ELSEVIER

Contents lists available at ScienceDirect

# Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed





# Service restrictions from emergency shelters among people experiencing homelessness: Uncovering pathways into unsheltered homelessness and institutional circuitry

Nick Kerman<sup>a,\*</sup>, Carrie Anne Marshall<sup>b</sup>, Alexia Polillo<sup>c</sup>, Joseph Voronov<sup>a</sup>, Timothy de Pass<sup>a</sup>, Corinna Easton<sup>d</sup>, Brooklyn Ward<sup>d,e</sup>, Amanda Noble<sup>f,g</sup>, Stephen W. Hwang<sup>f,h</sup>, Nicole Kozloff<sup>c,i</sup>, Vicky Stergiopoulos<sup>j,k,1</sup>, Sean A. Kidd<sup>c,k,1</sup>

- <sup>a</sup> Centre for Addiction and Mental Health, 60 White Squirrel Way, Toronto, Ontario, Canada
- <sup>b</sup> Western University, School of Occupational Therapy, 1201 Western Road, London, Ontario, Canada
- <sup>c</sup> Centre for Addiction and Mental Health, 1025 Queen Street West, Toronto, Ontario, Canada
- d Western University, Faculty of Health Sciences, 1201 Western Road, London, Ontario, Canada
- <sup>e</sup> Ottawa Hospital Research Institute, Clinical Epidemiology Program, 1919 Riverside Drive, Ottawa, Ontario, Canada
- f MAP Centre for Urban Health Solutions, Unity Health Toronto, 30 Bond Street, Toronto, Ontario, Canada
- g University of Toronto, Factor-Inwentash Faculty of Social Work, 246 Bloor Street West, Toronto, Ontario, Canada
- <sup>h</sup> University of Toronto, Division of General Internal Medicine, 1 King's College Circle, Toronto, Ontario, Canada
- <sup>i</sup> University of Toronto, Department of Psychiatry, 1025 Queen Street West, Toronto, Ontario, Canada
- <sup>j</sup> Centre for Addiction and Mental Health, 1051 Queen Street West, Toronto, Ontario, Canada
- <sup>k</sup> University of Toronto, Department of Psychiatry, 1051 Queen Street West, Toronto, Ontario, Canada

## ARTICLE INFO

Handling editor: Jamie Pearce

Keywords:
Homelessness
Homeless shelters
Violence
Substance use
Service use
Qualitative research
Canada

#### ABSTRACT

Service restrictions refer to temporary or permanent bans of individuals from a program or an organization's services, and are widely used in emergency shelter systems. Limited research exists on how service restrictions unfold and their impacts on people experiencing homelessness. This qualitative study used in-depth interviews with timeline mapping to examine the antecedents and consequences of service restrictions from emergency shelters among people experiencing homelessness in two cities in Ontario, Canada. A total of 49 people experiencing homelessness who had been restricted from an emergency shelter program in the past year were recruited and included in the study analysis. A pragmatic and integrative approach was used for data analysis that involved the development of meta-matrices to identify prominent and divergent perspectives and experiences with regard to service restriction antecedents and consequences. Study findings underscored that service restrictions were often the result of violence and aggression, primarily between service users. There were regional differences in other service restriction reasons, including substance use and possession. Service restrictions affected the shelter status of almost all participants, with many subsequently experiencing unsheltered homelessness, and cycling through institutional health, social, and criminal justice services (i.e., institutional circuitry). Other health and social consequences included substance use relapses and hospitalizations; coldrelated injuries due to post-restriction unsheltered homelessness; suicidality; food insecurity; diminished contact with support network and connections; and intense feelings of anger, fear, and hopelessness. Overall, the study findings advance our understanding of the role of homeless services in pathways into unsheltered homelessness and institutional circuitry, which raise critical questions about how to mitigate the harms associated with service restrictions, while concurrently facilitating safety and upholding the rights of people experiencing homelessness and emergency shelter staff.

Emergency shelters are a central component of homeless service systems in many communities. These services principally address the

<sup>\*</sup> Corresponding author. Centre for Addiction and Mental Health, 60 White Squirrel Way, 3rd Floor, Toronto, Ontario, M6J 1H4, Canada. *E-mail address*: nick.kerman@camh.ca (N. Kerman).

<sup>&</sup>lt;sup>1</sup> Equal contributions and shared last authorship.

need for shelter among people experiencing homelessness; however, they may also provide or connect service users to meal programs, healthcare, and housing support. Although most people experiencing homelessness use shelters on any given night in many North American cities, the rates of unsheltered homelessness (e.g., people living on the streets, in parks, under bridges, in encampments, or in abandoned buildings) have increased in recent years and even exceed sheltered homelessness in some communities (de Sousa et al., 2022; Government of Canada, 2023). This trend has individual and systemic consequences. Unsheltered homelessness is associated with longer durations without housing (i.e., chronic homelessness) and poorer health, including higher mortality rates, than sheltered homelessness (Richards and Kuhn, 2023). Type of homelessness also affects service use patterns, with people experiencing unsheltered homelessness accessing fewer primary and preventative health services than those residing in shelters (Richards and Kuhn, 2023). Ultimately, this may result in higher healthcare costs due to health deteriorations that require longer hospital admissions when care is eventually accessed (Hwang et al., 2011). Anti-homelessness ordinances and architecture are additional burdens that disproportionally affect people experiencing unsheltered homelessness by restricting access to sleeping locations and undermining safety. Further, the former laws are costly to enforce and yield barriers to exiting homelessness (American Public Health Association, 2017; Westbrook and Robinson, 2021). Thus, emergency shelters may have a role in mitigating the harms associated with unsheltered homelessness, making it imperative that these services are safe and accessible.

The rise in unsheltered homelessness is partially attributable to increased homelessness rates that are exceeding or threatening to exceed shelter system capacity. For example, a pre-COVID-19 pandemic study conducted in Canada found that the mean occupancy rate in shelters across the country was 91.0% in 2016 - a 8.3% increase from 2005 (Duchesne et al., 2021). There was a further proliferation of unsheltered homelessness in many North American cities during the COVID-19 pandemic, partially stemming from heightened risk of SARS-CoV-2 transmission in shelters (Finnigan, 2022; Mohsenpour et al., 2021). However, use of shelters is also shaped by other types of experiences that people have in these service settings. Shelters are widely perceived by service users to be unsafe due to risk of violent and nonviolent victimization (Kerman et al., 2023). These safety concerns may contribute to avoidance of shelters, as well as survival patterns involving hypervigilance and behavioural escalation when threatened (Heerde and Pallotta-Chiarolli, 2020; Heerde et al., 2022; Karadzhov et al., 2020; Wusinich et al., 2019). Yet, engagement in such behaviours may vield additional problems that undermine shelter stability.

Service restrictions, also known as service bans or discharges, are widely used in shelter systems and may be experienced negatively by people who are homeless. These refer to temporary or permanent bans of individuals from a program or an organization's services, and may occur for different reasons, such as aggression and violence, verbal abuse, or violation of program rules (e.g., substance use or intoxication, possession of a weapon, missed curfew; Evans, 2011; Nettleton et al., 2012; Wallace et al., 2018). Service restrictions can also vary in form; they may be permanent or temporary, service-specific or organization-wide, or appealable or irrevocable. In any form, service restrictions have the potential to leave people experiencing homelessness without needed supports and connection.

There is preliminary evidence on service restriction rates among homeless populations. Secondary analyses of two large Canadian datasets revealed that 17.6% of homeless adults with mental illness had been service restricted in the past two years, whereas 8.2% of homeless youth had experienced the same in the past year (Kerman et al., 2022a). Recent involvement with the criminal justice system and earlier age of first homeless episode significantly increased the likelihood of service restriction in both datasets, whereas substance use problems had nonsignificant correlations (Kerman et al., 2022a). Moreover, rates varied by city, suggesting that regional shelter policies and practices may affect

service restriction frequencies. No research has examined the effects of service restrictions among people experiencing homelessness. Accordingly, there is a critical need to understand how service restrictions are experienced by people who receive them and their subsequent impacts.

This qualitative study used in-depth interviews with timeline mapping to examine how service restrictions from shelters unfold among people experiencing homelessness in two Canadian cities. A two-part research question was addressed: What do people experiencing homelessness who have been service restricted from shelters identify as the (a) antecedents and (b) consequences of service restrictions?

#### 1. Methods

#### 1.1. City sites and context

The study was conducted in two cities in Ontario, Canada. City A was a large metropolitan city with a shelter system that served thousands of people experiencing homelessness each night. The shelter system included multiple shelters for youth, in addition to a range of adult services that were available by gender (men, women, mixed adult). Shelters varied in size and model, with some having hundreds of beds and others less than 20. Most shelter beds were available in traditional. congregate buildings; however, there were also a number of shelter hotels for people experiencing homelessness in the city at the time of data collection. Healthcare services, including primary care and harm reduction supports, were embedded in many shelters. A municipal policy established standards for shelter operations, including the use of service restrictions. However, standardized service restriction reasons and durations were not mandated, permitting agencies to develop organization-specific practices within the confines of the municipal policy. Restrictions exceeding several months required municipal government approval.

City B was a medium-sized metropolitan city with a shelter system that served more than 300 individuals each night. The shelter system included two larger adult shelters, a youth shelter, and a range of smaller services, which were available by gender (men, women, mixed adult). Like City A, there was variation in the size and models of the shelters in City B. The majority of shelter beds existed in traditional congregate buildings; however, there were also a number of shelter hotels and a developing shelter cabin community in the city's homeless service system at the time of data collection. Urban encampments, which were intermittently sanctioned, also existed. Healthcare, including mental health services, primary care, and harm reduction supports, was typically offered by external agencies that visited service users in shelters, though some shelter programs offered healthcare services internally. A municipal policy required shelter operators to have an organizational policy on service restrictions, though agencies were free to develop their own practices.

The study was approved by three research ethics boards affiliated with the lead study investigators.

## 1.2. Sample and recruitment

Purposive sampling was used to recruit 58 people experiencing homelessness in the two cities. Purposive sampling was based on location (large vs. medium-sized city), with additional considerations by age group (adult aged ≥25 years or youth aged 16–24 years), gender, and racial identity. Individuals were eligible to participate if they: [1] were currently experiencing homelessness (i.e., staying in an emergency accommodation, such as a shelter or hostel, or living outside in a place not ordinarily used as a regular sleeping accommodation for at least the past seven nights), [2] had been restricted from a health or social service in the past 12 months while experiencing homelessness, [3] were 16 years of age or older, [4] spoke English, and [5] had the capacity to give informed consent. The second eligibility criterion was amended during the course of the study from three months due to recruitment difficulties

and observations suggesting that participants were able to recall and describe their service restrictions from the past year in sufficient detail. Individuals experiencing homelessness as part of a family unit were excluded from participating in the study.

Participants were recruited from community agencies providing shelter programs. The programs from which participants were recruited were not necessarily the services from which they have been restricted. In City A, recruitment occurred at five agencies, which offered shelter services to single youth and adults. Similarly, in City B, recruitment occurred at two agencies, one of which provided shelter services to adults and the other to youth. Both agencies in City B offered services to people of a range of genders. Research team members liaised with community agency staff to identify prospective participants who met the study's eligibility criteria. Study flyers were also posted at some agencies. The researchers were present at each shelter for at least two days during which service users could ask questions about the study, and participate if they were eligible. Visits to shelters were also completed for pre-scheduled interviews and to accommodate interested individuals unable to participate on previously held data collection days.

Of the 58 individuals who participated in the study, data from nine individuals were removed for the following reasons: non-shelter service restriction (n=3); unreliable, poor quality data (n=2); housed at the time of service restriction (n=2); and study withdrawal (n=2). Data from 49 participants (29 in City A in 20 in City B) were analyzed.

## 1.3. Data collection

In-depth, semi-structured interviews that involved timeline mapping exercises were held with participants. Participants were first asked to identify and describe their most recent experience of being restricted from a shelter and how this experience unfolded. Questions then explored the events, including experiences and perceptions, that preceded and succeeded the service restriction. Affective, cognitive, and behavioural impacts were explored sequentially (i.e., prior to the restriction then when the restriction occurred then immediately following the restriction then the weeks after the restriction then the months after the restriction). The interview guide questions were structured to elicit narratives of the service restriction experience (e.g., "What happened next?" "What did you do after that?" "What were you thinking when that occurred?" "How were you feeling at that point?"). Participants' responses were mapped out visually on a timeline as they were discussed. This approach has been used in previous studies with homeless populations (Patterson et al., 2012; Polillo and Sylvestre, 2021) and complemented the narrative discussed in the in-depth interviews by helping to facilitate an understanding of the sequence of events that preceded and succeeded service restrictions. If participants identified multiple service restrictions, similar questions were used to explore one other experience of the participant's choosing. No more than two service restrictions were examined in an interview for time management reasons. The final part of the interview involved a discussion of the factors that contribute to safety in health and social service settings, as well as participants' perspectives on the use of service restrictions generally.

A short background survey gathered demographic and health information prior to the interview. Self-report data were collected on age, gender, sexual orientation, racial identity, country of origin, homelessness history, current substance use, diagnosed mental disorders, health service access and unmet support needs, recent justice system involvement, and past victimization in service settings. A \$40 cash honorarium was provided for study participation, which is consistent with personcentred compensation practices for research involving people experiencing marginalization (Collins et al., 2017). All interviews were audio recorded and participants provided written consent.

Data were collected from October 2022–June 2023 in City A and November 2022–April 2023 in City B. Three team members were involved in data collection in both cities (City A: NKe, JV, and TdP; City B: CM, CE, and BW). Interviews were primarily completed by two team

members, one of whom led the interview and the other who completed the timeline mapping. The team members involved in interviewing in City A were white men with backgrounds in psychology and education. NKe and TdP had previous experience conducting research with people experiencing homelessness. None of the interviewers had worked professionally in shelter settings. In City B, the interviewers were white women with backgrounds in occupational therapy and psychology. They all had previous experience conducting research with people experiencing homelessness and two had worked as service providers in shelters.

#### 1.4. Data analysis

Guided by the techniques of Miles et al. (2014), a pragmatic and integrative approach was used for data analysis. First, audio recordings from both cities were transcribed verbatim by a professional transcription company. The transcripts were then verified by the research team for accuracy and uploaded in NVivo 12 for analysis. An initial, deductive coding scheme was developed to capture service restriction reasons, contributing factors, consequences, and attitudes and perceptions. The coding scheme was then applied to a set of four transcripts, which were independently coded by NKe, JV, and TdP. The team members then met to review coding and revise the coding scheme. The latter involved the addition of codes to capture service restriction processes and service recommendations, among other minor coding framework changes. Line-by-line coding of the transcripts was then led by JV and reviewed by TdP using the revised coding scheme. Any discrepancies in the coding were resolved by NKe.

Following line-by-line coding, further analyses were conducted by NKe to better understand and explain the sequential effects of service restrictions. This involved the development of a partially ordered metamatrix in Microsoft Excel. Meta-matrices are master charts that integrate descriptive data from multiple sources into a standard format to enable subsequent partitioning and clustering of data, and detect differences between cases (Miles et al., 2014). Each participant had their own row in the meta-matrix, with columns for each post-restriction shelter/living arrangement, other domains relevant to the study research question (earlier events; contextual factors; service restriction reason, length, and details; cognitive/emotional response/outcomes; behavioural response/outcomes; and post-restriction timeline length), and key demographic and health information (gender, racial identity, age group, homelessness history, current substance use, overdose history, diagnosed mental disorders, and recent justice system involvement and hospitalization). The meta-matrix was then populated with data from the timeline maps and summaries, and NVivo coding, and then verified against the original transcript. These data were then analyzed to determine prominent and divergent perspectives and experiences with regard to service restriction antecedents and consequences. Further, different types of post-restriction living arrangement patterns were explored for the purpose of describing post-restriction timeline paths. This involved analyzing the number, types, and durations of living arrangements (including hospitals and jails); reasons for living arrangement transitions; and support connections used to re-access the shelter system. Finally, findings were compared between cities and by participant characteristics by clustering the meta-matrix cells by factors of interest. Some results are presented in a quantitized form (i.e., counts) to sharpen the focus on key findings (Sandelowski, 2001), a technique that has been used effectively in past research with a similar population (e.g., Henwood et al., 2015; Padgett et al., 2011). Memoing was used throughout data analysis to record analytic reflections and emergent patterns, with an emphasis on documenting divergent data sources (Miles et al., 2014).

Quotes presented in the results include participants' gender, racial identity, age group, and city. A total of 13 unique participants are represented in the 16 presented quotes, with no more than two quotes from any single participant.

#### 2. Results

### 2.1. Sample characteristics

The characteristics of study participants are shown in Table 1. Slightly less than two-thirds of the sample were men and over one-third were non-white. The average age of participants was approximately 40 years. Despite all participants having been restricted from a shelter during the past year, most had been primarily residing in a shelter during the past month. Nearly all participants had been homeless for six months or longer within the past year (i.e., chronically homeless). Unmet health needs were common among participants. The characteristics of participants in the two cities were similar, though the sample in City A was comprised of more men and non-white individuals. Participants in City A were also more likely to report having criminal justice system involvement in the past year and have a usual source of care (i.e., access to a regular medical doctor or nurse practitioner) than those in City B.

### 2.2. Service restriction causes and contextual factors

The most common cause of service restrictions was physical violence between service users (nine participants in City A and seven in City B; see Table 2). Pre-existing interpersonal conflict or tension between service users was often reported as a contextual factor prior to these violent incidents. Conflict in response to transphobic and racist discrimination by other service users was described by two participants: "We got another lady that moved in and she was allowed to call me a man, she was allowed to call me a pedophile, she was allowed to call me an abuser. She was basically allowed to say and do anything that she felt

**Table 1** Sample characteristics.

Characteristic	City A $(n=29)$		City B $(n=20)$		Total $(N = 49)$	
	n/M	%/SD	n/M	%/SD	n/M	%/SD
Gender, male	21	72.4	10	50.0	31	63.3
Age	40.83	12.05	38.56	14.22	39.90	12.88
Racial identity, non-white	14	48.3	5	25.0	19	38.8
Born outside of Canada	_	_	_	-	11	22.4
2SLGBTQ + identity	-	-	_	-	6	12.2
≥6 months homeless, past year	27	93.1	17	85.0	44	89.8
Primary sleeping location, p	ast month	ı <sup>a</sup>				
Shelter	23	79.3	14	70.0	37	75.5
Unsheltered or various locations <sup>b</sup>	6	20.7	5	25.0	11	22.4
Criminal justice system involvement, past year	13	44.8	5	25.0	18	36.7
Mental disorder diagnosis, lifetime	15	51.7	10	50.0	25	51.0
Current alcohol or drug use	19	65.5	17	85.0	36	73.5
Overdose, past year ( $N = 36$ )	7	36.8	7	41.2	14	38.9
Access to regular source of care	19	65.5	7	35.0	26	53.1
Hospitalization, past year	12	41.4	8	40.0	20	40.8
Unmet health need, past-yea	ar					
Physical health	12	41.4	8	40.0	20	40.8
Mental health	12	41.4	6	30.0	18	36.7
Substance use	7	24.1	6	30.0	13	26.5
Physical violence in service setting, past year	21	72.4	15	75.0	36	73.5
Experiences of racism in service setting, past year	17	58.6	5	25.0	22	44.9

*Note:* Cells with n < 5 are suppressed to maintain participant confidentiality.

**Table 2** Antecedents of service restrictions among participants in both cities (N = 49).

Self-reported Antecedent	n	%
Physical or sexual violence	19	38.8
Violence between service users	16	32.7
Violence toward shelter staff	3	7.1
Substance-related	10	20.4
Substance possession (including equipment)	5	10.2
Substance use/intoxication/overdose	3	7.1
Drug selling	1	2.0
Naloxone administration	1	2.0
Shelter policy/rule violation	7	14.3
Missed bed check/curfew	4	8.2
Other shelter policy/rule	3	7.1
Verbal altercation with shelter staff	5	10.2
Verbal altercation between service users	2	4.1
Property damage	2	4.1
Not following staff intervention instructions	2	4.1
Other reason	3	7.1
Unknown reason	1	2.0

Note: Number of reasons exceeds 49, as two participants reported multiple factors.

she wanted to do and they allowed her to come up to my bedside and wave her hands in my face and harass me ... and so, eventually I gave her a little kick in the stomach to go away and, within 15 min, I was sent out on the street with all of my stuff' (Indigenous, nonbinary adult in City A). Physical and sexual violence toward shelter staff, and property damage were less common, with all five of these reported incidents occurring in City A. Alcohol intoxication was reported in four of the incidents involving violence (two between service users and two with staff). Verbal altercations with staff were reported by five participants, three in City A and two in City B. Two participants in City A also reported restrictions due to verbal altercations between service users that had involved threats and aggression.

Service restrictions for reasons related to substance use were more prominent in City B. Five participants in City B reported a restriction for substance possession (including equipment), and one other had been restricted for selling drugs. Three participants, one in City A and two in City B, had been restricted for substance use, intoxication, or overdose. One other participant described having been restricted from a shelter in a different small city in Ontario for administering naloxone to another service user during an overdose.

Shelter policy/rule violations (e.g., missed bed check/curfew, sleeping in the wrong room, maximum stay allowances, not wearing mask) were reported by seven participants (five in City A, two in City B). Misinformation about shelter rules was reported by two participants as a factor leading to their missed bed checks. Pre-existing tension in relationships with shelter staff was also identified as a contextual factor by two other participants, leading to perceptions that their restrictions were partially the result of prejudice. Not following staff intervention instructions during an episode of extreme agitation and distress, and in response to conflict between service users, led to restrictions for two participants in City B. Other reported reasons for restriction included: medical condition acuity (i.e., shelter reportedly could not accommodate a service user's medical needs), collective safety (i.e., staff were reportedly concerned that an assailant would return to the shelter if the participant continued to reside there), and program ineligibility. The reason for restriction was unknown to one participant.

Most service restrictions ranged from 12 h to approximately three months. However, participants in City A were more likely to be unaware of or uncertain about the length of their restrictions. Restrictions of one month or longer were more common in City A, whereas only three participants reported restrictions of more than two weeks in City B. Of note, both participants who were restricted for 12 h were able to retain their shelter bed following completion of the restriction.

<sup>&</sup>lt;sup>a</sup> The primary sleeping location of one participant in City B is withheld to maintain confidentiality.

<sup>&</sup>lt;sup>b</sup> Various locations included nights spent in shelter, outside/encampments, homes of friends or family, and jail of unknown durations.

#### 2.3. Service restriction consequences

Three types of consequences of service restrictions were reported by participants: [1] shelter status changes, [2] emotional and cognitive experiences, and [3] health and social outcomes. Each type of consequence is described in detail below.

Shelter status changes. Almost all participants experienced a change in shelter status following service restrictions. This commonly involved unsheltered homelessness. Of the 49 participants, 23 (46.9%) experienced unsheltered homelessness for one or more nights immediately following their service restriction. However, when examining the timeline of each living arrangement from service restriction to interview date, a total of 35 participants (71.4%) had experienced unsheltered homelessness at some point. The additional 12 individuals had experienced unsheltered homelessness following hospital discharge, subsequent restrictions from other shelters for additional incidents, safety concerns at a previous living arrangement, a relationship breakdown, and jail discharge. The proportions of participants who experienced unsheltered homelessness immediately following service restrictions were similar in the two cities (13 in City A, 10 in City B). However, most of the additional 12 participants who experienced unsheltered homelessness later on in their post-restriction timelines were in City A (10 in City A, two in City B).

Four post-restriction timeline paths were identified from the analysis of participants' living arrangements following their index restrictions (i. e., the first restriction reported by participants in the interview that was then discussed sequentially to understand its impacts): [1] institutional circuitry (i.e., a pattern of residential instability where people cycle between institutional settings, such as shelters, hospitals and other treatment facilities, and jails; Hopper et al., 1997); [2] predominantly unsheltered homelessness; [3] unstable re-sheltering; and [4] stable re-sheltering. Examples of each timeline path are shown in Fig. 1. The timeline paths of two participants (4.1%) lacked sufficient details to make a classification.

Institutional circuitry was characterized as an index service

restriction that was followed by a pattern involving a succession of institutional residences of more than one type (e.g., shelter/warming centre/shelter hotel, jail, hospital, crisis or detoxification centre, other institution) or multiple shelter transitions due to re-occurring service restrictions (i.e., involuntary cycling between shelters). Individuals who briefly used institutional services following restrictions and then found more stable living situations elsewhere were not included in this path. A total of 19 participants (38.8%) – 12 in City A and 7 in City B – had institutional circuitry paths. The majority of these participants had overdosed in the past year, and unmet health needs for substance use problems were common. The causes of index restrictions that preceded this timeline path primarily involved violence, verbal conflict with shelter staff, or drugs (intoxication, selling, or overdose intervention).

The predominantly unsheltered homelessness timeline path was characterized as an index service restriction that initiated a period of homelessness involving stays in mostly unsheltered locations, with few other types of living arrangements. Seven participants (14.3%) had predominantly unsheltered homelessness paths, three of whom were in City A and four of whom were in City B. Most of these individuals were white adult men who had recent involvement with the criminal justice system. Few had access to a regular medical doctor or nurse practitioner, and unmet health needs for substance use problems were common among these individuals as well.

Unstable re-sheltering was characterized as an index service restriction that initiated a period of greater instability as reflected by short periods of unsheltered homelessness, variable stretches of hidden homelessness, and/or multiple short shelter stays that did not involve further service restrictions. Eleven participants (22.4%), all of whom were in City A, had unstable re-sheltering paths. Nine were adult men and slightly more than half identified as Indigenous or Asian. Of the two non-male participants (an adult woman and a nonbinary youth), both experienced hidden homelessness post-restriction that they described as unsafe due to violence. Experiences of racism in health and social services during the past year were most common among these participants. Reported incidents involving violence and verbal altercations where

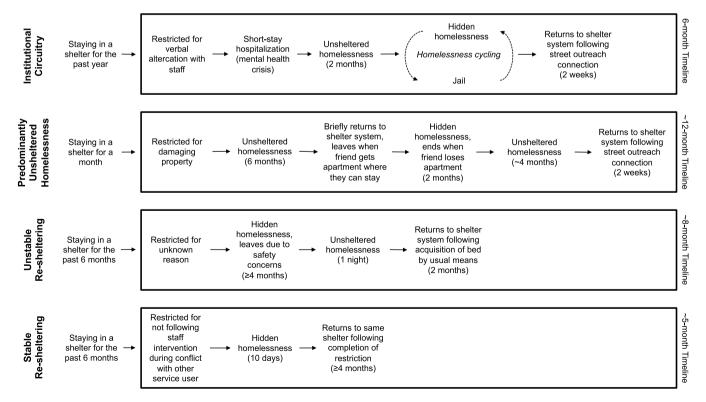


Fig. 1. Example timeline paths of institutional circuitry, predominantly unsheltered homelessness, unstable re-sheltering, and stable re-sheltering.

participants felt victimized or acted in defense of oneself or another party were commonly identified causes of service restriction among this group.

Stable re-sheltering was characterized by rapid re-sheltering, with few other living arrangements and no further shelter-related issues. Ten participants (20.4%) had stable re-sheltering paths. This timeline path was more common among participants in City B (n=8), many of whom were female youth who had short service restrictions and returned to the same shelter from which they has been restricted following its completion. In contrast, the two adult participants in City A were able to quickly secure a bed at another shelter in the city. Causes of service restrictions were varied among this group.

Emotional and cognitive experiences. Intense feelings of anger were a common emotional response to service restrictions. Participants' anger was often the result of the decision-making process and outcome being perceived as unfair: "I felt like I was putting in an honest effort. I didn't even get a fair chance to speak my side of things" (White, male adult in City A). Conflict involving service users from which participants were the only party restricted also contributed to their anger and perceptions of unfairness. Feeling misunderstood and victimized was a related experience tied to anger and unfairness: "They were like, 'We don't want you talking to people here, we don't want you on the property.' And I'm like, 'Whoa, what's going on here? You're treating me like I'm some criminal'" (White, male adult in City B). Surprise and disbelief were also noted by several participants.

Fear, hopelessness, and abandonment were other common emotional reactions that elicited critical perspectives on the meaning and objective of service restrictions. This set of emotions stemmed from uncertainty about where to find shelter, concerns about safety, and the prospect of being alone: "I'm scared that if I don't find a place during the night that I could get killed in my sleep" (White, nonbinary youth in City A). Said another of the gravity of their service restriction: "It's the weight of like being stuck in a snowstorm and you have at least a kilometer to walk in the high wind, with no glasses, no scarf, no gloves" (Black, male adult in City A). Service restrictions also led to self-questioning about where participants belonged: "If they don't want you in a shelter, where is your place in society now?" (White, male adult in City B). Further, for youth, restrictions could parallel their experiences of being kicked out of their family homes: "Felt like a repeat of my childhood" (White, female youth in City A). Several participants also reflected that their service restrictions were a step backward in their efforts to exit homelessness: "I need a stepping stone to get to a stepping stone to get to a stepping stone and that just prevents me from restarting completely" (White, male adult in City A).

In contrast to the majority of the sample, several participants reported that their service restriction was fair and did not have strong emotional reactions related to the decision-making process and outcome. This perception was principally held by participants who initiated violence or who were aware that their behaviours were in violation of shelter rules: "I deserved to get kicked out for what I'd done because I hurt him [other service user]" (White, male youth in City B). Another divergent experience was reported by two participants and involved more positively valanced emotions. These individuals felt free and relieved as a result of being able to express their anger and leave a shelter that was perceived as unsafe: "I was actually glad that I was leaving" (Indigenous, nonbinary adult in City A). No differences were found in emotional and cognitive experiences between participants in City A and B.

Health and social outcomes. Increased substance use was one of the most commonly reported health consequences of service restrictions. Substance use was often described as an immediate post-restriction response: "The liquor store is across the street – I went and got a big bottle and drank it, and then kind of walked around for a while, just lost" (Indigenous, female adult in City A). Several other participants described relapses and hospitalizations due to substance use: "It [service restriction] probably led to me relapsing with drugs and that kind of

slowed me down from trying harder to get into somewhere" (White, male adult in City A). In contrast, one participant described reduced substance use during a period of unsheltered homelessness following a restriction: "You don't use as much, you're just too cold" (White, male adult in City B). Cold-related injuries, principally frostbite, were also frequently described by participants who experienced post-restriction unsheltered homelessness, which often led to emergency department visits or hospital admissions. Suicidal ideation was reported by several participants, with two individuals being hospitalized for an attempt.

Food insecurity was also a threat following service restrictions that led participants to panhandle or busk to obtain money to purchase food, or be "always moving around" in search of food. Weight loss was a subsequent consequence. One other participant reported abstaining from filing a complaint about their service restriction due to the competing time need to obtain food. Concerns about food insecurity were more commonly reported among participants in City B.

Service restrictions commonly affected support networks and connections. Participants reported diminished contact with and barriers to seeing friends and family, especially when those supports were staying at the shelter from which participants had been restricted: "I felt kind of isolated out there, just by myself and stuff, and my sister wasn't coming around with the kids or anything" (White, male adult in City B). Others described disengagement with health services out of anger about their restriction: "I basically got so pissed off with them ... I was done with them" (White, male adult in City B). Interpersonal distancing persisted when participants returned to the shelter system. Mistrust of staff and concerns about conflict with other service users that would lead to further restrictions were the reasons for continued avoidance and guardedness: "I'm just like a little iffy about them [shelter staff]. I don't really say anything. I just walk away from situations now ... if I have a problem, I'll deal with it myself" (Indigenous, female adult in City B).

## 3. Discussion

This qualitative study examined the perceived antecedents and consequences of service restrictions from emergency shelters among people experiencing homelessness in two Canadian cities. Violence and aggression were common causes of service restrictions reported by participants, with some individuals also having been restricted for substance use-related reasons and minor rule violations. The latter findings support assertions made in previous literature that people who use drugs may be more vulnerable to service restrictions due to prohibitive shelter policies (Evans, 2011; Kerman et al., 2020; Nettleton et al., 2012; Wallace et al., 2018). However, consistent with past research that found regional differences in service restriction rates (Kerman et al., 2022a), emergency shelter policies on service restrictions likely varied between the two cities, as participants in one city were more likely to be restricted for substance use, whereas minor rule violations were more common in the other city. There was also variability in service restriction durations and awareness, with some participants reporting that they were not informed about or did not know the lengths of their restrictions. These findings have implications for the outcomes of service restrictions for people experiencing homelessness. For example, a lack of information about the duration of service restrictions limits individuals' capacity to plan and make informed decisions on how to address unmet shelter needs. Thus, although violence and aggression may be standard causes for service restrictions in emergency shelter systems, outcomes may be further shaped by how service restrictions are implemented.

Unsheltered homelessness was a frequent experience following service restrictions from emergency shelters. With nearly half the sample reporting an experience of unsheltered homelessness immediately following service restrictions, their use is a potential pathway into unsheltered homelessness. Past research has demonstrated that safety concerns can lead to avoidance of emergency shelters (Abramovich, 2017; Bardwell, 2019; Wusinich et al., 2019). Our findings deepen this

evidence base on the role of homeless services in pathways into unsheltered homelessness by demonstrating that service restrictions represent direct actions taken by emergency shelters, which frequently result in unsheltered homelessness, even if this is an unintended consequence. Coupled with the associated negative impacts on support networks and the potential for violence in post-restriction accommodations, service restrictions may yield further marginalization, victimization, and isolation in the context of homelessness. The lost connections and risk of unsheltered homelessness raise the prospect that service restrictions may hinder exits out of homelessness, although this is a speculative assertion given that our study cannot empirically confirm this. Accordingly, additional research on how service restrictions affect homelessness exits and approaches for mitigating outcomes of prolonged homelessness is needed. Relatedly, further examination is warranted on how service restrictions affect subsequent risk of intimate partner and gender-based violence.

The prominence of the institutional circuitry timeline path within the sample raises further concerns about the burden of service restrictions on individuals and systems. Although institutional circuitry has been a well-known outcome of deinstitutionalization among people experiencing homelessness and mental illness, it has also been identified in recent research examining eviction outcomes among people who use drugs (Fleming et al., 2023; Hopper et al., 1997; Stanhope et al., 2009). These studies have posited that institutional circuitry exacerbates vulnerability by forcing people experiencing homelessness to attend only to their most immediate survival needs, such as shelter and safety, which may result in disengagement from other services that are beneficial for addressing longer-term needs. Homeless services have also been theorized to contribute to institutional circuitry through the establishment of policies and regulations with which individuals may fail or refuse to comply (Greenwood and Manning, 2017; Quirouette, 2016). Our findings support this assertion by highlighting how service restrictions are a mechanism that can either directly initiate or extend institutional circuitry. Moreover, consistent with Fleming et al. (2023), people who use drugs may be at greater risk of institutional circuitry following service restrictions, given that past-year overdoses and unmet needs for substance use treatment were common among this group in our study. Ultimately, evidence-based interventions, such as Housing First and Critical Time Intervention (Aubry et al., 2020; Manuel et al., 2023), could be leveraged to concurrently reduce institutional circuitry and offset service costs following restrictions from emergency shelters. Further development of overdose prevention sites and other harm reduction services, especially in communities where shelters have more prohibitive policies on substance use, is also key to preventing service restrictions by creating spaces where people can more safely use drugs without penalty (Bardwell et al., 2018; Kerman et al., 2020; Wallace et al., 2018). Greater prioritization of homelessness prevention, particularly through the development of more affordable housing and income support rate raises, would also be beneficial for reducing the strain and reliance on emergency shelter systems - settings where institutional circuitry is concentrated and service restriction harms occur.

Caution is needed when considering the policy and practice implications of our study findings for emergency shelters. Service restriction decision-making represents a complicated issue that often affects multiple parties who may have differing, and even opposing, needs. The views of emergency shelter staff were not included in this study, though past research has indicated that this group may experience moral distress when administering service restrictions (Kerman et al., 2022b). Shelter staff also have a right to safety in their workplace and a responsibility to keep others in the shelter safe, which need to be considered in service restriction policy and practice. Still, our study findings clearly indicate that service restrictions negatively impact people experiencing homelessness, and shelter policy and practice must mitigate those harms as much as possible. Situating service restrictions in shelter policies as the final course of action for serious problems, with clear guidance on graded interventions that can be used earlier (e.g.,

de-escalation and redirection techniques, safety and coping plan development, restorative justice practices for conflict between service users), may be beneficial for addressing issues in alternative ways. Such practices could also make use of half-day service restrictions where individuals retain access to their shelter bed, a form of service restriction that had fewer associated harms among participants who had experienced them. Further, when service restrictions are administered, use of a procedural justice framework, which is concerned with the fairness, transparency, inclusivity, and respectfulness of decision-making processes (Evans et al., 2014), may reduce unfavourable perceptions of service restriction processes. These policy and practice recommendations are preliminary considerations that warrant further research to ensure that they concurrently facilitate safety and uphold the rights of people experiencing homelessness and shelter staff.

Prevention of the antecedents of service restrictions, such as shelterbased violence, is another path toward reducing their harms. As people experiencing homelessness often have histories of trauma and abuse, and are at high risk of victimization (Liu et al., 2021; Padgett et al., 2012; Roy et al., 2014), shelters may be perceived as threatening environments that can precipitate engagement in survival behaviours (Karadzhov et al., 2020). These responses may constitute a trauma response among some service users that could be prevented by improving their sense of safety in the shelter system. Accordingly, integrating a trauma-informed approach into shelter service delivery is recommended. Trauma-informed approaches centre on trauma awareness, safety, choice and empowerment, and recognition of service user strengths in service delivery policy and practice (Hopper et al., 2010). Recent research has highlighted the feasibility and potential benefits of implementing a trauma-informed approach within homeless services, as well as the importance of grounding this work in a strong empirical foundation (Barry et al., 2024; Schneider et al., 2022). By using a trauma-informed approach to attend to the relationships and interactions between service users and shelter staff, safety and wellness for both groups could be improved and potentially reduce interpersonal conflict that can lead to service restriction.

There were several important limitations to this study. First, participants were primarily recruited from shelter settings. Because of this, individuals experiencing prolonged periods of unsheltered homelessness following service restrictions were likely underrepresented in this study. This also raises the possibility that the unsheltered homelessness and institutional circuitry timeline paths are not fully representative of the groups that they characterize, as some individuals may not return to shelters. Further research is warranted on individuals who do not or are unable to return to the shelter system following service restrictions and how this affects their pathways out of homelessness. Second, interview guides did not include prompts regarding involvement with healthcare and criminal justice systems following service restrictions. Because of this, service interactions not involving overnight stays (e.g., use of emergency departments, citations issued by police) were likely underreported, which may obscure identification of additional institutional circuitry timeline path experiences. Third, the study documented timeline paths of up to approximately one year that were bounded by a service restriction from a shelter and the interview date. Although interviews treated that initial service restriction as an index event in the analysis to understand its subsequent impacts, there may have been important prior events not captured in interviews that precipitated the service restriction. Thus, the index service restriction may not be the catalyst event in some participants' timeline paths, and experiences of unsheltered homelessness and institutional circuitry may have preceded index restrictions. Fourth, recall quality and the strong emotionality attached to service restrictions may have affected how participants described their autobiographical memories of these events. Although timeline mapping was used as a visual aid to identify potential gaps in narratives and improve recollection of events, some details may have been forgotten or omitted by participants, especially among those who were intoxicated during or following their restrictions. Fifth, interviews

were conducted by two research members, which may have amplified power imbalances between the researchers and participants due to outnumbering. Sixth, all interviewers in both cities were white and working in professional research roles. These identities may have affected participants' comfort with discussing some aspects of service restrictions, such as the potential role of racial identity and experiences of racism in reported incidents.

#### 4. Conclusion

Service restrictions are fairly common occurrences in emergency shelter systems (Kerman et al., 2022a). This study examined how people who have experienced service restrictions from emergency shelters perceive these events as unfolding and their effects. Our findings underscored that service restrictions are often the result of violence and aggression, primarily between service users, and can lead to unsheltered homelessness and cycling through institutional health, social, and criminal justice services. Health and social consequences in the forms of substance use relapses and hospitalizations, cold-related injuries, suicidality, food insecurity, and diminished contact with support network and connections were also reported. Ultimately, the study findings raise additional questions about the extent to which service restrictions from emergency shelters exacerbate vulnerability and prolong homelessness, and how to effectively mitigate associated harms when restrictions are implemented. These are critical avenues for future research.

## Role of funding sources

This work was primarily supported by the Social Sciences and Humanities Research Council (Insight Development Grant Number 430-2021-00089). Secondary financial support was provided by the City of Toronto and Canadian Institutes of Health Research (CIHR Foundation Grant Number 143259). The funders did not have any involvement in the preparation of this article.

## Ethics approval

The study was approved by three research ethics boards affiliated with the lead study investigators.

## CRediT authorship contribution statement

Nick Kerman: Conceptualization, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Supervision, Writing - original draft, Writing - review & editing, Visualization. Carrie Anne Marshall: Conceptualization, Methodology, Project administration, Supervision, Writing - review & editing, Investigation, Formal analysis. Alexia Polillo: Conceptualization, Formal analysis, Methodology, Writing - review & editing. Joseph Voronov: Formal analysis, Investigation, Writing – review & editing. Timothy de Pass: Formal analysis, Investigation, Writing - review & editing. Corinna Easton: Investigation, Writing - review & editing. Brooklyn Ward: Investigation, Writing - review & editing. Amanda Noble: Conceptualization, Writing - review & editing. Stephen W. Hwang: Conceptualization, Writing - review & editing. Nicole Kozloff: Conceptualization, Writing - review & editing. Vicky Stergiopoulos: Conceptualization, Funding acquisition, Supervision, Writing - review & editing. Sean A. Kidd: Conceptualization, Funding acquisition, Supervision, Writing - review & editing.

## Declaration of competing interest

None declared.

### Data availability

The authors are unable or have chosen not to specify which data has been used.

#### References

- Abramovich, A., 2017. Understanding how policy and culture create oppressive conditions for LGBTQ2S youth in the shelter system. J. Homosex. 64, 1484–1501. https://doi.org/10.1080/00918369.2016.1244449.
- American Public Health Association, 2017. Housing and Homelessness as a Public Health Issue. https://www.apha.org/Policies-and-Advocacy/Public-Health-Policy-State ments/Policy-Database/2018/01/18/Housing-and-Homelessness-as-a-Public-Healt h-Issue. (Accessed 15 August 2023).
- Aubry, T., Bloch, G., Brcic, V., Saad, A., Magwood, O., Abdalla, T., Alkhateeb, Q., Xie, E., Mathew, C., Hannigan, T., Costello, C., Thavorn, K., Stergiopoulos, V., Tugwell, P., Pottie, K., 2020. Effectiveness of permanent supportive housing and income assistance interventions for homeless individuals in high-income countries: a systematic review. Lancet Public Health 5, e342–e360. https://doi.org/10.1016/S2468-2667(20)30055-4.
- Bardwell, G., 2019. The impact of risk environments on LGBTQ2S adults experiencing homelessness in a midsized Canadian city. J. Gay Lesb. Soc. Serv. 31, 53–64. https:// doi.org/10.1080/10538720.2019.1548327.
- Bardwell, G., Boyd, J., Kerr, T., McNeil, R., 2018. Negotiating space & drug use in emergency shelters with peer witness injection programs within the context of an overdose crisis: a qualitative study. Health Place 53, 86–93. https://doi.org/10.1016/j.healthplace.2018.07.011.
- Barry, A.R., Hoffman, E., Martinez-Charleston, E., DeMario, M., Stewart, J., Mohiuddin, M., Mihelicova, M., Brown, M., 2024. Trauma-informed interactions within a trauma-informed homeless service provider: staff and clients perspectives. J. Community Psychol. 52, 415–434. https://doi.org/10.1002/jcop.23102.
- Collins, A.B., Strike, C., Guta, A., Turje, R.B., McDougall, P., Parashar, S., McNeil, R., 2017. "We're giving you something so we get something in return": perspectives on research participation and compensation among people living with HIV who use drugs. Int. J. Drug Pol. 39, 92–98. https://doi.org/10.1016/j.drugpo.2016.09.004.
- de Sousa, T., Andrichik, A., Cuellar, M., Marson, J., Prestera, E., Rush, K., 2022. The 2022
  Annual Homelessness Assessment Report (AHAR) to Congress Part 1: Point-In-Time
  Estimates of Homelessness. Department of Housing and Urban Development, Office
  of Community Planning and Development, The U.S. https://www.huduser.gov/po
  rtal/sites/default/files/pdf/2022-AHAR-Part-1.pdf. (Accessed 15 August 2023).
- Duchesne, A., Cooper, I., Baker, N., 2021. The national shelter study: emergency shelter use in Canada 2005 to 2016. Employment and Social Development Canada. https://www.canada.ca/content/dam/esdc-edsc/documents/programs/homelessness/publications-bulletins/national-shelter-study/2255-National\_Shelter\_Study-EN.pdf. (Accessed 15 August 2023).
- Evans, S.D., Rosen, A.D., Nelson, G., 2014. Community psychology and social justice. In: Johnson, C.V., Friedman, H.L., Diaz, J., Franco, Z., Nastasi, B.K. (Eds.), The Praeger Handbook of Social Justice and Psychology: Volume 3 – Youth and Disciplines in Psychology. Praeger/ABC-CLIO, Santa Barbara, CA, pp. 143–163.
- Evans, J., 2011. Exploring the (bio)political dimensions of voluntarism and care in the city: the case of a 'low barrier' emergency shelter. Health Place 17, 24–32. https://doi.org/10.1016/j.healthplace.2010.05.001.
- Finnigan, R., 2022. Self-reported impacts of the COVID-19 pandemic for people experiencing homelessness in Sacramento, California. J. Soc. Distress Homeless 31, 72–80. https://doi.org/10.1080/10530789.2021.1879618.
- Fleming, T., Collins, A.B., Boyd, J., Knight, K.R., McNeil, R., 2023. "It's no foundation, there's no stabilization, you're just scattered": a qualitative study of the institutional circuit of recently-evicted people who use drugs. Soc. Sci. Med. 324, 115886 https://doi.org/10.1016/j.socscimed.2023.115886.
- Government of Canada, 2023. Everyone Counts 2020-2022: Preliminary Highlights Report. https://www.infrastructure.gc.ca/homelessness-sans-abri/reports-rapports/pit-counts-dp-2020-2022-highlights-eng.html. (Accessed 15 August 2023).
- Greenwood, R.M., Manning, R.M., 2017. Mastery matters: Consumer choice, psychiatric symptoms and problematic substance use among adults with histories of homelessness. Health Soc. Care Community 25, 1050–1060. https://doi.org/10.1111/hsc.12405.
- Heerde, J.A., Bailey, J.A., Patton, G.C., Toumbourou, J.W., 2022. A population-based study of homelessness, antisocial behaviour and violence victimization among young adults in Victoria, Australia. Aust. J. Soc. Issues 57, 762–782. https://doi.org/ 10.1002/ais4.212.
- Heerde, J.A., Pallotta-Chiarolli, M., 2020. "T'd rather injure somebody else than get injured": an introduction to the study of exposure to physical violence among young people experiencing homelessness. J. Youth Stud. 23, 406–429. https://doi.org/ 10.1080/13676261.2019.1610558.
- Henwood, B.F., Derejko, K.-S., Couture, J., Padgett, D.K., 2015. Maslow and mental health recovery: a comparative study of homeless programs for adults with serious mental illness. Adm. Pol. Ment. Health 42, 220–228. https://doi.org/10.1007/ s10488-014-0542-8.
- Hopper, E.K., Bassuk, E.L., Olivet, J., 2010. Shelter from the storm: trauma-informed care in homelessness services settings. Open Health Serv. Pol. J. 3, 80–100.
- Hopper, K., Jost, J., Hay, T., Welber, S., Haugland, G., 1997. Homelessness, severe mental illness, and the institutional circuit. Psychiatr. Serv. 48, 659–665. https://doi.org/10.1176/ps.48.5.659.

- Hwang, S.W., Weaver, J., Aubry, T., Hoch, J.S., 2011. Hospital costs and length of stay among homeless patients admitted to medical, surgical, and psychiatric services. Med. Care 49, 350–354. https://doi.org/10.1097/mlr.0b013e318206c50d.
- Karadzhov, D., Yuan, Y., Bond, L., 2020. Coping amidst an assemblage of disadvantage: a qualitative metasynthesis of first-person accounts of managing severe mental illness while homeless. J. Psychiatr. Ment. Health Nurs. 27, 4–24. https://doi.org/10.1111/ jpm.12524.
- Kerman, N., Kidd, S.A., Voronov, J., Marshall, C.A., O'Shaughnessy, B., Abramovich, A., Stergiopoulos, V., 2023. Victimization, safety, and overdose in homeless shelters: a systematic review and narrative synthesis. Health Place 83, 103092. https://doi.org/ 10.1016/j.healthplace.2023.103092.
- Kerman, N., Ecker, J., Tiderington, E., Aykanian, A., Stergiopoulos, V., Kidd, S.A., 2022b. "Systems trauma": a qualitative study of work-related distress among service providers to people experiencing homelessness in Canada. SSM – Mental Health 2, 100163. https://doi.org/10.1016/j.ssmmh.2022.100163.
- Kerman, N., Manoni-Millar, S., Cormier, L., Cahill, T., Sylvestre, J., 2020. "It's not just injecting drugs": supervised consumption sites and the social determinants of health. Drug Alcohol Depend. 213, 108078 https://doi.org/10.1016/j. drugaledap.2020.108078
- Kerman, N., Wang, R., Aubry, T., Distasio, J., Gaetz, S., Hwang, S.W., Latimer, E., O'Grady, B., Schwan, K., Somers, J.M., Stergiopoulos, V., Kidd, S.A., 2022a. Shelter bans among people experiencing homelessness: an exploratory study of predictors in two large Canadian datasets. J. Urban Health 99, 842–854. https://doi.org/ 10.1007/s11524-022-00680-0.
- Liu, M., Luong, L., Lachaud, J., Edalati, H., Reeves, A., Hwang, S.W., 2021. Adverse childhood experiences and related outcomes among adults experiencing homelessness: a systematic review and meta-analysis. Lancet Public Health 6, e836–e847. https://doi.org/10.1016/\$2468-2667(21)00189-4.
- Manuel, J.I., Nizza, M., Herman, D.B., Conover, S., Esquivel, L., Yuan, Y., Susser, E., 2023. Supporting vulnerable people during challenging transitions: a systematic review of critical time intervention. Adm. Pol. Ment. Health 50, 100–113. https://doi.org/10.1007/s10488-022-01224-z.
- Miles, M.B., Huberman, A.M., Saldaña, J., 2014. Qualitative Data Analysis: A Methods Sourcebook, third ed. Sage, Thousand Oaks, CA.
- Mohsenpour, A., Bozorgmehr, K., Rohleder, S., Stratil, J., Costa, D., 2021. SARS-Cov-2 prevalence, transmission, health-related outcomes and control strategies in homeless shelters: systematic review and meta-analysis. EClinicalMedicine 38, 101032. https://doi.org/10.1016/j.eclinm.2021.101032.
- Nettleton, S., Neale, J., Stevenson, C., 2012. Sleeping at the margins: a qualitative study of homeless drug users who stay in emergency hostels and shelters. Crit. Publ. Health 22, 319–328. https://doi.org/10.1080/09581596.2012.657611.
- Padgett, D.K., Smith, B.T., Henwood, B.F., Tiderington, E., 2012. Life course adversity in the lives of formerly homeless persons with serious mental illness: context and

- meaning. Am. J. Orthopsychiatry 82, 421–430. https://doi.org/10.1111/j.1939-0025.2012.01159.x.
- Padgett, D.K., Stanhope, V., Henwood, B.F., Stefancic, A., 2011. Substance use outcomes among homeless clients with serious mental illness: comparing housing first with treatment first programs. Community Ment. Health J. 47, 227–232. https://doi.org/ 10.1007/s10597-009-9283-7.
- Patterson, M.L., Markey, M.A., Somers, J.M., 2012. Multiple paths to just ends: using narrative interviews and timelines to explore health equity and homelessness. Int. J. Qual. Methods 11, 132–151. https://doi.org/10.1177/160940691201100202.
- Polillo, A., Sylvestre, J., 2021. An exploratory study of the pathways into homelessness among of foreign-born and Canadian-born families: a timeline mapping approach. J. Soc. Distress Homeless 30, 6–19. https://doi.org/10.1080/ 10530789.2019.1705518.
- Quirouette, M., 2016. Managing multiple disadvantages: the regulation of complex needs in emergency shelters for the homeless. J. Poverty 20, 316–339. https://doi.org/ 10.1080/10875549.2015.1094774.
- Richards, J., Kuhn, R., 2023. Unsheltered homelessness and health: a literature review. AJ Focus 2, 100043. https://doi.org/10.1016/j.focus.2022.100043.
- Roy, L., Crocker, A.G., Nicholls, T.L., Latimer, E.A., Ayllon, A.R., 2014. Criminal behavior and victimization among homeless individuals with severe mental illness: a systematic review. Psychiatr. Serv. 65, 739–750. https://doi.org/10.1176/appi. ps.201200515.
- Sandelowski, M., 2001. Real qualitative researchers do not count: the use of numbers in qualitative research. Res. Nurs. Health 24, 230–240. https://doi.org/10.1002/nur\_1025
- Schneider, C., Hobson, C.W., Shelton, K.H., 2022. 'Grounding a PIE in the sky': Laying empirical foundations for a psychologically informed environment (PIE) to enhance well-being and practice in a homeless organisation. Health Soc. Care Community 30, e657–e667. https://doi.org/10.1111/hsc.13435.
- Stanhope, V., Henwood, B.F., Padgett, D.K., 2009. Understanding service disengagement from the perspective of case managers. Psychiatr. Serv. 60, 459–464. https://doi. org/10.1176/ps.2009.60.4.459.
- Wallace, B., Barber, K., Pauly, B., 2018. Sheltering risks: implementation of harm reduction in homeless shelters during an overdose emergency. Int. J. Drug Pol. 53, 83–89. https://doi.org/10.1016/j.drugpo.2017.12.011.
- Westbrook, M., Robinson, T., 2021. Unhealthy by design: health and safety consequences of the criminalization of homelessness. J. Soc. Distress Homeless 30, 107–115. https://doi.org/10.1080/10530789.2020.1763573.
- Wusinich, C., Bond, L., Nathanson, A., Padgett, D.K., 2019. "If you're gonna help me, help me": barriers to housing among unsheltered homeless adults. Eval. Progr. Plann. 76, 101673 https://doi.org/10.1016/j.evalprogplan.2019.101673.