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Exploring the need for overdose prevention centers in England: A qualitative community-based participatory study on the perspectives of people who use drugs in public and semi-public environments

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ABSTRACT

Background: Overdose prevention centres (OPCs) have been implemented as a harm reduction response in around 20 countries; with one just opened in the UK. In a context of rising rates of drug-related deaths, this study aimed to assess the need for an OPC in Sandwell, England, by examining the experiences and perspectives of local people who use drugs

Methods: Qualitative data were collected through three focus groups, 20 street-based interviews with people who use drugs, and observations from four ethnographic field sessions. This was a community-based participatory project and included community consultation during study design and peer researcher participation during data collection, analysis and dissemination.

Results: Findings evidence how the threat of public and police interaction in semi-public drug use spaces leads to rushed injection practice, hampers poor venous access management, and increases risk of injection-related harms. Participants were enthusiastic about the concept of an OPC and its potential to reduce injecting-related risks, drug-related death, provide safety, and prevent traumatic experiences with police. Participants also highlighted concerns about negative public perceptions of their community, viewing an OPC as a potential solution to improving community relations by reducing drug-related litter.

Conclusions: There is an urgent need for OPC implementation, given current risks from rushed injection practices, the lack of safe spaces, and the increasing presence of nitazenes and other unexpected contaminants in the UK drug supply. The assertion from local people who drugs that an OPC would be an appropriate and effective intervention requires prioritisation by policymakers.

Background

Co-production

The UK is amid a public health crisis, marked by rising premature mortality among some of its most marginalised citizens – people who use drugs (Angus et al., 2023; Holland et al., 2022). In 2023, England and Wales recorded 5448 drug-related deaths (approx. 9.3 per 100,000) (Office for National Statistics, 2024). Similarly, in this period in Scotland, the number of recorded deaths reached 1172 (approx. 19.3 per

100,000) (National Records of Scotland, 2024). These figures signify a drastic increase since 2007, with Scotland experiencing a 157 % rise in drug-related fatalities, with a 106 % increase in England and Wales during this period (Office for National Statistics, 2024). With the recent detection of a new and highly potent group of synthetic opioids, nitazenes (some being hundreds of times more potent than heroin), within the UK drug supply, including in the West Midlands where this study was conducted, (Pucci et al., 2024), there is a concern that drug-related

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fatalities could increase in the coming years without increased investment in harm reduction interventions (Holland et al., 2024). Overdose risk is additionally exacerbated by socio-environmental factors such as homelessness (Doran et al., 2022; Yamamoto et al., 2019). In the UK, the most recent estimates suggest 354,000 people experienced homelessness in 2024, with numbers rising (Shelter, 2024).

Within the context of this rise in drug-related deaths, the UK Government has received several independent recommendations calling for the piloting of Overdose Prevention Centres (OPCs)¹ (UK Faculty of Public Health, 2022; Holland et al., 2022; House of Commons Home Affairs Committee, 2023). An unsanctioned site in Glasgow provided evidence that these facilities can be effectively implemented in the UK (Shorter et al., 2022). Despite these calls to action and increased government investment in the wider drug treatment sector (Stevens, 2022), plans to trial OPCs were not included in the UK governments' recent 10-year drug strategy (Holland et al., 2023; UK Home Office, 2021). Scotland recently opened Glasgow's first legally sanctioned OPC (Glasgow City Health & Social Care Partnershp, 2023). Although in Glasgow policymakers have overcome political challenges regarding the establishment of an OPC, in the rest of the UK, their implementation continues to face opposition (Guise et al., 2023; Holland et al., 2022).

OPCs provide supervised, safe and sterile environments for people to consume illicit substances. Trained professionals are present to respond to overdoses and provide harm reduction advice. International evidence compiled in systematic and other reviews (Kennedy et al., 2017; Levengood et al., 2021; Shorter et al., 2023) suggests that by providing spaces of safety, trust, and social inclusion, OPCs can reduce the harms associated with drug injection practice and help people to connect to health and social supports (Scher et al., 2024; Stevens et al., 2024; Keemink et al., 2025). Internationally, studies suggest OPCs reduce mortality and morbidity risks of people who use them, as well as demands on emergency medical services (Bouzanis et al., 2021; Levengood et al., 2021). By providing sterile injecting equipment and harm reduction advice, these sites promote safer injecting practice which reduces risk of HIV and hepatitis C transmission, also skin and soft tissue infections and associated sequelae (Doran et al., 2020; Fischer et al., 2019; Harris et al., 2020a; Lalanne et al., 2024; Small et al., 2012). Reviews on community impacts also highlight how these facilities are effective interventions to reduce public drug use and the presence of drug-related litter (Kennedy et al., 2017; Levengood et al., 2021; Shorter et al., 2023). Studies highlight significant cost savings through reductions in emergency service callouts, reductions in disease transmission and subsequent treatment and number of life-years gained (Bayoumi & Zaric, 2008; Khair et al., 2022). Notwithstanding variations in models and capacities of services, OPC implementation can be an appropriate and effective response in settings where people are at risk of overdose, injury and infection from the consumption of illicit substances, use drugs in isolation and/or do not have anywhere safe, secure, or sterile (Kennedy et al., 2022; Shorter et al., 2023).

The context of focus for this study is Sandwell, a town in the UK with a population of 341,900 (as of 2022) bordering the west of Birmingham, in the West Midlands region of England and spanning an area of 86 km. In 2019, Sandwell was ranked 12th most deprived of England's 317 boroughs (Sandwell 2021 Census Profile, 2022). Sandwell is estimated to have a higher rate of people using opiates and/or crack cocaine (11.68 per 1000) than England (8.85 per 1000) and the West Midlands (9.61 per 1000) (NHS, 2021). Local service provider data suggests in 2021, 48 % of people who use opiates in Sandwell were not in treatment including substitution treatment or otherwise (Stevens et al., 2022). Analysis of service provider and local government data suggests that there are

approximately 250 people who are experiencing homelessness or who are unstably housed who are likely to be injecting opiates (Stevens et al., 2022). Compared to other areas of the UK Sandwell has a moderate level of new HIV diagnoses, of which an unspecified number are related to injecting drug use and whilst data is not collected in relation to rates of HCV, over 90 % of new cases nationwide are related to injecting drug use (Stevens et al., 2022). In theory, this population would be the primary target population of any intervention like an OPC which sought to respond to overdose, mitigate drug administration harms and connect people with housing, treatment, and/or other desired services.

The aim of this study was to capture the current lived experiences of people who use drugs in local street-based settings. Rhodes et al. (2006) note quantitative, epidemiological data often focuses on individual-level risk practices, such as needle and syringe sharing, and can overlook the way in which the physical, policy and social environment shapes vulnerability to risk and associated health harms. Ethnographic, qualitative methods which attend to the interplay of environment and risk are therefore well placed to complement epidemiological data and inform effective community-responsive interventions.

Participatory methods of knowledge generation, including through "representative participation" (Gallegos et al., 2023) of the local community of focus, are recognised to enhance research relevance and applicability (Moore et al., 2019). Here, the community affected by the issue or intervention of focus are central to the design and undertaking of the knowledge production surrounding it (Scher et al., 2023b). While previous research has explored how people who use drugs in the UK navigate their drug use in the absence of safer drug consumption environments, (Hunt et al., 2007; Ng et al., 2004; Parkin, 2016; Parkin & Coomber, 2011a, 2011b), this has not focused on the need or applicability of OPCs within a localized UK context or incorporated community participatory methods in doing so.

Safer environment interventions and the risk environment

While definitional terms vary (eg., overdose prevention centre, supervised consumption site, drug consumption room) across countries, legal, and drug policy contexts, spaces in which the physical and/or social environment is reshaped by, for example, enabling people to consume drugs with oversight, can be characterized as 'safer environment interventions' (Ivsins et al., 2023; McNeil & Small, 2014; Rhodes et al., 2006; Yoon et al., 2022). Qualitative research (Degenhardt et al., 2023; Fadanelli et al., 2020; Harris et al., 2020a; Rhodes et al., 2006; Small et al., 2007; Strathdee et al., 2010) highlights an interplay between three recognised environmental risks informing implementation: 1) injection urgency due to fear of interruption or apprehension when consuming drugs publicly, 2) challenge of finding private spaces in which to consume drugs, and 3) issues of hygiene and physical safety, often compromised by the conditions of the surrounding physical environment (i.e., unsanitary surfaces, absence of essential amenities like adequate lighting or clean water, debris, isolated environments increasing overdose risk). Fear of adverse contact and violence from the police and others in the environment is also reported as a common reason for people to use OPCs, where they exist (Stevens et al., 2024). In describing such settings, Parkin and Coomber (2009) demarcate between 'controlled' and 'uncontrolled' public consumption sites. Here, 'controlled' consumption sites are public places like toilets, car parks, parks, or stairwells commonly frequented by the public. These locations are either fully or partially monitored by staff, typically have electronic or manual surveillance and are regularly cleaned. They provide ways to discreetly use drugs in spaces which are much closer to where people may already be during their daily activities. In contrast, 'uncontrolled' consumption sites, offer less protection from environmental risk factors, police contact, and violence. They are often more secluded and less organized and structured. These sites include spaces such as abandoned buildings, alleyways or canal banks; producing significantly more risk with no one close by to respond or call emergency services in the case of

 $^{^{1}}$ Including from: the House of Commons Health and Social Care Committee on Drug Policy, the Advisory Council on the Misuse of Drugs, the Scottish Drug Deaths Taskforce, the Faculty of Public Health and the Drug Science Independent Working Group on Enhanced Harm Reduction.

an overdose.

Given this contextual, theoretical and empirical background, the primary research question of this study was: based on the lived experiences and perspectives of people who use drugs, is an OPC an appropriate and necessary intervention in Sandwell?

Methods

This article reports on qualitative data from the second part of a wider feasibility study investigating the potential applicability of an OPC in Sandwell. Part one comprised an initial quantitative assessment (Stevens et al., 2022) which gathered baseline metrics related to: 1) Injecting drug use, 2) Rates of homelessness, 3) Drug treatment coverage, 4) Drug-related deaths, 5) Drug-related litter, 6) Drug-related hospitalizations and non-fatal overdoses, 7) Blood-borne viruses (BBVs) and 8) Crime. This initial quantitative investigation highlighted that there was a substantial population of people who use drugs in Sandwell who are not currently in treatment and who are experiencing homelessness. It was deemed appropriate to follow-up with phase two of the study. This article represents part 2 of the feasibility study and looked to assess the current lived experiences of people who use drugs in Sandwell as a means of determining the potential need and applicability of an OPC. We applied a community-based participatory method (CBPM) approach, leveraging a variety of qualitative methods of data generation including focus groups, street-based interviews, rapid-ethnographic fieldnotes, and photo-ethnographic data collection. This research was funded by Drug Science, an independent scientific research, policy and advocacy organization in the UK. Co-authors, ANONYMIZEDBDS, MS, MH and GWSAS are part of the Drug Science Enhanced Harm Reduction Working Group chaired by AS with GWS as Vice-Chair. This group comprises academics, community groups, and third sector organizations with the aim of developing a robust evidence-base to inform policy discussions as well the potential implementation and evaluation of OPCs in the UK.

Community-Based participatory method (CBPM)

The experiential knowledge and perspectives of people who use drugs is essential to understand the realities of drug use (Boucher et al., 2017). Views of community interest holders are important and are reported elsewhere (see Southwell et al., 2022). Often, policies and interventions are conceived without meaningful inclusion of the voices and experiences of those most affected (Madden et al., 2021). The CBPM approach used in this study emphasizes meaningful involvement of community members throughout the research process (Israel, 2005). This involvement can manifest in various ways, such as through community review panels, advisory groups, or by employing community members as peer researchers within the research team (Damon et al., 2017). CBPM is particularly appropriate when conducting research with communities who have historically been marginalized from research processes, and recognizes the increased richness of data, and broader impacts of research when collaborating meaningfully with communities with lived and living experience (Brush et al., 2020). Despite the evidence-base highlighting the benefits of this approach, drug policy activists have highlighted systemic power imbalances and issues to its use within drug policy research, offering several recommendations for such imbalances to be addressed and in particular for ways in which research can be led by people who use drugs (Simon et al., 2021).

Research team and partnerships

This study was conducted with two organizations comprising people who use drugs: Coact Technical Support Limited and the SCORE team (as seen in Table 1). Coact is a peer-led technical support agency. All their technical consultants have dual expertise as people who use drugs and drug user organisers with a range of technical skillsets and

Table 1 Participatory elements of this study.

Research Activity	Coact Technical Support Limited	SCORE Team	Academic Researchers
Research Design	X		X
Ethics Application	X		X
Participant Recruitment	X	X	
Ethnographic Fieldwork	X	X	X
Data Analysis	X	X	X
Research Dissemination	X	X	X
Publication Writing	X		X

professional backgrounds. Coact were key partners from the offset of study conceptualization stages (eg., funding and ethics applications) through to the dissemination. The SCORE team (Sandwell Community Outreach Resources Education) are a group of people who currently use drugs, who were brought together and trained by Coact members. The founding group of 12 peers were recruited from the local community of people with opioid dependence to establish a peer-to-peer Naloxone programme. From this group, six people who inject drugs were recruited as peer guides to support data collection, analysis and dissemination. For more information on the SCORE Team see (Southwell et al., 2022). This research was also conducted in partnership with Cranstoun, a charity which provides drug treatment and harm reduction services in Sandwell.

Recruitment and sampling

Recruitment for focus groups was done through a combination of snowball and purposeful sampling (Naderifar et al., 2017). Within the Cranstoun drug service where harm reduction supplies are dispensed, staff discussed the scope of the project and focus group schedule with people who were eligible to participate. People who signed up to take part were encouraged to discuss the study with eligible members of their local peer network. Participants were eligible for the study if they were over 18 years old, had a history of injection drug use locally, could provide informed consent, and have English language proficiency. Eligibility criteria was self-reported and assessed by Coact.

For the street-based interviews, participants were identified and approached by a peer-guide and MS at known local drug consumption environments. Peer guides only approached community members they already had an existing relationship with and were only introduced to other members of the research team once they had agreed to participate. The project was verbally introduced by MS and a peer-guide and an information sheet was presented and discussed with the potential participant. After giving verbal consent, participants were interviewed by MS and BDS (and GWS on one occasion) in a range of locations in which public drug use occurred. To ensure privacy, all interviews were conducted away from others so the conversation could not be overheard. These included: pavements, parks, canal banks, abandoned residential buildings, churches and car parks. Eligibility for these interviews were the same as the focus groups, except participants also had to have a history of injecting in local public and or/semi-public environments.

Data collection

Rapid-ethnographic data collection² was conducted over four, three-day blocks totalling twelve days. Each block followed an identical format. Day 1 comprised a community clean-up session supported by the SCORE team in which fieldnotes and photo-ethnographic evidence were generated in relation to public and semi-public injecting environments and associated debris, and the SCORE teams' interactions with the public. Day 2 included focus groups at the Cranstoun facility with local people who inject drugs and day 3 comprised rapid-ethnographic field sessions where the research team were led by peer guides into local street-based settings known to them as being public and semi-public drug consumption sites, to collect photo-ethnographic data and conduct rapid-ethnographic interviews. This facilitated triangulation of findings for a more complete qualitative research inquiry than one form of data collection alone (Malina et al., 2011).

Focus groups

In total, 20 participants, (15 men and 5 women),³ attended one of three focus groups. Sessions ranged from 27 to 45 min and were located in the local Cranstoun building. The study was introduced by MS and then moderated by BDS. The focus group question guide was semi-structured and although each session varied based on the tempo, direction, and situational prompts of the group conversation, the predetermined questions were aimed at 1) exploring current experiences of drug use (public or otherwise) (e.g., where do you currently consume drugs?, how would you describe these environments?, do you face any challenges in these environments?) and 2) exploring people's opinions on OPCs (e.g., have you ever heard of an OPC, if so how would describe it?, if one existed in your local community do you think you would use it, if so, why?; is there anything that would stop you from going to one?). Focus groups were audio recorded and subsequently transcribed for analysis.

Rapid-Ethnographic interviews and photo-ethnographic data

We conducted 20 rapid-ethnographic street-based interviews, of which 14 were with male participants and 6 with female participants. Interviews ranged from 4 to 22 min and were conducted during our ethnographic field sessions. These sessions were carried out in one of the four neighbourhoods identified as priority areas of Sandwell: Bearwood, West Brom, Cape Hill and Great Bridge. Priority areas were decided based on 1) areas of Sandwell with high recorded rates of drug-related litter and 2) input from the SCORE team with regards to known public and semi-public drug consumption settings and 3) insights from the Cranstoun outreach team on where they distribute harm reduction equipment.

The primary aim here was to engage with people who may not wish to attend a treatment service building to take part in a focus group or interview and to potentially obtain different responses from those who may not be interested in treatment services presently (Kaneva, 2024). Interviews were also semi-structured and contained the same question guide as that of the focus groups. Due to the time constraints of interviewing in public, less verbal prompts from the researcher were used although we noticed prompts related to the physical environmental generated different unprompted responses (i.e., people directly commenting on environmental factors or telling us stories of things that had occurred in that specific setting). Data from these interviews was generated through the form of handwritten notes and key quotes were recorded and read back to the participant to check for accuracy. Whilst one researcher conducted the interview, another recorded quotes verbatim to ensure robust documentation. The relatively short duration of these interviews was purposeful and informed by previous research seeking to better understand how people engage with their immediate environments (Bartlett et al., 2023; Blumen, 2007; Kinney, 2021; Rheinlander et al., 2008), including in drug policy research (Parkin, 2016) where brief yet focused interactions have been documented to vield valuable insights from individuals who may be hesitant or unable to engage in longer forms of qualitative data collection.

We also collected photo-ethnographic data of the public and semipublic drug consumption environments observed during the ethnographic fieldwork and community clean up sessions. Although most photos did not contain any peers or participants and focused solely on the environments themselves, in the few instances people were included, informed written consent was provided. To adhere to ethical standards of photo-ethnography, no identifiable features of study participants were captured within the drug consumption settings (i.e., faces were blurred out or backs turned to the camera) (Wright, 2018).

Compensation and consent

Participants received £25 reimbursement to take part in a focus group and £10 to take part in a street-based interview. Focus groups were audio recorded, and participants gave written consent of their participation – recordings were then transcribed verbatim. Verbal consent is often preferred to written consent in street-based interviewing as the physical barrier of securing written consent can put off potential participants and undermine the research (King & Woodroffe, 2017). In line with best practice, individuals were fully briefed on the purpose of the conversation, asked their permission to take notes, received summaries back of the conversation to check accuracy, and any identifying details were removed from fieldnotes. There were multiple points of verbal consent at the start of the conversation, through the explanation of the research, and at the end of the conversation.

Ethics

Cranstoun provided logistical support to form the SCORE team by: 1) offering peer payments for the initial peer-naloxone program, 2) providing office space for the SCORE team to conduct meetings, 3) assigning a member of Cranstoun staff to support the administrative elements of the group and 4) advertised the formation of the group to their clients who accessed harm reduction supplies. They provided a space for us to conduct focus groups and a member of staff to facilitate the community clean up sessions. Cranstoun staff were not present during the street-based interviews or focus groups.

Ethical approval for was granted by Queen's University Belfast Faculty of Engineering and Physical Sciences Ethics Committee on 11/02/2022 reference EPS 21_319. To ensure the confidentiality and anonymity of participants, identifying details were removed from individual quotations.

² Vindrola-Padros (2021) defines rapid ethnography with the following characteristics: (1) research must be carried out over a short or intensive period (approximately 90 days, however the fieldwork component can be substantially shorter); (2) research captures relevant social, cultural and behavioural qualitative data focused on human experiences, perspectives and practices; (3) research engages with social science theories promoting reflexivity and (4) data must be collected from multiple sources/various implicated stakeholders, uses multiple modes of data collection and is triangulated in analysis. The strengths of this approach lie in its ability to produce research with a "nuanced understanding of lived experiences while prioritizing efforts to rapidly inform interventions and decisions that address urgent health and social issues" (Collins et al., 2020, p.384).

³ Whilst current demographic statistics related to the sex of individuals who inject drugs in Sandwell is unknown, our sample for both focus groups and interviews is approximately that of the UK: 74% male vs 26% female (Lewer et al., 2022). Further research should focus more explicitly on the experiences of women in these contexts.

Data analysis

The scope of our research focused specifically on the lived experience of people who inject drugs in public or semi-public settings, centring relevant social, cultural, and behavioural data. Data analysis applied the Braun and Clarke (2006) six stage thematic analysis, commencing with a process of familiarization with the data, whereby MS, BDS and GWS read transcripts and fieldnotes, wrote analytic memos, and collectively developed a thematic codebook to work systematically through the data, identifying relevant and meaningful information related to our research questions, as well as novel concepts inductively. This initial codebook comprised seven overarching themes (including: lived experience of street-based injecting, practical recommendations for an OPC and experiences of stigma). Subsequently, as part of this process, BDS and MS ran a participatory coding session where a sample of two focus group and two interview transcripts were shared and discussed with the SCORE team. Here, the group refined and challenged the initial coding process. This session produced new observations and highlighted additional topics of focus resulting in a secondary codebook of fourteen codes (including codes such as desire for peer involvement in a service and experiences with police). As an example, the SCORE team requested that more emphasis was put on the experiences of having to rush the injection process and the specific practices adopted to avoid environments and situations in which this may occur. Following this participatory coding session, BDS, MS, and GWS re-examined transcripts and refined the analysis until all the data were systematically organized using the final coding framework and themes presented in this paper. The final coding and themes were reviewed by all authors (Braun & Clarke, 2023).

Results

We present our results under two overarching themes 1) risk dynamics in current drug consumption environments and 2) perspectives on OPCs, each with sub-themes relating to the relationship between participants' experiences, the contextual and environmental settings in which they occur, and how these factors shape participants' views on a potential local OPC.

Theme 1: Risk Dynamics in Current Drug Consumption Environments

Through this theme, we describe the nuanced relationship between multiple risk dynamics where drugs are consumed. This focus highlights how these environments are shaped by wider forces that produce structural vulnerability, as suggested by Rhodes et al. (2012). Importantly, participants outlined how an OPC could have a direct positive impact on the harm described within each of the sub-themes.

Subtheme 1: Consumption spaces of privacy, convenience, and necessity $% \left(1\right) =\left(1\right) \left(1$

From the offset, we were interested in better understanding if and where public and semi-public drug use was taking place. These accounts offer insight into the diverse spaces used to consume drugs in Sandwell, and why some of these public and semi-public, 'controlled' and 'uncontrolled' spaces were used. The SCORE team guided us through this investigation, taking us to meet people who injected drugs in locations often unknown to local drug treatment and social services. One participant spoke of how it was hard to know how many individuals there were as people chose locations which were hidden from public view, often in an uncontrolled way:

"It's not visible, it's car parks, bin sheds, anywhere out of the way. It's hard to estimate numbers because it is so hidden." (Street-Based Interview 12, Male).

Participants emphasized their desire for privacy as a primary motivator for seeking isolated locations. This presented challenges for local drug services in relation to reaching individuals who may be at risk of experiencing an overdose. Participants, particularly those experiencing

homelessness, spoke often about the constant search for privacy:

"Someplace like an old factory where people aren't working and it's empty...like sheds, just where it's empty and people don't go...parks as well." (Focus-Group Participant 19, Male).

While chosen locations were often isolated to ensure privacy, we encountered individuals who also reported convenience as an important factor when selecting drug consumption locations. Participants who either lived or generated their income in public or street-based settings, consumed drugs close to the location that they acquired them. Ideal drug consumption locations were sought which were hygienic and warm such as toilets in coffee shops and fast-food chains, with lockable doors. But even these were not always accessible:

"Somewhere to go, clean, safe, now we really struggle. We have to score [acquiring drugs] which is easy, the hard bit is finding somewhere to go...I use mainly in the McDonalds toilets." (Street-Based Interview 16, Male).

In other situations, however, drug consumption locations were used more out of necessity than choice, in an urgent need to ease or prevent drug withdrawals and where the semi-public environments described above were not available:

"I went in the bushes this morning because I had nowhere to go. It's one of them. When you're rattling [experiencing withdrawal symptoms] that bad, you will go wherever you got to go." (Focus-Group Participant 4, Female).

Subtheme 2: Urgency and Venous access

Although the drug consumption environments we were taken to and told about were either very isolated or in settings where participants could find privacy by locking themselves away, it was apparent that this was not always the case. Contrasting his home environment to a highly exposed 'uncontrolled' semi-public environment, this participant described the anxiety that results from the constant threat of public exposure:

"Obviously, when you're home, you're more comfortable...you can take your time, you're more comfortable in your space...But when you're out, let's say in a bush...you've got no thoughts in your head and you're rushing. Is anybody looking? Is anybody coming past? You just try to get [inject] yourself very quickly." (Focus-Group Participant 3, Male).

While this participant's experience of drug use is influenced by his social environment and in particular rushed administration due to the threat of being seen, many participants discussed the desperation of an interplay between needing to rush and being prevented from doing so effectively due to poor venous access:

"It normally takes me up to 30 mins to find a vein and it is the feeling of being rushed which makes you fuck up a hit." (Street-Based Interview 5, Female).

Participant accounts illustrated the benefits of being able to prepare and use drugs in a home, or an environment in which they felt safe, such as the ability to change needles and take time in drug administration without the fear of being disturbed. For many, feeling a need to rush exacerbated issues relating to poor vein health:

"You know when you've got to change the needles that many times and you're rattling for that long...I'm losing more [of the drug] than I'm getting. Especially when people walk past and you've got to stop and take the needle out and do this and do that. You haven't got time to do that. But when you're in a room or at home you can take as much time as you want. Change as many needles as you want" (Focus-Group Participant 4, Female)

Once again, this participant's experience of poor venous access, heightened by the need to rush within the environments in which drug consumption takes place, illustrates how tangible physical harms within these environments are produced:

"I've got about 17 abscesses all over my legs and lumps all over my legs and that's through like not having the pins, using the same pins and rushing to try and get it you know. My whole legs are just full of bumps and full of red marks." (Focus-Group Participant 6, Female).

Descriptions of being rushed and experiencing a sense of urgency within the consumption process were widespread. Participants linked the presence of a 'room', 'home' or OPC, as a legitimate safeguard to the tangible physical and psychological health impacts of these experiences:

"Well, I wouldn't have to worry about people looking at what I'm doing [if I had access to an OPC]You're always constantly worrying when you do it on the streets. Who is walking past? Are there any cars that can see me? How many needles do I have to use? When you're in either a consumption room [OPC] or at home, you can take all the time in the world you can use all the needles, right? You haven't got to waste it [the drug]. I had to squirt mine away this morning because I've seen people and I've seen a baby. I've seen the child look at me...so I knew I had to stop. I couldn't do it after that. It was gone." (Focus-Group Participant 4, Female).

Emphasizing the multiple impacts of a lack of privacy, this participant highlights both the desire for an OPC in Sandwell but also the multiple ways in which an OPC would support their health and wellbeing as well as diminish the visibility of public drug use. She expressed concerns about being observed and rushed while using drugs in public, again emphasizing the importance of privacy and the ability to take time for a safer consumption process. As noted above, the reference to using multiple needles reflected the interplay between poor veinous access, injecting urgency and health harms experienced by many people who inject drugs in the UK (Harris & Rhodes, 2012), particularly those who are unstably housed.

Subtheme 3: Safety and Experiences with Police

As we explored anxieties deeper, participants' perceptions of the way police would react and implement policies around an OPC were a direct result of their lived experience with local police in Sandwell. Many described hostile interactions with police:

"Police can be horrible, especially when they catch you using, I was withdrawing bad and the police took the pin, kicked it straight out of my hand. They squirted it straight out too...they don't help me they just fuck with me." (Street-Based Interview 16, Male).

This participant described his perception and experience of law enforcement as not just unsupportive but as a continual threat. The violence of having a syringe kicked out of their hand and the contents emptied in the context of extreme withdrawal can leave a profound and enduring scar among people navigating already challenging circumstances. Experiences of policing as exacerbating the daily struggles of existence on the street, including the ability to generate income were common, as related by another participant: "Police treat us bad enough as it is with begging...it surprises me how blind the police are to our problems here." (Street-Based Interview 4, Male). We experienced these dynamics also during ethnographic observations. During an interview on the main high street in the Bearwood neighbourhood, a police van pulled up next to us. The officers did not interact with us or get out of their vehicle, but both stared over intently for approximately five to ten seconds before driving off. Immediately the participants tone changed: "See how they are fucking staring at us here, the Old Bill [English slang for police], it's ridiculous." (Street-Based Interview 8, Male).

Police intervention was frequently mentioned by participants as a threat to their safety. The involvement of police in prohibiting or facilitating the acceptability of an OPC was commonly raised by participants as a concern:

"But then you get stopped by the police and you say, oh, hang on a minute. I'm trying to get to this drug consumption room, what would happen?" (Focus-Group Participant 2, Male).

These concerns were expressed both in relation to getting to the site in the possession of drugs but also when leaving, given a vulnerability to attention and/or arrest after attending a service in which drugs are known to be consumed:

"Would the drugs be taken off ya? Would you be nicked [arrested]? How would you leave? How would you even go about doing it?" (Focus-Group Participant 4, Female).

Despite these negative experiences and concerns about an OPC potentially increasing vulnerability to arrest both before and after attending, after, most participants then reflected on the benefits of an OPC in shielding people from the police gaze during the act of injecting, in which they were the most vulnerable to threat and associated health harms:

"People would feel so much safer with no hassle [from police]. I see people injecting with pins [needles] in their arm looking around, ready to run off with the pin in their arm they're so scared" (Street-Based Interview 12, Male).

Evident in the quote above and others noted, is the way in which policing was experienced as exacerbating injecting risks and associated health harms. In framing an OPC as a site of refuge from the police (e.g., "a drug consumption room would keep us safe from police" Street-Based Interview 2, Male) the violence of policing was positioned by some as an even greater threat to the self than that of an opioid overdose: "People won't go in [to an OPC] to be safe from overdose but actually safe from police" (Street-Based Interview 13, Female).

Theme 2: Perspectives on OPCs

Participant accounts illustrated the personal impacts of drug-related death in Sandwell. OPCs were perceived as a tangible and effective response to reduce fatal overdoses in Sandwell, welcomed by participants. Broader impacts of OPCs were also mentioned, including in relation to reduction of drug related litter, indicating the potential for an OPC to mediate public perceptions of people who inject drugs in Sandwell and reduce associated stigma.

Despite the relatively low rates of drug-related death noted in the quantitative feasibility assessment (Stevens et al., 2022), it became evident that study participants shared personal experiences of losing friends and loved ones in this way. During the participatory coding, these narratives were identified by the SCORE team as significant, underscoring the deep-rooted, and longer-term impact on people. During discussions on the political justification for OPCs, SCORE members expressed frustration that the life-saving potential of OPCs alone was not considered sufficient to justify their implementation. The community trauma of drug-related deaths and how this is compounded by perceptions of political disregard highlights an urgent need for interventions that effectively address and mitigate this loss of life:

"I've seen too many people die on the street... I've lost two of my friends, no I tell a lie, three of heroin overdoses... It [an OPC] is a really good idea, and I'd use it myself, I really would." (Focus-Group Participant 4, Female).

Personal experiences deeply shaped this participants' perspective on the need for OPCs. Witnessing multiple deaths on the street instilled in her a sense of urgency to prevent further loss of life and a desire to enact personal safety strategies. With a current lack of services providing immediate assistance through the supervision of overdose situations, some participants discussed previous instances in which they felt helpless in trying to respond to themselves:

"When someone overdoses, then there would be someone there to help... I've done it where the guy has overdosed and I didn't know what to do...I was high myself at the time and I just didn't know what to do." (Focus-Group Participant 12, Male).

This account exposes the reality faced by individuals who encounter overdoses without access to appropriate assistance. Finally, when

discussing the way in which an OPC could be evaluated moving forward, overdose prevention was often highlighted as the primary goal: "The main one is the number of deaths we're keeping down." (Focus-Group Participant 5, Male). This statement reflects a broader understanding among people who inject drugs of the positive impact these centers can have on rates of drug-related death, even where such deaths are less common in other parts of the region or nation. Such experiences, and so the desire to use OPCs, would likely be higher in areas with even higher rates of drug-related death, such as Blackpool, and several other towns in the north of England, Northern Ireland, South Wales, and the deindustrialized cities of Scotland.

Participants also noted that discarded injecting equipment was an issue in their local area, demonstrating through expressions of responsibility how an OPC could enhance public safety, through providing a site for safe use and disposal of needles and syringes:

"Members of the public, kids going to school comes past dirty needles, I've heard mum's mention it to people, you know, it's disgusting mate, at least with one of these rooms [OPC], you've got everything and you can just throw it away safely." (Focus-Group Participant 7, Male).

Repeated accounts in which used needles in public spaces were framed as posing risks to members of the public, particularly children, indicated a desire not only to reduce public risk, but to redeem perceptions of their community as 'irresponsible' and mitigate associated stigma. An OPC was seen to facilitate these aims: "It would make things cleaner, no more pins [needles] in bushes and under bridges and kids' play areas". (Street-Based Interview 20, Female)

Overall, these testimonies demonstrate participants' perception that the implementation of an OPC in the local area could promote cleaner and more inviting community spaces. By fostering a sense of wellbeing for all community members, there is an implicit hope that stigma towards people in their communities of drug use would also reduce. By facilitating this and enacting a safe space from policing and associated health harms, OPCs were perceived as acceptable and welcome to people who injected drugs in semi/public spaces. Despite framing the threat of policing as, at times, more of a concern than that of overdose, the potential for an OPC to save lives cannot be overstated, given the collective trauma held among participants experiencing drug-related deaths in their community and the feeling of abandon when no solutions are seen to be forthcoming. Relevant images from fieldwork are available at Figs. 1-6.

Discussion

This study highlights how individual level behaviors and drug consumption practices do not act alone to produce harm, but intertwine with the broader physical and policy environment to increase risk. Narratives of participants' drug use in isolated (eg., abandoned building) and/or inaccessible (e.g., a locked toilet stall) environments



Fig. 1. SCORE members leading community clean-up of an abandoned building used *as a consumption environment.*



Fig. 2. GWS and GWS BDS conducting rapid-ethnographic interview outside of a hostel where residents frequently inject in the bushes and alleyway.

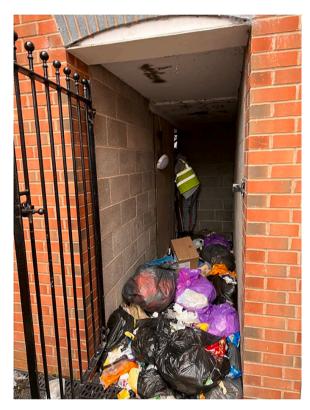


Fig. 3. Residential building bin-shed used as a consumption environment.

illustrate the way in which overdose risk is incorporated into the fabric of daily lives. This may also place individuals who use drugs in more conflict, this time with community members such as businesses, transport operators, and cafes/restaurants. In more visible public and semipublic settings, feeling rushed by the potential threat of police apprehension and public interaction, severely impacted peoples' ability to manage poor venous access during the consumption process. This not only exacerbated people's anxiety and stress within these settings but also shaped drug-related injuries, including infections and abscess. As a means of mitigating these environmental factors, an OPC was perceived by participants to be a welcome and acceptable intervention. Accounts of concern about 'drug related litter' illustrated how an OPC could offer a potential respite from public and community stigma through the reduction of discarded injecting equipment. Importantly, an OPC was framed as a potential haven from the violence of street policing, and a way in which community lives might be saved and community trauma honored, if not reduced.

Drawing on the work of Parkin and Coomber (2009), we categorized the identified hidden consumption environments in Sandwell as



Fig. 4. SCORE team and BDS clearing Sandwell city centre car park used as a consumption environment.



Fig. 5. Visible needle litter on footpath along the canal bank.

'controlled' and 'uncontrolled'. The abandoned buildings, factories, secluded canal banks and other concealed urban spaces we were shown were characteristic of 'uncontrolled' spaces. 'Controlled' locations such as supermarket toilets and parks, were described both in relation to the situational necessity as well as the convenience they offered, including momentary privacy from the public or police. A distinct differentiation between these two environmental categories, included that 'uncontrolled' settings contained a multitude of environmental risks outside of the control of the individual. As highlighted in the existing literature on public drug use (Briggs et al., 2009; Collins et al., 2019; Holeksa, 2022; Malins et al., 2006; Small et al., 2007), due to the lack of supervision, these 'uncontrolled' environments offer minimal safety mechanisms in the event of an overdose. Concealed from public view, in such locations it is improbable that passers-by would be aware of an overdose event. Despite 'controlled' environments offering benefits such as a privacy through a lockable door and potentially increased hygiene, in both types of settings, people who inject drugs gain no respite from the structural vulnerability that they experience (i.e., reduction in potential threat of



Fig. 6. Bushes used as consumption environment around a children's playground.

police apprehension, overdose or health risks from current consumption environments). Such risks would be reduced through the provision of an OPC.

Our examination of current consumption environments in Sandwell highlights the interplay between "situational necessities" (Rhodes et al. 2007, p. 276) and the socio-physical risk environment of people who inject drugs. The decision to use drugs in less secure settings (such as the participant who described being seen by a mother and children whilst using in a publicly exposed bush) reflects immediate pressures and environmental constraints (Harris et al., 2020a, 2020b). Use in this way is dictated by the absence of safer alternatives, and motivated by the need to address the immediate risk of physical and psychological distress of opioid withdrawal (Harris et al., 2022). With limited physical opportunity for alternate spaces, individuals describe concern about their use in public spaces and the multiple impacts, but factors of opportunity, immediacy, and craving drive their behaviour (Rhodes et al., 2007; Shorter et al., 2023).

Poor vein health B related health complications are reported globally amongst people who inject drugs (Harris & Rhodes, 2012; Jain et al., 2021). In Sandwell, poor venous access was a central issue that was repeatedly emphasised alongside the challenges of injecting in public or semi-public spaces. Within these discussions the broader environment (e.g., feeling rushed due to the threat of police or public apprehension) was described as impacting their ability to manage veinous access. Studies also highlight how feeling rushed during consumption is shown to reduce likelihood of individuals engaging in harm reduction practices (eg., starting off with a small batch to ascertain potency, use fentanyl strips or use communally amongst peers) which would reduce overdose risk (Suen et al., 2022). An OPC would provide a context in which such health risks and complications could be better managed through technological intervention (vein scanners), advice from trained harm reduction practitioners, and through providing the time and space to prepare and consume drugs in a calm and secure environment (Stoltz et al., 2007).

Fear of law enforcement is a barrier to the implementation of safe injecting practices within public and semi-public settings, and potentially for the operation of an OPC if it were available. While individual officers hold potential to act as supportive agents for people experiencing social marginalization in such environments (Ryland & Scher 2024), the default heuristic was that police were a threat to people using drugs and a reason for seeking out isolated and risky locations. Undoubtedly, fear of consequences drives risky behaviour, such that the personal risks are weighted to avoid policing at the expense of health (Baker et al., 2020; Miller et al., 2023; Shorter et al., 2023). If an OPC were to be implemented in Sandwell, it would be important to note the fear and anxiety caused by actual or feared interactions with the police. This has successfully been considered in other international contexts including Copenhagen (Kammersgaard, 2019), Malmo (Nordgren et al., 2022) and Toronto (Strike et al., 2020), where policing practices are adapted (eg., reduced patrolling and surveillance, non-prosecution zones, signposting to services) to facilitate harm reduction service engagement. The statements from participants suggest that even the mere presence of the police in the vicinity of an OPC and/or involvement in its set up could be enough to dissuade people from accessing a service. Again, as echoed by others, this speaks to the importance of involving whole communities in planning and opening an OPC including those who do and do not use drugs to encourage their use (Boland et al., 2025; Shorter et al., 2023).

Participants described experiences of stigma at multiple levels (Cheetham et al., 2022; Scher et al., 2023a), including public and community stigma (Parkin & Coomber, 2011a) related to the visibility of drug use and drug-related litter, as well as internalized stigma when injecting in public spaces. These experiences were particularly pronounced for those who were precariously housed, as the lack of private environments for consumption heightened feelings of shame and social exclusion. As theorized in other contexts (Ali et al., 2023; Kosteniuk et al., 2021; Stevens et al., 2024) an OPC in Sandwell has the potential to mitigate these harms by providing a space where both drug use and the subsequent used equipment is removed from public view. Beyond this, OPCs may play a role in addressing internalized stigma by offering an environment where individuals can consume substances and engage with auxiliary health and social services in the presence of peers who can ease potential fears of being stigmatized (Yoon et al., 2022).

Reviews of global literature show OPCs can be effective in engaging already marginalised and structurally vulnerable people who use drugs with auxiliary health, housing and drug treatment services (Bardwell et al., 2019; Luchenski et al., 2018; Marshall et al., 2011; Shorter et al., 2023). Previous quantitative research from Sandwell suggests that there are approximately 250 people who are experiencing homelessness and a significant population of people who inject drugs who are not engaged in treatment and are particularly vulnerable to overdose (Stevens et al., 2022). This study complements these findings by highlighting both the public and semi-public environments in which drugs use is occurring but also participant perspectives that a well-designed OPC may help alleviate some of the harms perpetuated within these environments. Systematic reviews on OPCs suggest that a primary reason people who use drugs are so willing to use them is their ability to offer spaces of respite from the types of environments described in this paper (McNeil & Small, 2014; Stevens et al., 2024., Yoon et al., 2022).

Whether it is a medicalized, peer-led, mobile, or integrated OPC, there exists a range of models for a potential service (Shorter et al., 2023). Each of these models have characteristics that need to be carefully matched to a specific geographical and contextual setting. The aim of this paper was not to argue or suggest which model would be appropriate for Sandwell, the findings of this study suggest there is a need for a safer environment intervention. Drug-related death was perceived by participants as something crucial that an OPC could impact upon; as part of a suite of other harm reduction initiatives. While harm reduction initiatives such as peer-to-peer naloxone programs can reduce overdose risk, and are crucial in contexts of toxic drug supply, there is a

clear need for an intervention which will offer an alternative consumption environment to the ones people are currently exposed to and safeguarded against overdose within the community. Despite the current political opposition to OPCs in England (Holland et al., 2022), this paper adds to the literature on stakeholder experiences in the UK (Nicholls et al., 2022; Parkes et al., 2022; Southwell et al., 2022) documenting an expressed need and support from residents, health care professionals, policymakers and business owners towards OPCs. The perspectives of people who inject drugs, who would benefit from such an intervention, should be valued stakeholder voices in future advocacy efforts and policymaking processes.

Limitations

While the collaboration with Cranstoun facilitated various logistical aspects of the research, the involvement of their clients in the research may have created an environment that influenced participation and responses. Specifically, participants may have felt pressured to provide responses that aligned with the perceived expectations of the organization or their involvement in the study, particularly as peer researchers and in the context of the focus groups could change what was revealed in the group. Additionally, individuals who are hesitant or unwilling to engage with Cranstoun may have been less likely to participate or come forward as peer researchers or participants limiting the diversity of our study sample. In conducting street-based ethnographic data collection, we hoped to reduce this influence and speak to as many community members as we could who were not engaged with drug treatment at present. We know from work with outreach services in the area there are many individuals with diverse and intermittent interaction with harm reduction and other support services (Shorter & Scher, 2025). Future research however could consider alternative recruitment strategies to facilitate broader and more inclusive engagement with people who use drugs beyond those known to our valued peer guides in the field. Additionally, whilst our sample was limited to people who injected drugs in public/semi-public settings and who were in precarious housing situations, global evidence highlights how through immediate overdose response and timely connection to auxiliary health and social services, OPCs can support a wide range of those who use drugs (Shorter et al., 2023). This includes people who use pills, snort, or inhale drugs as well as people who are housed. Preferred modes of consumption often reflect socioeconomic and racial differences (Novak & Kral, 2011; Pro et al., 2022). As such, OPCs set up solely for injection, by definition, exclude more marginalized groups (Collins et al., 2020; Scher et al., 2025). Finally additional demographic questions such as housing status, age, length of time injecting could have added more context to participant perspectives and should be considered in future research.

Conclusion

The aim of this study was to address the question of whether an OPC is an appropriate, and necessary intervention in Sandwell, as perceived by individuals who might benefit from such a service. The narratives provided by participants highlight structural risk dynamics that shape experiences and harms in current controlled and uncontrolled, public and semi-public drug consumption environments. These were being sought out for reasons including convenience, urgency, and necessity and fell short of an ideal environment. Harms including poor vein health and other issues were increased by rushed injections due to the threat, privacy, and concerns about negative experiences of interactions with police and the public. Police interference was a particular concern for participants, including fears about how they were currently treated by police, and how they might be treated if there were an OPC. In addition to shifting the environment in which people currently consume drugs, participants believed an OPC could have a positive impact on reducing rates of drug-related death and wider harm. Additionally, participants believed an OPC would facilitate a reduction in drug-related litter which they hoped could improve community relations. Descriptions of harms caused within such environments urgently emphasise the need for safe, sterile, and supportive private spaces for people in Sandwell and similar places – which could be provided by an OPC (alongside other harm reduction interventions). Descriptions also echo the importance of a range of naloxone distribution mechanisms including peer-led naloxone programs to reach individuals (Miller et al., 2022). The participants vulnerability and sense of helplessness in the face of a life-threatening situation again underscores the vital need for an intervention which could provide prompt medical support but also alleviate the burden and panic experienced by individuals witnessing overdoses. We therefore conclude descriptions of current drug consumption environments and the lived experiences of people who inject drugs within them, should be strongly considered by policymakers and other interest holders when deciding on the implementation of OPCs in the UK.

Ethics approval

The authors declare that they have obtained ethics approval from an appropriately constituted ethics committee/institutional review board where the research entailed animal or human participation.

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CRediT authorship contribution statement

Benjamin D. Scher: Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Data curation, Conceptualization. Mat Southwell: Writing – review & editing, Project administration, Formal analysis, Data curation, Conceptualization. Magdalena Harris: Writing – review & editing, Conceptualization, Methodology. Alex Stevens: Writing – review & editing, Supervision, Conceptualization. Benjamin W. Chrisinger: Writing – review & editing, Supervision. David K. Humphreys: Writing – review & editing, Supervision. Gillian W. Shorter: Writing – review & editing, Supervision, Project administration, Formal analysis, Conceptualization, Methodology.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Ali, F., Russell, C., Kaura, A., Leslie, P., Bayoumi, A. M., Hopkins, S., & Wells, S. (2023). Client experiences using a new supervised consumption service in Sudbury, Ontario: A qualitative study. *Plos One, 18*(10), Article e0292862. https://doi.org/10.1371/journal.pone.0292862
- Angus, C., Buckley, C., Tilstra, A. M., & Dowd, J. B. (2023). Increases in 'deaths of despair' during the COVID-19 pandemic in the United States and the United Kingdom. *Public Health*, 218, 92–96. https://doi.org/10.1016/j.puhe.2023.02.019
- Baker, P., Beletsky, L., Avalos, L., Venegas, C., Rivera, C., Strathdee, S. A., & Cepeda, J. (2020). Policing practices and risk of HIV infection among people who inject drugs. Epidemiologic Reviews, 42(1), 27–40. https://doi.org/10.1093/epirev/mxaa010
- Bardwell, G., Kerr, T., & McNeil, R. (2019). The opioid overdose epidemic and the urgent need for effective public health interventions that address men who use drugs alone. *American Journal of Men's Health*, 13(3), Article 1557988319859113. https://doi. org/10.1177/1557988319859113

- Bartlett, R., Koncul, A., Lid, I. M., George, E. O., & Haugen, I. (2023). Using walking /go along interviews with people in vulnerable situations: A synthesized review of the research literature. *International Journal of Qualitative Methods*, 22. https://doi.org/10.1177/16094069231164606
- Bayoumi, A. M., & Zaric, G. S. (2008). The cost-effectiveness of Vancouver's supervised injection facility. CMAJ: Canadian Medical Association Journal, 179(11), 1143–1151. https://doi.org/10.1503/cmai.080808
- Blumen, O. (2007). The gendered display of work: The midday scene in an Ultra-Orthodox street in Israel. Nashim: A Journal of Jewish Women's Studies & Gender Issues, 13, 123–154. https://doi.org/10.2979/nas.2007.-.13.123
- Boland, P., Sturm, T., & Shorter, G. W. (2025). (Dealing with) Illegal drugs and "unwanted land-use": A socially inclusive future planning imagination for drug consumption rooms. *Journal of Planning Education and Research*. https://doi.org/ 10.1177/073945657251318245
- Boucher, L. M., Marshall, Z., Martin, A., Larose-Hébert, K., Flynn, J. V., Lalonde, C., Pineau, D., Bigelow, J., Rose, T., Chase, R., Boyd, R., Tyndall, M., & Kendall, C. (2017). Expanding conceptualizations of harm reduction: Results from a qualitative community-based participatory research study with people who inject drugs. *Harm Reduction Journal*, 14(1), 18. https://doi.org/10.1186/s12954-017-0145-2
- Bouzanis, K., Joshi, S., Lokker, C., Pavalagantharajah, S., Qiu, Y., Sidhu, H., Mbuagbaw, L., Qutob, M., Henedi, A., Levine, M. A. H., Lennox, R., Tarride, J.-E., Kalina, D., & Alvarez, E. (2021). Health programmes and services addressing the prevention and management of infectious diseases in people who inject drugs in Canada: A systematic integrative review. *BMJ Open*, 11(9), Article e047511. https:// doi.org/10.1136/bmjopen-2020-047511
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063c
- Braun, V., & Clarke, V. (2023). Toward good practice in thematic analysis: Avoiding common problems and be(com)ing a knowing researcher. International Journal of Transgender Health, 24(1), 1–6. https://doi.org/10.1080/26895269.2022.2129597
- Briggs, D., Rhodes, T., Marks, D., Kimber, J., Holloway, G., & Jones, S. (2009). Injecting drug use and unstable housing: Scope for structural interventions in harm reduction. *Drugs: Education, Prevention and Policy, 16*(5), 436–450. https://doi.org/10.1080/ 09687630802697685
- Brush, B. L., Mentz, G., Jensen, M., Jacobs, B., Saylor, K. M., Rowe, Z., Israel, B. A., & Lachance, L. (2020). Success in long-standing community-based participatory research (CBPR) partnerships: A scoping literature review. Health Education & Behavior. 47(4), 556–568. https://doi.org/10.1177/1090198119882989
- Cheetham, A., Picco, L., Barnett, A., Lubman, D. I., & Nielsen, S. (2022). The impact of stigma on people with opioid use disorder, opioid treatment, and policy. Substance abuse and rehabilitation, 1–12. https://doi.org/10.2147/SAR.S304566
- Collins, A. B., Boyd, J., Cooper, H. L. F., & McNeil, R. (2019). The intersectional risk environment of people who use drugs. *Social Science & Medicine*, 234, Article 112384. https://doi.org/10.1016/j.socscimed.2019.112384
- Collins, A. B., Boyd, J., Hayashi, K., Cooper, H. L., Goldenberg, S., & McNeil, R. (2020). Women's utilization of housing-based overdose prevention sites in Vancouver, Canada: An ethnographic study. *International Journal of Drug Policy, 76*, Article 102641. https://doi.org/10.1016/j.drugpo.2019.102641
- Damon, W., Callon, C., Wiebe, L., Small, W., Kerr, T., & McNeil, R. (2017). Community-based participatory research in a heavily researched inner city neighbourhood: Perspectives of people who use drugs on their experiences as peer researchers. Social Science & Medicine, 176, 85–92. https://doi.org/10.1016/j.socscimed.2017.01.027
- Degenhardt, L., Webb, P., Colledge-Frisby, S., Ireland, J., Wheeler, A., Ottaviano, S., ... Grebely, J. (2023). Epidemiology of injecting drug use, prevalence of injectingrelated harm, and exposure to behavioural and environmental risks among people who inject drugs: A systematic review. *The Lancet Global Health*, 11(5), e659–e672. https://doi.org/10.1016/S2214-109X(23)00057-8
- Doran, J., Harris, M., Hope, V. D., Wright, T., Edmundson, C., Sinka, K., & Heinsbroek, E. (2020). Factors associated with skin and soft tissue infections among people who inject drugs in the United Kingdom: A comparative examination of data from two surveys. *Drug and Alcohol Dependence*, 213, Article 108080. https://doi.org/10.1016/j.drugalcdep.2020.108080
- Doran, K. M., Fockele, C. E., & Maguire, M. (2022). Overdose and homelessness—Why we need to talk about housing. *JAMA Network Open*, *5*(1), Article e2142685. https://doi.org/10.1001/jamanetworkopen.2021.42685
- Fadanelli, M., Cloud, D. H., Ibragimov, U., Ballard, A. M., Prood, N., Young, A. M., & Cooper, H. L. F. (2020). People, places, and stigma: A qualitative study exploring the overdose risk environment in rural Kentucky. *International Journal of Drug Policy*, 85, Article 102588. https://doi.org/10.1016/j.drugpo.2019.11.001
- Fischer, B., Pang, M., & Tyndall, M. (2019). The opioid death crisis in Canada: Crucial lessons for public health. *The Lancet Public Health*, 4(2), e81–e82. https://doi.org/ 10.1016/S2468-2667(18)30232-9
- Gallegos, D., Durham, J., Rutter, C., & McKechnie, R. (2023). Working towards the active participation of underrepresented populations in research: A scoping review and thematic synthesis. Health & Social Care in the Community, 2023, 1–26. https://doi. org/10.1155/2023/1312525
- Glasgow City Health & Social Care Partnershp. Implementation of Safer Drug
 Consumption Facility. https://glasgowcity.hscp.scot/sites/default/files/publications
 /Item%20No%2007%20-%20Implementation%20of%20a%20Safer%20Drug%20
 Consumption%20Facility.pdf.
- Guise, A., Harris, M., McCusker, M., McNeil, R., & Werb, D. (2023). Stigma is stopping an evidence based response to drug overdose deaths in the UK. BMJ., Article e074934. https://doi.org/10.1136/bmj-2023-074934
- Harris, M., & Rhodes, T. (2012). Venous access and care: Harnessing pragmatics in harm reduction for people who inject drugs. Addiction, 107(6), 1090–1096. https://doi. org/10.1111/j.1360-0443.2011.03749.x

- Harris, J., Shorter, G. W., Davidson, G., & Best, P. (2020a). Risk perception, changing social context, and norms prevent transition to regular injection among people who smoke heroin. *Drug and Alcohol Dependence*, 208, Article 107878. https://doi.org/ 10.1016/j.drugalcdep.2020.107878
- Harris, M., Scott, J., Hope, V., Wright, T., McGowan, C., & Ciccarone, D. (2020b). Navigating environmental constraints to injection preparation: The use of saliva and other alternatives to sterile water among unstably housed PWID in London. *Harm Reduction Journal*, 17(1), 24. https://doi.org/10.1186/s12954-020-00369-0
- Harris, M., Holland, A., Lewer, D., Brown, M., Eastwood, N., Sutton, G., Sansom, B., Cruickshank, G., Bradbury, M., Guest, I., & Scott, J. (2022). Barriers to management of opioid withdrawal in hospitals in England: A document analysis of hospital policies on the management of substance dependence. *BMC Medicine*, 20(1), 151. https://doi.org/10.1186/s12916-022-02351-y
- Holeksa, J. (2022). Dealing with low access to harm reduction: A qualitative study of the strategies and risk environments of people who use drugs in a small Swedish city. Harm Reduction Journal, 19(1), 23. https://doi.org/10.1186/s12954-022-00602-y
- Holland, A., Harris, M., Hickman, M., Lewer, D., Shorter, G. W., Horsley, J., Powell, M., & Rae, M. (2022). Overdose prevention centres in the UK. The Lancet Public Health, 7 (3), e196–e197. https://doi.org/10.1016/S2468-2667(22)00038-X
- Holland, A., Stevens, A., Harris, M., Lewer, D., Sumnall, H., Stewart, D., Gilvarry, E., Wiseman, A., Howkins, J., McManus, J., Shorter, G. W., Nicholls, J., Scott, J., Thomas, K., Reid, L., Day, E., Horsley, J., Measham, F., Rae, M., ... Hickman, M. (2023). Analysis of the UK Government's 10-year drugs strategy—A resource for practitioners and policymakers. *Journal of Public Health*, 45(2), e215–e224. https://doi.org/10.1093/pubmed/fdac114
- Holland, A., Copeland, C. S., Shorter, G. W., Connolly, D. J., Wiseman, A., Mooney, J., Fenton, K., & Harris, M. (2024). Nitazenes—Heralding a second wave for the UK drug-related death crisis? *The Lancet Public Health*, 9(2), e71–e72. https://doi.org/ 10.1016/S2468-2667(24)00001-X
- UK Home Office. (2021). From harm to hope: A 10-year drugs plan to cut crime and save lives. https://assets.publishing.service.gov.uk/media/629078bad3bf7f036fc492d1/From_harm_to_hope_PDF.pdf.
- House of Commons Home Affairs Committee. (2023). Drugs: Government Response to the Committee's Third Report of Session 2022-23. https://committees.parliament.uk/publi cations/42046/documents/209210/default/.
- Hunt, N., Lloyd, C., Kimber, J., & Tompkins, C. (2007). Public injecting and willingness to use a drug consumption room among needle exchange programme attendees in the UK. *International Journal of Drug Policy*, 18(1), 62–65. https://doi.org/10.1016/j. drugpo.2006.11.018
- Israel, B. A. (Ed.). (2005). Methods in community-based participatory research for health (1st ed). Jossey-Bass.
- Ivsins, A., Warnock, A., Small, W., Strike, C., Kerr, T., & Bardwell, G. (2023). A scoping review of qualitative research on barriers and facilitators to the use of supervised consumption services. *International Journal of Drug Policy*, 111, Article 103910. https://doi.org/10.1016/j.drugpo.2022.103910
- Jain, N., Avanthika, C., Singh, A., Jhaveri, S., De La Hoz, I., Hassen, G., Camacho L, G. P., & Carrera, K. G (2021). Deep vein thrombosis in intravenous drug users: An invisible global health burden. *Cureus*. https://doi.org/10.7759/cureus.18457
- Kammersgaard, T. (2019). Harm reduction policing: From drug law enforcement to protection. Contemporary Drug Problems, 46(4), 345–362. https://doi.org/10.1177/ 0091450919871313
- Kaneva, D. (2024). Learning walks: Making sense of school through prompts from the physical environment. *International Journal of Research & Method in Education*, 47(5), 484–495. https://doi.org/10.1080/1743727X.2024.2335185
- Keemink, J. R., Stevens, A., Shirley-Beavan, S., Khadjesari, Z., & Shorter, G. W. (2025). Four decades of overdose prevention centres: Lessons for the future from a realist review. *Harm Reduction Journal*, 22(1), 36. https://doi.org/10.1186/s12954-025-01178-z
- Kennedy, M. C., Karamouzian, M., & Kerr, T. (2017). Public health and Public order outcomes associated with supervised drug consumption facilities: A systematic review. Current HIV/AIDS Reports, 14(5), 161–183. https://doi.org/10.1007/ s11904-017-0363-v
- Kennedy, M. C., Karamouzian, M., & Marshall, B. D. L. (2022). The north American opioid crisis: How effective are supervised consumption sites? *The Lancet*, 400 (10361), 1403–1404. https://doi.org/10.1016/S0140-6736(22)01593-8
- Khair, S., Eastwood, C. A., Lu, M., & Jackson, J. (2022). Supervised consumption site enables cost savings by avoiding emergency services: A cost analysis study. *Harm Reduction Journal*, 19(1), 32. https://doi.org/10.1186/s12954-022-00609-5
- King, A. C., & Woodroffe, J. (2017). Walking interviews. In P. Liamputtong (Ed.), Handbook of research methods in health social sciences (pp. 1–22). Singapore: Springer. https://doi.org/10.1007/978-981-10-2779-6 28-1.
- Kinney, P. (2021). Walking interviews: A novel way of ensuring the voices of vulnerable populations are included in research. In M. Borcsa, & C. Willig (Eds.), Qualitative research methods in mental health. Cham: Springer. https://doi.org/10.1007/978-3-030-65331-6 4.
- Kosteniuk, B., Salvalaggio, G., McNeil, R., Brooks, H. L., Dong, K., Twan, S., ... Hyshka, E. (2021). You don't have to squirrel away in a staircase": Patient motivations for attending a novel supervised drug consumption service in acute care. *International Journal of Drug Policy*, 96, Article 103275. https://doi.org/10.1016/j.drupa.2021.103275
- Lalanne, L., Roux, P., Donadille, C., Briand Madrid, L., Célerier, I., Chauvin, C., Hamelin, N., Kervran, C., Maradan, G., Auriacombe, M., Jauffret-Roustide, M., & the COSINUS Study Group. (2024). Drug consumption rooms are effective to reduce atrisk practices associated with HIV/HCV infections among people who inject drugs: Results from the COSINUS cohort study. Addiction, 119(1), 180–199. https://doi. org/10.1111/add.16320

- Levengood, T. W., Yoon, G. H., Davoust, M. J., Ogden, S. N., Marshall, B. D. L., Cahill, S. R., & Bazzi, A. R. (2021). Supervised injection facilities as harm reduction: A systematic review. *American Journal of Preventive Medicine*, 61(5), 738–749. https://doi.org/10.1016/j.amepre.2021.04.017
- Lewer, D., Croxford, S., Desai, M., Emanuel, E., Hope, V. D., McAuley, A., ... Tweed, E. J. (2022). The characteristics of people who inject drugs in the United Kingdom: Changes in age, duration, and incidence of injecting, 1980-2019, using evidence from repeated cross-sectional surveys. Addiction, 117(9), 2471-2480. https://doi.org/10.1111/add.15911
- Luchenski, S., Maguire, N., Aldridge, R. W., Hayward, A., Story, A., Perri, P., ... Hewett, N. (2018). What works in inclusion health: Overview of effective interventions for marginalised and excluded populations. *The Lancet*, 391(10117), 266–280. https://doi.org/10.1016/S0140-6736(17)31959-1
- Madden, A., Lancaster, K., Ritter, A., & Treloar, C. (2021). Making legitimacy: Drug user representation in United Nations drug policy settings. *International Journal of Drug Policy*, 87, Article 103014. https://doi.org/10.1016/j.drugpo.2020.103014
- Malina, M. A., Nørreklit, H. S. O., & Selto, F. H. (2011). Lessons learned: Advantages and disadvantages of mixed method research. Qualitative Research in Accounting & Management, 8(1), 59–71. https://doi.org/10.1108/11766091111124702
- Malins, P., Fitzgerald, J. L., & Threadgold, T. (2006). Spatial 'Folds': The entwining of bodies, risks and city spaces for women injecting drug users in Melbourne's Central Business District. Gender, Place & Culture, 13(5), 509–527. https://doi.org/10.1080/ 09663690600858895
- Marshall, B. D., Milloy, M.-J., Wood, E., Montaner, J. S., & Kerr, T. (2011). Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: A retrospective population-based study. *The Lancet*, 377 (9775), 1429–1437. https://doi.org/10.1016/S0140-6736(10)62353-7
- McNeil, R., & Small, W. (2014). Safer environment interventions': A qualitative synthesis of the experiences and perceptions of people who inject drugs. Social Science & Medicine, 106, 151–158. https://doi.org/10.1016/j.socscimed.2014.01.051
- Miller, N. M., Campbell, C., & Shorter, G. W. (2023). Barriers and facilitators of naloxone and safe injection facility interventions to reduce opioid drug-related deaths: A qualitative analysis. *International Journal of Drug Policy*, 117, Article 104049. https:// doi.org/10.1016/j.drugpo.2023.104049
- Miller, N. M., Waterhouse-Bradley, B., Campbell, C., & Shorter, G. W. (2022). How do naloxone-based interventions work to reduce overdose deaths: A realist review. Harm Reduction Journal, 19(1), 18. https://doi.org/10.1186/s12954-022-00599-4
- Moore, G., Wilding, H., Gray, K., & Castle, D. (2019). Participatory methods to engage health service users in the development of electronic health resources: Systematic review. *Journal of Participatory Medicine*, 11(1). https://doi.org/10.2196/11474. Sconus
- Naderifar, M., Goli, H., & Ghaljaie, F. (2017). Snowball sampling: A purposeful method of sampling in qualitative research. Strides in Development of Medical Education, 14 (3), https://doi.org/10.5812/sdme.67670
- National Records of Scotland. (2024). Drug-related deaths in Scotland in 2023. https://www.nrscotland.gov.uk/files/statistics/drug-related-deaths/23/drug-related-deaths-23-report.pdf.
- Ng, R. S. H., Darko, D. A., & Hillson, R. M. (2004). Street drug use among young patients with type 1 diabetes in the UK. *Diabetic Medicine*, 21(3), 295–296. https://doi.org/ 10.1046/j.1464-5491.2003.01092.x
- NHS Digital. (2021). Hospital admissions related to drug misuse. Statistics on Drug Misuse, England 2020. https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-drug-misuse/2020/part-1-hospitaladmissions-related-to-drug-misuse#hospital-admissions-for-drug-relatedmental-and-behavioural-disorders-and-for-poisoning-by-drug-misuse.
- Nicholls, J., Livingston, W., Perkins, A., Cairns, B., Foster, R., Trayner, K. M., ... Parkes, T. (2022). Drug consumption rooms and public health policy: Perspectives of scottish strategic decision-makers. *International Journal of Environmental Research and Public Health*, 19(11), 6575. https://doi.org/10.3390/jjerph19116575
- Nordgren, J., Richert, T., & Stallwitz, A. (2022). Police officers' attitudes and practices toward harm reduction services in Sweden-a qualitative study. *International Journal* of *Drug Policy*, 104, Article 103672. https://doi.org/10.1016/j.drugpo.2022.103672
- Novak, S. P., & Kral, A. H. (2011). Comparing injection and non-injection routes of administration for heroin, methamphetamine, and cocaine users in the United States. *Journal of Addictive Diseases*, 30(3), 248–257. https://doi.org/10.1080/ 10550887.2011.581989
- Office for National Statistics. (2024). Deaths related to drug poisoning in England and Wales: 2023 registrations. https://www.ons.gov.uk/peoplepopulationandcommun ity/birthsdeathsandmarriages/deaths/bulletins/deathsrelatedtodrugpoisoninginen glandandwales/2023registrations#:~:text=In%20England%20and%20Wales%2C% 205%2C448,has%20risen%20every%20year%20since.
- Parkes, T., Price, T., Foster, R., Trayner, K. M., Sumnall, H. R., Livingston, W., ... Nicholls, J. (2022). Why would we not want to keep everybody safe? The views of family members of people who use drugs on the implementation of drug consumption rooms in Scotland. *Harm Reduction Journal*, 19(1), 99. https://doi.org/ 10.1186/s12954-022-00679-5
- Parkin, S., & Coomber, R. (2009). Public injecting and symbolic violence. Addiction Research & Theory, 17(4), 390–405. https://doi.org/10.1080/16066350802518247
- Parkin, S., & Coomber, R. (2011a). Injecting drug user views (and experiences) of drugrelated litter bins in public places: A comparative study of qualitative research findings obtained from UK settings. *Health & Place*, 17(6), 1218–1227. https://doi. org/10.1016/j.healthplace.2011.08.002
- Parkin, S., & Coomber, R. (2011b). Public injecting drug use and the social production of harmful practice in high-rise tower blocks (London, UK): A Lefebvrian analysis. Health & Place, 17(3), 717–726. https://doi.org/10.1016/j.healthplace.2011.02.001

- Parkin, S. (2016). Observant participation with people who inject drugs in street-based settings: Reflections on a method used during applied ethnographic research. Addiction Research & Theory, 25(1), 39–47. https://doi.org/10.1080/ 16066359.2016.1196675
- Pro, G., Hayes, C., Montgomery, B. E., & Zaller, N. (2022). Demographic and geographic shifts in the preferred route of methamphetamine administration among treatment cases in the US, 2010–2019. *Drug and Alcohol Dependence, 237*, Article 109535. https://doi.org/10.1016/j.drugalcdep.2022.109535
- Pucci, M., Singh Jutley, G., Looms, J., & Ford, L. (2024). N-desethyl isotonitazene detected in polydrug users admitted to hospital in Birmingham, United Kingdom. Clinical Toxicology, 62(1), 19–25. https://doi.org/10.1080/15563650.2024.2309323
- Rheinländer, T., Olsen, M., Bakang, J. A., Takyi, H., Konradsen, F., & Samuelsen, H. (2008). Keeping up appearances: Perceptions of street food safety in urban Kumasi, Ghana. Journal of Urban Health, 85, 952–964. https://doi.org/10.1007/s11524-008-9318-3
- Rhodes, T., Kimber, J., Small, W., Fitzgerald, J., Kerr, T., Hickman, M., & Holloway, G. (2006). Public injecting and the need for 'safer environment interventions' in the reduction of drug-related harm. *Addiction*, 101(10), 1384–1393. https://doi.org/10.1111/j.1360-0443.2006.01556.x
- Rhodes, T., Watts, L., Davies, S., Martin, A., Smith, J., Clark, D., Craine, N., & Lyons, M. (2007). Risk, shame and the public injector: A qualitative study of drug injecting in South Wales. Social Science & Medicine, 65(3), 572–585. https://doi.org/10.1016/j.socscimed.2007.03.033
- Rhodes, T., Wagner, K., Strathdee, S. A., Shannon, K., Davidson, P., & Bourgois, P. (2012). Structural violence and structural vulnerability within the risk environment: Theoretical and methodological perspectives for a social epidemiology of HIV risk among injection drug users and sex workers. In P. O'Campo, & J. Dunn (Eds.), Rethinking social epidemiology. Dordrecht: Springer. https://doi.org/10.1007/978-94-007-2138-8 10.
- Ryland, J., & Scher, B. D. (2024). Following the evidence-base or exacerbating harms? An autoethnography of a London metropolitan police officer. *Journal of Criminological Research, Policy and Practice*. https://doi.org/10.1108/JCRPP-01-2024-0002
- Sandwell 2021 Census Profile. (2022). Sandwell metropolitan borough council. https://www.sandwelltrends.info/wp-content/uploads/sites/5/2023/04/Sandwell-Census-Profile -2021.pdf.
- Scher, B. D., Neufeld, S. D., Butler, A., Bonn, M., Zakimi, N., Farrell, J., & Greer, A. (2023a). Criminalization causes the stigma": Perspectives from people who use drugs. Contemporary Drug Problems,, 50(3), 402–425. https://doi.org/10.1177/00914509231179226
- Scher, B. D., Scott-Barrett, J., Hickman, M., & Chrisinger, B. W. (2023b). Participatory research emergent recommendations for researchers and academic institutions: A rapid scoping review. *Journal of Participatory Research Methods*, 4(2). https://doi. org/10.35844/001c.74807
- Scher, B. D., Chrisinger, B. W., Humphreys, D. K., et al. (2025). Resident and staff experiences of structural barriers to a housing-based overdose prevention site in Vancouver, Canada: "there is a double standard if you smoke". Canadian Journal of Public Health. https://doi.org/10.17269/s41997-025-01007-7
- Shelter. (2024). At least 354,000 people homeless in England today. December 11 https://england.shelter.org.uk/media/press_release/at_least_354000_people_homeless in england today.
- Shorter, G. W., & Scher, B. D. (2025). Dynamic evolving model of outreach evaluation report.
 Cranstoun
- Shorter, G. W., Harris, M., McAuley, A., Trayner, K. M., & Stevens, A. (2022). The United Kingdom's first unsanctioned overdose prevention site; A proof-of-concept evaluation. *International Journal of Drug Policy*, 104, Article 103670. https://doi.org/ 10.1016/j.drugop.2022.103670
- Shorter, G. W., McKenna-Plumley, P. E., Campbell, K. B., Keemink, J. R., Scher, B. D., Cutter, S., ... Campbell, A. (2023). Overdose prevention centres, safe consumption sites, and drug consumption rooms: A rapid evidence review. *Drug Science*. https://

- doi.org/10.17034/7nb2-j826. https://www.drugscience.org.uk/wp-content/uplo ads/2024/01/Overdose-Prevention-Centres-Safe-Consumption-Sites-and-Drug-Consumption-Rooms-A-Rapid-Evidence-Review.pdf
- Simon, C., Brothers, S., Strichartz, K., Coulter, A., Voyles, N., Herdlein, A., & Vincent, L. (2021). We are the researched, the researchers, and the discounted: The experiences of drug user activists as researchers. *International Journal of Drug Policy, 98*, Article 103364. https://doi.org/10.1016/j.drugpo.2021.103364
- Small, W., Rhodes, T., Wood, E., & Kerr, T. (2007). Public injection settings in Vancouver: Physical environment, social context and risk. *International Journal of Drug Policy*, 18(1), 27–36. https://doi.org/10.1016/j.drugpo.2006.11.019
- Small, W., Moore, D., Shoveller, J., Wood, E., & Kerr, T. (2012). Perceptions of risk and safety within injection settings: Injection drug users' reasons for attending a supervised injecting facility in Vancouver, Canada. *Health, Risk & Society, 14*(4), 307–324. https://doi.org/10.1080/13698575.2012.680950
- Southwell, M., Scher, B., Harris, M., & Shorter, G. W. (2022). The case for overdose prevention centres: voices from Sandwell. *Drug Science*. https://pureadmin.qub.ac.uk/ws/portalfiles/portal/357209311/DS_Coact_Report_V3_AW_Digital.pdf.
- Stevens, A., Southwell, M., Scher, B. D., Shorter, G. W., & Kenth, S. (2022). Reducing drug-related harms in Sandwell: The need and feasibility of an overdose prevention service. *Drug Science*. https://dd80b2c8-95b2-4474-aeca-2c600051cd32.usrfiles.com/ugd/6d80b2 8d648e0773d84fab969bb6895d3f3ae6.pdf.
- Stevens, A., Keemink, J. R., Shirley-Beavan, S., Khadjesari, Z., Artenie, A., Vickerman, P., Southwell, M., & Shorter, G. W. (2024). Overdose prevention centres as spaces of safety, trust and inclusion: A causal pathway based on a realist review. *Drug and Alcohol Review*, 43(6), 1573–1591. https://doi.org/10.1111/dar.13908
- Stevens, A. (2022). New prospects for harm reduction in the UK? A commentary on the new UK drug strategy. The International Journal on Drug Policy, 109, Article 103844. https://doi.org/10.1016/j.drugpo.2022.103844
- Stoltz, J.-A., Wood, E., Small, W., Li, K., Tyndall, M., Montaner, J., & Kerr, T. (2007). Changes in injecting practices associated with the use of a medically supervised safer injection facility. *Journal of Public Health*, 29(1), 35–39. https://doi.org/10.1093/pubmed/fdl090
- Strathdee, S. A., Hallett, T. B., Bobrova, N., Rhodes, T., Booth, R., Abdool, R., & Hankins, C. A. (2010). HIV and risk environment for injecting drug users: The past, present, and future. *The Lancet*, *376*(9737), 268–284. https://doi.org/10.1016/S0140-6736(10)60743-X
- Strike, C., Watson, T. M., Altenberg, J., Barnaby, L., Bayoumi, A. M., Challacombe, L., ... Wright, A. (2020). Challenges, skepticism, and recommendations from police about working in collaboration with supervised consumption services. Substance Use & Misuse, 55(12), 1919–1924. https://doi.org/10.1080/10826084.2020.1781177
- Suen, L. W., Davidson, P. J., Browne, E. N., Lambdin, B. H., Wenger, L. D., & Kral, A. H. (2022). Effect of an unsanctioned safe consumption site in the United States on syringe sharing, rushed injections, and isolated injection drug use: A longitudinal cohort analysis. JAIDS Journal of Acquired Immune Deficiency Syndromes, 89(2), 172–177. https://doi.org/10.1097/OAI.000000000002849
- UK Faculty of Public Health. (2022). Call to amend Misuse of Drugs Regulations to make it easier to pilot overdose prevention centres. https://www.fph.org.uk/news/call-to-amen d-misuse-of-drugs-regulations-to-make-it-easier-to-pilot-overdose-prevention-centre s/#:~:text=Overdose%20prevention%20centres%20are%20healthcare,countries% 2C%20but%20not%20the%20UK.
- Vindrola-Padros, C. (2021). Rapid ethnographies: A practical guide. Cambridge University press.
- Wright, C. (2018). Photo-ethnography. In H. Callan (Ed.), The international encyclopedia of anthropology (1st ed., pp. 1–5). Wiley. https://doi.org/10.1002/9781118924396. wbiea2017.
- Yamamoto, A., Needleman, J., Gelberg, L., Kominski, G., Shoptaw, S., & Tsugawa, Y. (2019). Association between homelessness and opioid overdose and opioid-related hospital admissions/emergency department visits. Social Science & Medicine, 242, Article 112585. https://doi.org/10.1016/j.socscimed.2019.112585
- Yoon, G. H., Levengood, T. W., Davoust, M. J., Ogden, S. N., Kral, A. H., Cahill, S. R., & Bazzi, A. R. (2022). Implementation and sustainability of safe consumption sites: A qualitative systematic review and thematic synthesis. *Harm Reduction Journal*, 19(1), 73. https://doi.org/10.1186/s12954-022-00655-z