine, Monash University, Melbourne, Australia and Department of Infectious Diseases, Alfred Health and Monash University, Melbourne, Australia.

Background

Globally, hepatitis C is highly prevalent among people with a history of injection drug use (Degenhardt *et al.*, 2017). Likewise, people who continue to inject drugs are a key population group at risk of new hepatitis C infection. This is despite the availability of a range of evidence-based harm reduction interventions including sterile needle and syringe programs (NSP) and opioid agonist therapy (OAT), both of which have been shown to reduce the risk of hepatitis C (van Santen *et al.*, 2023). OAT and NSP however remain underfunded and, in many cases, opposed outright in a range of settings globally with only five countries worldwide defined as providing adequate coverage of both (Colledge-Frisby *et al.*, 2023).

Since 2014, hepatitis C treatment with direct-acting antivirals has been available in many countries with cure rates almost universally exceeding 90% among people who inject drugs (Hajarizadeh *et al.*, 2018). This has led to a dominant biomedical and public health

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discourse, that hepatitis C direct-acting antiviral treatment is “easy” and cure is “inevitable”. However, it is important to note that this is when contrasted with the interferon era of treatment which was typified by treatment timelines of up to a year, notable negative side effects (Fraser and Seear, 2011) and cure rates as low as 50% depending on the hepatitis C genotype (Hadziyannis *et al.*, 2004). However, despite the perceived ease and acceptability of direct-acting antivirals, virtually all countries globally had policies that restricted treatment access. For example, in the USA, restrictions based on current substance use were the norm rather than the exception (Barua *et al.*, 2015). While this was less common in Europe, prescribing was almost exclusively restricted to specialist physicians (Marshall *et al.*, 2022) and this remains so in numerous European countries. Restrictions such as these contradict the best available evidence and global guidelines, however, as suggested by others (Kind *et al.*, 2022), evidence alone has not been enough to drive hepatitis C policy change. This reiterates that hepatitis C treatment still remains inherently “political” (Fraser and Seear, 2011).

When compared to most other countries, Australia has minimal restrictions for hepatitis C treatment. There are no restrictions based on current substance use or stage of liver disease. Treatment has been made available in the community and primary care services as well as tertiary hospitals, and treatment for reinfection is government-funded. Based on this, Australia has received a “perfect” score for hepatitis C-related policies (Palayew *et al.*, 2020). Nonetheless, a body of Australian research building on the earlier work of Fraser and Seear explores a range of critical questions regarding hepatitis C treatment, and nontreatment, in the direct-acting antiviral era (Fraser *et al.*, 2022; Moore *et al.*, 2023; Farrugia *et al.*, 2022). Where previously limited attention has been given to broader structural and political forces, this work provides an important counterpoint and critique.

Housing, or the lack thereof, is well recognized as a social and political determinant of health. Though difficult to quantify with precision, people who inject drugs are particularly impacted by homelessness with a complex relationship between the two, leading to what has been referred to as a “double jeopardy” (Neale, 2001). Further work from Neale focused on hepatitis C also suggests that homelessness amplifies the risk of hepatitis C among people who inject drugs (Neale, 2008). More recent research continues to highlight unstable housing and homelessness as a risk environment for hepatitis C among people who inject drugs (Aung *et al.*, 2021; Arum *et al.*, 2021). Similarly, even in an era of “easy” treatment for hepatitis C, evidence indicates that people who are homeless or unstably housed are less likely to commence treatment compared to those who are housed (Alavi *et al.*, 2019; Beiser *et al.*, 2019; Harney *et al.*, 2022). There is a growing body of qualitative literature focused on homelessness, or housing more generally and hepatitis C treatment. However, this research has usually focused on designing hepatitis C services for people who are experiencing homelessness (Nyamathi *et al.*, 2021) or as post-intervention evaluation (Surey *et al.*, 2021). While this can inform the design and evaluation of services, there remains limited understanding of the broader life experiences and challenges of people who inject drugs who are homeless or unstably housed and are living with hepatitis C. Drawing on interviews with people with lived and/or living experience of hepatitis C, homelessness and injecting drug use, we aimed to explore how these personal experiences influence barriers and facilitators to hepatitis C treatment and related healthcare.

Methods

Recruitment

Participants were purposively selected from the SuperMIX cohort (Van Den Boom *et al.*, 2022), Australia’s longest running and only observational cohort study of people who inject drugs. Participants were eligible for recruitment if they self-reported current or previous experiences of unstable housing during their most recent survey and had serological evidence of lived experience of hepatitis C. As recruitment occurred during strict COVID

lockdowns in Melbourne, outreach-based fieldwork could not be conducted. Therefore, the participants recruited were able to be contacted via mobile phone and/or social media, which was facilitated by a senior SuperMIX investigator (P.H.). All interviews were conducted remotely via mobile telephone calls (R.M. and P.H.) and participants were reimbursed by bank transfer with \$40 on completion of their interview for their time.

Analyses

Using a case-study approach, data were analyzed using interpretive phenomenological analysis (IPA). IPA is particularly useful to explore topics that are complex and emotionally laden and is suited to small sample sizes, allowing in-depth and detailed accounts of experience (Smith *et al.*, 2022). As such, notions of generalizability and representativeness are not applicable. Rather, a central tenant of IPA is giving voice to the individual experiences of participants. IPA does not impose a preconceived theory but instead enables a flexible exploration of participants' experiences. This approach allowed participants to shape the direction of the interview regarding their interactions with health and housing services, creating depth with minimal guidance by the research team beyond a few preprepared prompts based on what was already known from the literature.

The lead author transcribed all interviews verbatim and data was read and re-read for data familiarization. The next step involved initial note-making, by attaching comments, summaries and keywords to text segments of transcripts, which were managed within NVivo 12 software.

Using the updated terminology suggested to be both simpler and more suitable to the experiential focus of IPA (Smith *et al.*, 2022), we use the terms personal experiential themes and group experiential themes in presenting our findings. For each case, personal experiential themes were developed through the analysis of experiential statements, i.e. what is said by a participant, and these may be themes unique to that one case. We then present group experiential themes, inclusive of similarities and differences, across the cases.

Throughout the analysis process, including before and during data collection and analysis, reflection and the consideration of researcher positionality were practiced. Such ongoing reflection is crucial to maintain awareness of the influence of the researcher on the interpretation of findings and is integral to the methodology of IPA. The three authors have varied career lengths and included an honors student, a postgraduate student and another holding a PhD with over 20 years of experience in working with the population. All are strong advocates for harm reduction programs and housing first initiatives which may influence interpretation of the data. R.M. and B.H. had no prior interaction or knowledge of any of the interview participants. P.H. had previous interactions and knowledge of the participants via their continued role as a member of the SuperMIX field work team.

Ethics

Ethics approval was granted through Alfred Health human research ethics committee (Project 318/21) and all human research ethics protocols were followed.

Informed consent was gained from participants both at the time of first contact and, after going through the participant information and consent form, was re-gained immediately prior to commencing the interview. Member-checking also formed part of the feedback process to enhance the authenticity of the data collection. To achieve this, the participant's verbatim transcript and initial interpretations of the data were provided back to the participant on request.

Findings

Four people with lived experience of injection drug use, homelessness and hepatitis C were interviewed (R.M. and P.H.). All four people were currently prescribed OAT, two were currently living with hepatitis C, i.e. had a positive test for hepatitis C ribonucleic acid (RNA) while two were hepatitis C RNA negative but had previously been exposed to hepatitis C. All reported currently injecting drugs at least weekly.

Case 1: April

At the time of the interview, April was 41 and had hepatitis C twice. She had spontaneously cleared it the first time, i.e. did not receive medical treatment. The second time, she was treated and cured. She was hepatitis C RNA negative at the time of her interview, currently prescribed OAT and reported injecting once a week. At the time of the interview, April and her young daughter were living with her parents in a house the parents owned. April describes her life prior to her experience of homelessness:

I'd only ever known stability all my life. Many years of being, sort of, in my twenties and that sort of stuff, living in share houses. But we never had an issue. I've been with my partner for such a long time. We have our daughter. He had a good job. Even though we were using, we were living good lives. Yeah, it just got to the point – we got a notice [to vacate the premises because of rental [arrears] and we just couldn't [pay the rent] in time.

In this statement, April refers to stability, counter to the research question focused on unstable housing. This is perhaps of importance to April as she wanted to ensure an accurate representation of her circumstances. This is seen also when discussing her personal experiences of homelessness:

I was in a rental house for about two and a half years, before that I was homeless for eight months. So, when I say homeless, sort of moving around from motel to motel and going through government housing services and that sort of stuff to try and get a rental. In the end we just got a rental house ourselves.

April quickly clarified what she meant by “homeless” as it applied to her particular situation. Like her statements regarding stability, April was making efforts to clarify her own situation and differentiate herself from sleeping on the streets or in improvised dwellings, i.e. rough sleeping. While people sleeping rough may face additional barriers to hepatitis C treatment compared to other people using housing services (Harney *et al.*, 2019), April goes on to explain in detail how her living arrangement, combined with taking her daughter to kindergarten and her partner to work in different parts of Melbourne, coalesced to limit her ability to engage in hepatitis C care:

Cause [my partner] was working, my daughter was still at kinder in [outer north-west Melbourne]. So, I would drive him, we had one car, to work in [inner south-east Melbourne] early in the morning, then I would come from [inner south-east Melbourne] back to [outer north-west Melbourne] to drop my daughter at kinder. Then I'd pick her up again and go all the way back to [inner south-east Melbourne] to pick him back up. We'd only have a few hours to actually use the motel. We'd have to do housing appointments and all that sort of stuff during the day. And we'd only have a few hours to stop. We were exhausted by that time. Next thing you've got to pack all your stuff up and move on. It's impossible to take care of anything. Anything. We were struggling, you know showering, doing anything with the doctors at all. It was impossible. You know, you have to do your washing all the time, that sort of stuff. We had to get money together, plus our habit, so when we weren't using we'd get sick, so we had to sort that out at some stage. You know, it was impossible.

[. . .] there was just no time to scratch yourself or think about your health. Everything else at the time was life and death for a three-and-a-half-year-old. It didn't matter what was going on for us, it was on the backburner I guess.

For April, her housing situation in and of itself was not an issue in accessing hepatitis C treatment. Rather, she and her partner trying to provide stability for her daughter, and themselves, was an apparent barrier to receiving treatment. This may constitute what is commonly referred to as “competing priorities” with both employment and caregiving responsibilities reported as barriers to hepatitis C treatment in other settings ([Kapadia et al., 2023](#)).

A well-recognized barrier to hepatitis C treatment is the stigma ([Harris and Rhodes, 2013](#)). While April did not use the word stigma itself, anticipated stigma and more specifically government policy driven by this stigma, was a notable concern of hers:

I was so afraid, you know, having a drug habit and that sort of thing. As soon as I fell pregnant, I'd only had a drug addiction [...] maybe six months before I fell pregnant. And I didn't want to be one of those bloody parents who didn't take care of their kid or ended up with DHS [Department of Human Services now known as Department of Families, Fairness and Housing], lost their child all that sort of stuff. I did everything in my power so that she could go to kinder, look tidy, that people didn't really know what was going on because I was so afraid people would say she's on drugs, she doesn't have a house and take my kid. So, I really did everything in my power to not reach out to anybody. Because I had such a fear of losing her.

This narrative from April reinforces findings that mothers or potential mothers who inject drugs have concerns about child protection services becoming involved in the care of their children ([Oni et al., 2022](#); [Boyd et al., 2022](#)). April herself engaged in “othering” behavior by referring to “those bloody parents who didn't take care of their kid”. This suggests that even for mothers who inject drugs who consider themselves to be responsible parents, the possibility of child protection service involvement is an ever-present threat and is another potential barrier to hepatitis C care. In addition to anticipated stigma, self-stigma was also initially a barrier to hepatitis C care for April:

By the time I went to the study [Treatment and Prevention (TAP) study] I'd been using for a few years and knew a lot more people in this sort of lifestyle and stuff like that. So I wasn't so ashamed of it. But the first time I was very ashamed. So I wouldn't have told anybody, wouldn't want anybody to know.

April goes on to explain her experience with the treatment and prevention (TAP) study ([Goutzamanis et al., 2021](#)) in more detail:

I remember it was really easy for me, I mean, I didn't need to go out searching to get on medication or anything. I found out because I was doing a study to get money. That was how I found out that I had hep C. Because, you know, I did the bloodwork to get the money at the time. The fact was there was people that would help me, hand me the medication and I didn't have to go to the chemist, I didn't have to do any of that sort of stuff. [The study] was keeping me on track with the medication even though I was missing a lot of it, it was reminding me to keep going with it and that sort of thing. And knowing someone was keeping an eye on it and gave a shit whether I was healthy or not.

For April, her involvement in the TAP study made hepatitis C treatment, in her words, “easy”, because it eliminated the need to visit multiple clinical services. April also freely mentioned she took part in this study because of the money being offered as reimbursement. Revisiting the work of Farrugia and colleagues ([Farrugia et al., 2022](#)), it could be suggested that the removal of the need to visit multiple services provided material change by allowing April more time to address the other needs she had in her life. This same concept drives the logic of providing hepatitis C testing and treatment in community-based settings used by people who inject drugs ([Oru et al., 2021](#); [Di Ciaccio et al., 2023](#)), including services providing OAT. However, as April explained while unstably housed, maintaining engagement in OAT is challenging, and missing doses may result in being “kicked off” OAT:

We were getting kicked off the program at that stage, off the program possibly weekly.

Because it was so hard to pick up the medication [. . .]. We'd just think 'oh it's only been two days' and go back and it's actually been four days. And we'd get kicked off. So, then it would take us two or three days to have the time to get an appointment with the doctor and then you know we'd back on it and wouldn't be able to get to the chemist for a few days. So, you know, we were getting kicked off all the time we were so worn down. We had no money, we had no house. We were trying to keep our family together, trying to keep our family safe. And you know, try not to let people know the situation we were in at the time as well. It wasn't easy.

During her interview, April does not blame anyone when she describes this situation. Rather, she again points to caregiving responsibilities and concerns about not letting people know about her family's situation, which again highlights the social force of stigma. These caregiving responsibilities, aspirations and wanting to prove herself to be a good mother, were further explained toward the end of April's interview:

I pay rent, pay bills, all that sort of stuff. I earn my keep around the house [. . .]. Because I have to prove to my own self, her [daughter], and everybody else in the world, no, I'm her mum and I'm doing a damn good job. But when I'm here it's like, I act more like a child. Because I can, I think. I know I can't stick with that. But I'm using my health as a really good excuse. It's been working for a while. But after this surgery whilst I'm here I've sort of got no excuses. It'll be time.

This above narrative emphasizes a personal experiential theme for April as one of “care giving and responsibility”. April's concern about anticipated stigma *vis-à-vis* involvement from child services as it relates to being a mother who injects drugs also ties into this theme. Whether consciously or subconsciously, “differentiation of circumstances” was another personal experiential theme for April as she explained how life was mostly stable with only a brief period of less-visible homelessness when living in a motel. Stigma also seeped into this theme through April herself, as she engaged in “othering” behavior when referring to parents who do not take care of their children. The third personal experiential theme for April was “disabling and enabling environments”; in April's experience, being homeless was a disabling environment from which to access her OAT daily. Conversely, her participation in the TAP research study provided an enabling environment and made hepatitis C treatment, “easy” for her by providing material change, including in the form of financial compensation. Similarly, it also alleviated concerns about anticipated stigma by undergoing treatment with people who she recognized cared for her well-being.

Case 2: Shelley

Shelley was 40 at the time of her interview and was living in public housing with her partner and his young adult daughter. She was currently prescribed OAT and reported injecting once daily. She was currently hepatitis C RNA negative, having spontaneously cleared a previous infection. Shelley had experiences of sleeping rough and staying in short-term emergency and crisis accommodation provided by various organizations in Melbourne and explains her experiences with this:

They can only do so much. Like, they'll put you in a women's house and sometimes you can't go into women's housing, because of some of the rules and stuff [. . .] especially being on drugs as well. They look at you like you're a piece of shit.

A couple of times I'd got into, like, places to stay that have had rules and sometimes I wouldn't get home in time and get locked out. So I'd have to go sleep on the street.

Here Shelley ties together “rules” related to drug use, curfews and perceptions of stigma. This suggests that even for someone able to and willing to engage in these services, there are a number of challenges remaining in place for someone actively using drugs. While Shelley was currently living with her partner and considered herself stably housed, she also recognized how quickly this could change and how she may resort to sleeping rough:

It can just happen overnight. Know what I mean? I can have an argument with my partner, fall out with him, and he can say get out, and then I'm out on the street. You know what I mean? It could just take that one thing. Yeah. It's hard.

This statement suggests that Shelley's housing circumstance was quite precarious despite being in stable "public housing". Although living with her partner, her name was not on the lease. Shelley went on to explain how her various living arrangements also made engagement with OAT challenging:

Travelling [to the pharmacy] in the mornings, like, if I hadn't stayed in the area, it was a bit hard [...] I wake up in the mornings and the first thing I want to get is my methadone. And so I've got to travel an hour, hour and a half. And I'm so sick before I even get there. It's really hard [...] I don't have money to get a taxi every morning. So it's hard.

Shelley goes on to explain how her experience of sleeping rough created even more challenges:

People take them [take-away doses] off you if your sleeping. Like you'd get bashed in the streets for your methadone. You can get attacked for it. You've got to hide your methadone. And as I said, when you're living on the street and you're not near your chemist that day – the next morning, you're so sick, you know. It's so hard to get your methadone if you haven't got housing. And sometimes there's no housing and you can't get housing. Yeah.

While Shelley had personally spontaneously cleared her hepatitis C infection, based on her experiences of sleeping rough and trying to maintain OAT, she extrapolated these experiences to discuss some of the likely challenges for people when engaging in hepatitis C treatment while in this situation:

People on hep C [treatment], I think it's pretty hard. You're living on the streets. You're not doing the best. I don't know how anyone can do it on the streets. So if I was living on the streets, I don't think I could do the treatment. It'd be pretty hard.

If you're moving around there's a good chance – good chance you're going to lose them [hepatitis C treatment tablets], someone's going to steal them thinking they're something else. Or something's going to happen. That's just an accident waiting to happen.

In these statements, Shelley indicates that if she were sleeping rough, she would be unlikely to engage in hepatitis C treatment due to the risk of losing or having medications stolen, including the possibility of being physically assaulted in the process. This is a well-recognized issue not only for hepatitis C medications but also more generally for people who are homeless, particularly those who are rough sleeping (Davies and Wood, 2018). Conversely, at various points during her interview Shelley discussed her engagement with staff at a community health service and stated this was where she would go for hepatitis C treatment if required:

I'd go to [community health service]. See what the go was. Yeah, of course. That's the only place I really need to get anything.

Shelley had experiences and made statements that lead to a personal experiential theme of "perpetual precariousness". This is because of the rules of crisis and emergency accommodation providers regarding curfews and substance use. Not adhering to these rules could result in having to sleep rough, with Shelley having experienced exactly this. Likewise, while she was seemingly happy with her current living arrangements, she also acknowledged this was still at the mercy of her partner as her name was not on the lease. While Shelley had not required hepatitis C treatment, a personal experiential theme for Shelley was one of "acute double awareness" as she was aware of the challenges of engaging in hepatitis C treatment while rough sleeping from her experiences with OAT, but she also knew precisely where she would go if she needed to engage in hepatitis C care.

This was because she had managed to build a trusting relationship with the lived experience staff there, and particularly the peer workers working on the NSP.

Case 3: Nicolas and Innis

Though not intentional, Nicolas was the only male with living experience of injecting drug use, unstable housing and hepatitis C recruited and interviewed for this study. He was 41 at the time of the interview and reported injecting six times per week. While this was not set out to be conducted as a dyad interview, Innis, Nicolas' partner, was also interviewed at the same time. Innis was 39 and reported injecting twice a week. Both Nicolas and Innis were currently prescribed OAT and both had active HCV infection at the time of the interview. Nicolas and Innis were living in public housing, however, Innis was not on the lease. She describes their housing situation prior to this:

We were actually homeless. Living on the streets homeless, camping tents set up at Russell [Flagstaff] Station on Lonsdale Street. So, we were quite transient in our [...] we really didn't have any stable accommodation. I'd say [...] for a year and a half prior to that. We come up from [regional Victorian city]. This is from a transitional property [...]. that's pretty much who put us onto the streets, made us come home.

Nicolas goes on to explain that there was confusion about their situation with their housing and this led to them being homeless:

I wasn't aware that I was [being taken to] VCAT [Victorian Civil Administration Tribunal] to get evicted. The [charity] lady told me that the lease has run out and that they didn't want to give me the lease, they wanted me to pay rent and I didn't have to worry about the VCAT. So the lady told me and I didn't worry about it. And then next thing, I've got the police coming. So I had one lady told me one thing, and then the police came and boarded the joint up. And they started moving everything out.

Both the statements from Innis and Nicolas suggest there was potentially some miscommunication about their previous transitional housing situation which they both at least partially attribute to now sleeping rough. Experiences of forced eviction like this reinforce the challenges of trying to engage with housing services for people who inject drugs, even when they are willing and able to.

Generally, Innis and Nicolas described being engaged in health care, and Nicolas discussed what seemed to be a good relationship with the doctor prescribing his methadone:

I'm still seeing Doctor [name] at [inner-city suburb]. Still got our scripts for methadone from there. But when we speak to the doctor, we don't go in there, we speak to him on the phone. I haven't spoken to the doctor in like eighteen months, man. I speak to him on the phone, and he sends the script straight to the chemist.

However, Nicolas and Innis went on to explain how this was not possible while they were homeless:

Nicolas: "Not then we weren't [on OAT]. No. We tried to get on it and we couldn't maintain the program".

Interviewer: "So what was happening that you couldn't maintain it?"

Innis: "We were using daily".

Nicolas: "Using, had no money, sleeping on the street".

Innis: "We were begging on the street. It was \$20 a cap back then, remember?"

Nicolas: "The methadone wasn't cutting the mustard, and we were still using on it anyway. So, it really made the habit worse to be honest".

Based on these statements, it is apparent that Innis and Nicolas wanted to engage in and maintain OAT while homeless, however, their circumstances were not conducive to this. As Nicolas refers to methadone not “cutting the mustard”, he means that the methadone dose he was receiving was not adequate to stop his cravings for injecting and to avoid heroin withdrawal symptoms. Nicolas and Innis had also both been engaged in hepatitis C treatment, though for different reasons, both were HCV RNA positive at the time of the interview. Nicolas discusses his experience with treatment:

You gave me the pills the first time. And I cleared it. Cleared the virus out of my system. And then I contracted it again, a second time. And I done it again with you and I cleared it again. And now I've contracted it again.

When Nicolas states he has “contracted it again” he is referring to what is commonly called reinfection in clinical and epidemiological hepatitis C research. For Nicolas, it is likely that sleeping rough created a risk environment for reinfection as he could not maintain OAT and/or was receiving an inadequate dosage. In contrast to maintaining engagement in methadone treatment while homeless, Nicolas suggests being treated through the TAP study was easy because he was living on the street. He goes on to state that this is how he would try and get treated again, but also that it is not a priority for him:

It was easy because I was living on the street anyway.

I'd probably try, probably go through you guys again I suppose. But I'm reasonably healthy.

In his explanation of some of what is currently happening in his life, it is clear that there are a number of competing priorities:

I've got court matters that are outstanding – a few outstanding serious charges from my neighbour downstairs, she's charging me of stalking and all sorts of shit. But she's cooked on ice [...] I've had issues with my dog. I had a dog and she didn't like it.

For Nicolas his explanation of being homeless and living on the street possibly meant he did not have much else to do, so he may as well engage in treatment. In contrast, once he was actually housed, new problems arose and dealing with these problems was a more pressing concern for him than reengaging in treatment.

Innis also had to deal with other issues before being able to commence hepatitis C treatment, however, these were more of a personal health nature as she explains:

There was an interaction type thing with the medication. The antibiotics – cause I got that bad infection, got a bad Staph infection and, yeah, so I had to stop taking the meds that you guys gave me. And then when I stopped my other medications and they tried to start me again, I ended up taking one or two pills, only two times.

Innis means she wanted to start treatment however another medical issue prevented her from doing so. Given people who inject drugs may have multiple health needs, some of which need to be addressed before hepatitis C, it is important that while someone may not be ready for treatment at the time, they are still offered treatment when they are ready. Innis noted such an experience with the doctor prescribing her methadone:

He has brought it up several times – each phone consult. And um, especially with the lockdown, Covid, he says it's the best time to do it. Because, you know, you're locked down, you've got nothing to do. You don't get side-tracked doing other things and forgetting to take it. He just thought this would be a good time. A good opportunity. We've just never gotten around to going into the clinic. But yeah, I would love to.

For both Innis and Nicolas, a personal experiential theme was “wanting to but being unable to”, as they wanted to engage in stable housing, OAT and hepatitis C treatment, however, they faced both system-level and individual-level barriers to doing so. Related to hepatitis C

treatment, they had a personal experiential theme of “uncommon but different”. Nicolas had what would be referred to as reinfection, an uncommon outcome that is often described as a “concern” or “threat” in the elimination of hepatitis C (Falade-Nwulia *et al.*, 2018). However, Nicolas did not seem concerned or threatened by this himself. Statements from Innis suggest she started, or attempted to start, treatment twice, but could not finish her treatment because of other health related issues. While this is also an uncommon outcome, people like Innis who are still living with hepatitis C are at risk of longer-term personal health problems including liver cancer, and can potentially transmit hepatitis C to other people. Unlike reinfection, however, the situation Innis finds herself in is not usually referred to as a “concern” or “threat” to the elimination of hepatitis C.

Group experiential themes and cross-case comparisons

The three women we interviewed considered their housing to be stable. However, were these arrangements to come to an end, these women may have had to resort to other temporary accommodation or sleeping rough, something with which they were already aware. As such, “precarious housing for women” was a group experiential theme. As noted by others, many women who inject drugs have a different lived reality to most men who inject drugs (Iversen *et al.*, 2015) and our findings support calls for greater attention to be given to gender in hepatitis C research (Larney *et al.*, 2022). For example, gendered differences were seen in our interviews when Nicolas suggested hepatitis C treatment was “easy” while he was sleeping rough. Conversely, Shelley, a woman, was adamant that she would be unlikely to engage in hepatitis C treatment while sleeping rough. It is likely that as a woman, Shelley was more concerned about theft of medication and possible physical violence, both of which she described, whereas this was less of a concern for Nicolas.

OAT is a well-established form of harm reduction and is associated with a reduced risk of hepatitis C among people who inject drugs (van Santen *et al.*, 2023). However, evidence also indicates people who are homeless face more barriers to OAT than people who are housed (McLaughlin *et al.*, 2021), and this was also true for our participants. Though all were currently prescribed OAT, they all reported challenges in maintaining engagement with OAT while homeless, leading to a group experiential theme of “cycles of housing and harm reduction”. The nature of these challenges varied depending on their situation at the time. Requirements for daily dosing were problematic for people who weren’t living nearby. However, “take-aways” or “carries” were also problematic for people sleeping rough due to concerns about theft and physical assault.

For hepatitis C treatment, “right place, right time, right people” was a group experiential theme. April and Nicolas both used the term “easy” to describe their treatment. An important caveat to this is that they were treated via a community-based study (Goutzamanis *et al.*, 2021) which was far from the standard of care at the time. Nonetheless, April in particular elucidated how this was an ideal way to be treated because it removed individual barriers including the need to go to multiple services. Likewise, she recognized that the nurses at the center of the study cared for her health. In somewhat of a paradox, when Nicolas was housed, he described how this made engaging in treatment more challenging, as new issues arose in his life that were more of a concern for him. Similarly for his partner Innis, she had to deal with more pressing health concerns before engaging in a full course of treatment. Despite this, they both reported knowing where to go when they were ready for treatment. Likewise, while Shelley had never been treated because she had spontaneously cleared her infection, she knew exactly where she would go as she had built a trusting relationship at a health care service who could provide harm reduction and social care services. This supports the further upscaling of hepatitis C testing and treatment in services already used by people who inject drugs where they may have established relationships (Oru *et al.*, 2021; Di Ciaccio *et al.*, 2023).

Discussion

Our IPA provides a detailed insight into the personal experiences of four people with lived and/or living experience of injection drug use, hepatitis C and homelessness. While on one hand these may be considered homogenous experiences, and indeed there was commonality among the people we interviewed, there was also a high level of heterogeneity in these experiences. Similar to recent analyses critiquing the biomedical framing of hepatitis C treatment as “easy” and cure as “inevitable” (Farrugia *et al.*, 2022; Moore *et al.*, 2023), our findings also highlight four different hepatitis C outcomes, and show how these are shaped by a range of personal circumstances. These personal circumstances however are influenced by societal expectations and policy choices, which share their own complex relationships. We agree with and recognize that social and political determinants of health should be given greater attention within the hepatitis C elimination agenda. Nonetheless, we also suggest that our findings, and similar findings from other groups, can and should be used to take advantage of a policy window in Australia that, at least for now, seems committed to hepatitis C elimination.

While the continued provision of hepatitis C testing and treatment in harm reduction settings is critical, we suggest this also needs to be upscaled in homeless services and pharmacies. This however needs to be tailored to the setting to account for the multiple competing priorities of both staff and people using these services. In addition, while replicating what works in primary health care and harm reduction services may work for some people, it is also likely to leave other people behind. As noted in our analyses, engagement in hepatitis C care is dependent on individual circumstances, however, most people are expected to adhere to whatever has been determined by treatment providers to be suitable. More individualized approaches for people who are sleeping rough could include simple and cost-effective personalized medication storage options (Morris *et al.*, 2023). Within pharmacies, some people may be happy to receive daily hepatitis C dosing alongside their daily OAT, however others may prefer to receive one weeks or one months' worth of medication at once, which again, is dependent upon their own individual circumstances (Gunn and Higgs, 2020).

There are some limitations to our work. Namely, occurring at a time of strict COVID lockdowns in Melbourne, we were unable to conduct face-to-face interviews and had to rely on those who were contactable by mobile phone or social media. Similarly, at the time of the interview, all people with lived experience had relatively stable housing. This means that the people we interviewed may not be reflective of even more marginalized people who inject drugs.

Our analyses add to a body of qualitative research that plays an important role in understanding the far more dominant quantitative research exploring housing, homelessness and hepatitis C. There is a need to tailor novel interventions to reach people who may not be attending harm reduction services and ensure these can equitably reach women who inject drugs as they likely face additional barriers to hepatitis C care. Regarding this, our findings support the call for research, whether qualitative or quantitative, to be conducted with an explicit gender lens. It is also important to note that hepatitis C is one small facet of life for people who inject drugs; we further suggest this gender lens should apply to all research related to the health care and other needs of people who inject drugs.

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Corresponding author

Roisin McColl can be contacted at: roisin.mccoll@mh.org.au

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