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‘Why would I go somewhere where I’m not welcome?’ Dehumanisation of people experiencing homelessness in medical settings and the healing potential of a structurally competent model: a qualitative study

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ABSTRACT

Introduction People experiencing homelessness (PEH) face myriad barriers to healthcare, including preventative sexual health services. A street medicine team in one Northern California county observed low uptake of sexually transmitted infection (STI) screening among PEH. We conducted this study to understand the factors contributing to PEH’s decision to seek or accept STI screening.

Methods This is a qualitative study using semistructured interviews and demographics surveys among PEH. The interviews focused on understanding facilitators and barriers to STI screening and experiences in healthcare settings more broadly. Interviews were audio-recorded, transcribed and analysed using a thorough memoing process and matrix-based analysis.

Results We enrolled a total of 50 adult, English-speaking PEH: 24 men, 26 women; 52% white, 28% Black/African American, 22% Native American, 4% Asian, 22% Hispanic/Latino. Qualitative analysis revealed a theme of ‘dehumanising’ prior experiences in healthcare environments including judgement, dismissal of medical concerns, and denial of treatment. Participants reported similar experiences outside of medical settings, which together shaped their self-worth and factored into their decision to delay seeking routine and urgent forms of care, including STI screening. Approximately half of the participants had received medical services from the street medicine team. PEH perceived the street medicine team to foster trust by physically, emotionally and structurally ‘meeting patients where they are’.

Conclusion Prior experiences of exclusion within and outside of healthcare settings informed PEH’s decision to avoid seeking healthcare until extremely urgent, and to deprioritise services like STI screening. In order to develop interventions to increase STI screening and other preventative health services, it is critical to understand the structural elements underlying relationships between PEH and healthcare systems, and the relevance of social exclusion beyond medicine. This street medicine team exemplifies features of structural competency, a model that may be integrated in other settings and in medical education to promote more equitable and inclusive healthcare.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Existing literature documents significant health challenges among people experiencing homelessness (PEH). This study investigates the broader role of stigma and discrimination PEH experience and how this shapes their relationship and perception of preventative healthcare services like sexually transmitted infection (STI) screening.

WHAT THIS STUDY ADDS

⇒ The study incorporates direct knowledge from PEH to demonstrate how experiences of discrimination within and beyond healthcare shape individuals’ willingness to access health services, including preventative health services. Our findings indicate that participants are interested in accessible STI screening, but that this service is perceived as one of many routine health services which PEH often avoid due to prior negative experiences in and beyond the healthcare settings. PEH experience greater trust in one street medicine team which fosters participation in their healthcare, but even this setting is not impervious to the impact of prior discriminatory experiences on PEH as evidenced by poor STI screening uptake in this trusted setting.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Our study contributes to a call to attend to the broader experiences of PEH within society and the need for health systems and health professionals to integrate knowledge of these histories to provide patient-centred care.

INTRODUCTION

It is well-established that the lack of stable housing is associated with many adverse health outcomes.[1–3] Sexually transmitted infections (STIs) are one form of preventable illness experienced at disproportionately high rates by people experiencing homelessness (PEH).[4 5] The prevalence of STIs among PEH ranges from 2.1% to 52.5%.[4] Precarious living situations, increased pressure for transactional sex, intimate partner violence, substance use, prior incarceration, distrust of the healthcare system, and logistical barriers to routine screening and treatment are some of the factors that increase risk for STI acquisition for PEH.[6–9]

Street medicine evolved as a form of outreach medicine to address these barriers. In 2020, one Northern California street medicine team began delivering healthcare and case management to individuals living in motels, parks, encampments, shelters and migrant work centres. In 2022, California accounted for 30% of PEH in the USA and half of the nation's unsheltered PEH.[10] The county in which this street medicine team operates has an approximate population of 200 000 in both rural and urban settings, with a total of 746 unhoused individuals according to the 2022 Point-In-Time Count.[10] In the summer of 2022, the street medicine team embarked on a series of quality improvement cycles to increase uptake and capacity for STI screening.[11] This paper describes the results of an adjacent qualitative study that used the conversation around STI screening as a window into how PEH consider accessing healthcare services.

Current medical and public health literature around PEH focuses on the disengagement of PEH from healthcare and opportunities to reduce barriers pertaining to insurance and transportation.[12–17] Some literature explores challenges to trust and experiences of unwelcomeness among PEH in medical environments.[7 18–22] Psychology research explores the experience of loneliness among PEH as a symptom of social discrimination and marginalisation.[23] However, proposed solutions relying on individual-level relationships between PEH and healthcare staff are narrow in scope, and a broader structural understanding is required to address systemic harms faced by PEH.

In contrast to these individual-level perspectives, some public health, global health and anthropology literature acknowledge larger social, political and economic forces shaping the interactions between PEH and healthcare staff. For example, the concept of 'medical apartheid' describes the ways in which political and economic segregation along racial and ethnic lines produces health and healthcare inequities.[24–26] Medical anthropologists Philippe Bourgois and Jeff Schonberg examine the 'social pariah' status of intravenous drug users experiencing homelessness in San Francisco. They explore the status of social exclusion using Bourdieu's sociological concept of 'habitus', referring to the manner in which social structural power translates into intimate ways of being and everyday practices that legitimise social inequities.[27] This includes racial and ethnic components resulting from histories of racism, slavery and socioeconomic inequity.

In this paper, we highlight how STI screening can only be understood by attending to PEH's prior experiences within and beyond the medical system. Participants revealed several significant themes surrounding how their prior relationships with healthcare settings and providers influenced their engagement with STI screening, and that STI screening was not experienced as a single event. Instead, we demonstrate using qualitative methods the strong links PEH make between STI screening and previous and ongoing relationship to healthcare delivery and well-being. The study thus evolved from evaluating perspectives on one specific preventative service to highlighting factors influencing the relationship of PEH to healthcare services, including STI screening as one example. This study captures the nuanced and complex topic of how PEH view their own health and how they access healthcare services.

MATERIALS AND METHODS

Participant recruitment

The study's primary inclusion criterion was current homelessness as defined by the U.S. Department of Housing and Urban Development: 'lacking a fixed, regular, and adequate nighttime residence'.[10] Exclusion criteria included age under 18, lack of fluency in English and acute illness at the time of screening.

Recruitment sites included the locations visited weekly by the street medicine team and a domestic violence service centre. The primary researcher (RB) offered in-person participation at these sites. This study used both purposive and snowball sampling methods. Some participants were identified by staff and subsequently approached by RB. Additionally, informational flyers were posted and distributed to clients with information about the study. Some participants learnt of the study through other participants by word-of-mouth and approached enrolment sites specifically to participate. Participation was declined infrequently and primarily based on logistical difficulty (ie, did not have time). Some participants were able to return for enrolment at a future date.

Participant consent

For those interested in participation, RB obtained verbal informed consent for a demographics survey and an interview. Given the vulnerability of our study population, RB spent significant time discussing the voluntary nature of interviews and interview responses having no influence on the ability to receive care from the street medicine team. RB disclosed their position as a medical student and their interest in addressing barriers to healthcare access for PEH.

Data collection

We conducted a qualitative study to centre the voices and capture the nuanced experiences of PEH. RB, a gender non-binary medical student, conducted semistructured

interviews (guide in online supplemental appendix A). RB had prior experience designing interview guides and conducting semistructured interviews; was enrolled in a qualitative research course during the study execution; and received mentorship from NR who has qualitative research expertise. RB spent several months shadowing and supporting the services of the street medicine team prior to data collection to establish relationships with the team, staff at affiliated sites and some patients. The interview guide was piloted among several colleagues.

Interviews lasted 22–90 minutes in duration. Following each interview, a verbally administered survey was conducted to collect demographic, housing, health and healthcare utilisation information. Interview locations included the following: seated on stools outside of a participant's motel or shelter while the street medicine team was present on site, inside of a client's motel room with the door propped open, or in private counselling offices. Participants were offered light refreshments to facilitate their comfort during the interview. Upon completion of the interview and survey, each participant received a $50 prepaid Visa gift card and materials containing information regarding sexual health screening services and other local health, social and legal services.

Interviews were audio-recorded and transcribed by paid transcription service Rev. Identifiable information was removed. Survey data were stored in REDCap. This study was approved by the UC Davis Institutional Review Board.

Data analysis

Researchers adopted a thematic analysis approach. Following each interview, RB recorded notes with impressions from the interview and developed comprehensive memos. After transcription, RB read each interview twice, the second time writing a thorough memo. Memos included participant identification number, same as REDCap ID to link interview data with survey data; salient excerpts with timestamps; a brief, non-identifying biography of the participant; researcher reactions; and findings sorted into domains based on the research questions. Through continuous iteration, thematic domains became more structured around common themes emerging through data collection. We interviewed individuals until thematic saturation was achieved by the emergence of consistent themes without new domains. After the completion of data collection, RB reviewed memos and created a master matrix to organise key themes and identify relevant quotations.

Patient and public involvement

The research topic and interview guide were focused on a question generated by staff of the street medicine team. The study topic and approach were designed collaboratively with staff of the street medicine team. Staff provided feedback on recruitment approaches with specific emphasis on how to ensure participant safety, sensitivity to topics discussed, and minimising harm. Throughout the research process, RB shared preliminary research findings with community stakeholders including street medicine team, county case management, domestic and family services centre and county public health to ensure consistency of findings and any need for additional thematic domains to explore.

RESULTS

We interviewed 50 participants. Our participants included 24 cisgender men and 26 cisgender women experiencing homelessness. Our participants were 52% white, 28% Black/African American, 22% Native American, 4% Asian and 22% Hispanic/Latino. Approximately half of our participants had interacted with the street medicine team. See table 1 for participant housing, healthcare utilisation and other sociodemographic information.

We present two main themes from our interviews. The first captures experiences of dehumanisation and frames medical settings as a part of exclusionary systems. The second explores opportunities to rebuild relationships through novel clinical structures such as street medicine.

The experience of dehumanisation and medical settings as part of broader exclusionary systems

Most participants expressed a positive attitude towards STI testing when available, but viewed it as time-consuming, overwhelming and low priority compared with other basic needs, which were already difficult to manage. Furthermore, many expressed hesitance to enter medical environments for any reason based on prior mistreatment which several described as 'dehumanising'. This mistreatment included attitudes of ignorance or dismissal, judgmental comments and experiences of exclusion. We first highlight these experiences which have occurred in clinical settings. We then move on to describe experiences outside of the clinical setting, emphasising that for PEH medical environments are embedded within larger discriminatory social structures.

In the clinical setting

For many participants, the experience of dehumanisation in clinical settings was rooted in feeling misunderstood by health professionals. Participants noted that health professionals often overlooked the ways in which homelessness affects the feasibility of a proposed treatment. One participant declined back surgery because rehabilitation would have been near impossible from the homeless shelter where she was living: "[M]y doctors… can't really fathom what it's like to be in that position of being in a homeless shelter and not being able to have that support" (P20).

Many participants described attitudes of judgement, dismissal or shame from healthcare workers relating to perceived housing status or presumed substance use. One participant commented on his experience at the hospital after being transported from his encampment: "[T]hey said, 'Where'd you find this one?'… They talk down to us. I've heard them say things like, 'Why are you wasting

Table 1 Participant sociodemographic and health data

	N (%)
Gender identity	
Male/man	24 (48%)
Female/woman	26 (52%)
Transgender or non-binary	0 (0%)
Age	
20–39	17 (34%)
40–59	25 (50%)
60–79	8 (16%)
Race and ethnicity*	
White	26 (52%)
Black or African American	14 (28%)
American Indian or Alaska Native	11 (22%)
Asian	2 (4%)
Hispanic, Latino or Spanish origin	11 (22%)
Other	6 (12%)
Decline to respond	4 (8%)
Recruitment sites†	
Street medicine sites‡	23 (46%)
Domestic violence and family services centre	25 (50%)
Through county case manager§	2 (4%)
Locations stayed in the last 6 months¶	
Outside (such as tents, parks, underpasses)	22 (44%)
Someone else's home (outside or in a garage)	7 (14%)
Someone else's home (inside)	6 (12%)
Motel (paid for by agency because homeless)	13 (26%)
Motel (paid for with own money)	8 (16%)
Institution (if released after midnight to homelessness)	1 (2%)
Car, camper, RV (with no permanent hookups)	14 (28%)
Transitional housing	1 (2%)
Treatment programme	12 (24%)
Own or rent home	8 (16%)
Current sheltered status	
Sheltered	29 (58%)
Unsheltered (staying outside)	7 (14%)
Unknown	14 (28%)
Length of time homeless, this episode only	
Less than 1 year	12 (24%)
1 to <5 years	24 (48%)
5 years or longer	14 (28%)
First episode of homelessness	
Yes	12 (24%)
No	34 (68%)
Unknown	4 (8%)
Number of chronic medical conditions**	
0	1 (2%)
1–2	20 (40%)
3 or more	29 (58%)
Emergency room visits in the last 6 months	
0	22 (44%)
1–2	19 (38%)
3–9	8 (16%)
10 or more	1 (2%)
Non-urgent ambulatory health visits in the last 6 months††	
0	14 (28%)
1–2	5 (10%)
3–9	23 (46%)
10 or more	8 (16%)

*Race and ethnicity data were self-reported. Participants were able to select multiple categories.
†We use recruitment site as a proxy for prior interaction with the street medicine team. This is approximate as some participants recruited near the street medicine site may not have been active patients, and some participants recruited at other sites may have had exposure to the street medicine team.
‡Street medicine sites included motels, a daytime respite center and a shelter. Recruitment was distributed approximately evenly across sites.
§One interview occurred in the participant's motel room, and the other in a private room at the county Health and Human Services Agency. Case manager was present for the interview with participant consent in both cases.
¶Due to the transient nature of this demographic, we asked participants to indicate all locations where they had slept within the prior 6 months rather than current sleeping location. Participants were able to select multiple categories. One participant was currently renting on Section 8 vouchers but this was not clear until after the interview, and she remained included given extensive prior experiences with homelessness.
**Medical conditions were self-reported using a checklist including common chronic health conditions such as hypertension, COPD, asthma, arthritis, chronic hepatitis C, liver cirrhosis and 'other'. 37 participants reported a mental health condition in the 'other' category such as depression, anxiety, PTSD or bipolar disorder.
††Number of health visits was self-reported. These included clinics and medical visits with the street medicine team.

our time?' … Those are the types of things that'll make somebody with a weak mind commit suicide" (P32).

When interacting with health staff, PEH perceived a lack of concern for their medical problems and an overattribution of ailments to substance use.[28] Some participants with a remote history of substance use still anticipated clinical bias years later. One such participant explained,

> Every time I would go to the emergency room, they would say, whatever's wrong with me, didn't matter what it was, that it was due to methamphetamine poisoning because they knew I was an addict (P17).

Another commonly cited example of perceived clinical bias was denial of pain medication or inadequate pain control based on a history of substance use and anticipated 'drug-seeking behaviour'. One participant commented that

> once they find out you're an ex-drug addict or a drug addict, your healthcare goes way to the bottom of the list. Literally, some of them are rude… You can't get anything for pain. All of a sudden, you're not a candidate for anything (P31).

Some experienced this bias even in the absence of a substance use history (see table 2).

Participants' experiences of dehumanisation within medical settings led to decreased motivation to engage in care and impinged on their sense of deserving health and wellness. One participant described this negative cycle: It "feels downgrading and discriminative, and it lowers my self-worth even more…I internalise it… [It] has affected my health, the way I treat myself, the importance I put myself under, all that because I'd rather be sick than to go to a doctor because of the way you're spoken to" (P1). This feedback loop illustrates a cycle perpetuating the 'social pariah' status.

In many situations, avoidance of medical care is an act of self-protection, both emotional and legal. Put simply by one participant: "Why would you want to be somewhere where you don't feel welcome?" (P28). See table 2 for additional examples.

Beyond the clinic

Participants described factors shaping their social exclusion outside of medical settings, which also impacted their ability and motivation to carry out health-promoting behaviours. Three salient examples are houselessness itself; discrimination by law enforcement; and racism as it intersects with homelessness.

For many participants, the lack of access to stable housing was a form of exclusion from health as it prevented their access to a healthy lifestyle. As one participant commented: "What's a shame is I know what works for me and it's really hard to have access to that: a good diet, good sleep, and swimming" (P20).

A punitive law enforcement system also shapes the social exclusion of PEH. Participants brought up interactions in which law enforcement officers approached them as a threat to the community rather than a vulnerable population in need of safety and protection—including officers designated specifically to work with PEH. One participant recalled the local Police Department Homeless Outreach Team commenting, "'We're not here to help you. We're here for the community to deal with you.'… I said, 'Do you want me just to kill myself, so I won't be a problem to you guys?'" (P12).

Several participants feared collaboration between health professionals and law enforcement. "You can't trust nobody… Some people have warrants, arrest warrants… Some people, they're addicts, and they're afraid that they're going to get tested and then the cops are going to get called…When it comes to police…It impacts everybody's decisions to do the right thing… Because they fear the consequences or what could happen" (P16). This highlights the imbrication of healthcare and law enforcement and the lack of clear boundaries between these spaces. For example, officers act as medical first responders in the context of substance use and mental health crises; emergency departments also use law enforcement as security.

Participants described systemic racism as embodied by law enforcement and medical institutions. One middle-aged Black woman described sustaining a serious hand injury inflicted by law enforcement. In the emergency room, she overheard medical staff joking about her situation with the officers. She commented, "If I had pursued it, I'd probably look like a fool… You don't know, other cops backing them up. Look at the stuff they're doing today to people… It don't even do no good to try… They got a license to kill or shoot a Black or beat them down" (P8). Another commented on law enforcement as a vestige of the institution of slavery: "You know what an officer is? He's an overseer" (P15).

She was one of several participants who brought up the Tuskegee 'Study' which concluded in 1972. During this experiment, government scientists intentionally withheld treatment for syphilis leading to the deaths of scores of Black people. This links the community's mistrust in law enforcement and medical environments as white-led institutions which have harmed people of colour and informs ongoing mistrust around sexual and reproductive healthcare.[29–31] The same participant explained that "the white man, he got treated right away. But the Blacks, they wanted to see how far the syphilis would take the toll on the man. It was like a guinea pig…They are actually putting away people. They have the option to say who lives and who doesn't" (P8).

Thus, healthcare is embedded in many other systems in which PEH feel unsafe. This array of demoralising histories contributes to PEH's avoidance of healthcare environments, referred to by one young Black participant as the "home of the oppressor" (P9). The experience of exclusion within multiple systems contributes to a sense of ambivalence or avoidance towards preventative health services. One participant described living "amongst people that have a… lower expectation or appreciation

Table 2 Supplementary qualitative data

Experience of dehumanisation in the medical setting as part of broader exclusionary systems	
In the clinic	"[A health professional said] 'Well, if you didn't shoot heroin, you wouldn't have the abscess.' … It hurt because it's like they want to do away with us, with addicts, for real, and it's not right… It makes you scared and fearful because we really think that they really are out to get you." (P8)
	"(G)iven the demographics of the individuals there, most times the doctors [in one health system] just think… people want… Promethazine cough syrup. But that was not why I was there…I don't suffer from addiction… I would like to be treated as a regular person, not as someone that's already being stereotyped because of the demographics or the culture of the environment in which I live in…African American, you smoke cigarettes, you live in an impoverished neighborhood and you're a statistic." (P6)
	"(M)aybe I didn't make the best decisions about drugs in the beginning of my life, but there's reasons why people do drugs…You don't know if you would have done it, too, if you would have been in my shoes, or had my childhood, or that… I don't want to be a drug addict. I never wanted to be one, but it happened… I didn't ask for that childhood, but apparently, I got it. It's not my fault, I don't feel. It hurts when you can't get painkillers when you really need them, when you're in pain. Why do I have to suffer and not have a painkiller because I was a drug addict at one time? That's crazy, but that's just the way it is." (P31)
	"I start to disbelieve in myself and I start to look at myself the way that you're looking at me. Since you're looking at me in this way…I might as well give up. I might as well not try to fight or try to accomplish the things that I knew before that I was capable of achieving. So it messes with your psyche, it messes with your mind. It messes with your spirit. And when your mind is not right, your body is not right, then there's no way that you can be a functioning part of the community." (P41)
Beyond the clinic	"You go into a store with a backpack on, you're automatically judged as a homeless person… They look at you throughout the whole store like you're going to steal something." (P41)
	"That's not even just in medical field. It's everywhere. I've been a gang member since I was 10 years old and a bunch of gang tattoos and I'm Hispanic and that's just the way it is… You got to make them comfortable to be comfortable with them… The way you carry yourself, the way you speak, the way you dress, everything. Just trying to be as normal, if you want to call it normal, as possible, away from that persona that they automatically assume when you walk in the door." (P48)
	"(T)he whole situation with CPS [Child Protective Services] was really fucked up because I was clean and sober at the time and they were treating me like I was a monster, like I was using when I wasn't… I feel like they've had it out for me since the beginning. They as in the county… So there's a lot of resentments, there's a lot of hard feelings with a lot of things." (P25)
Rebuilding relationships: an example of a street medicine team promoting trust	
Physical structure	"I've sat and observed the medical team that came here from, say, [clinic housing street medicine team] … and how they reached out and how they encouraged people… to take care of themselves… I've been impressed with this type of a team effort. I've seen it in the motel room when they came to help us and here…I'm really glad that healthcare is heading in that direction to where you have much more support than just giving you a bottle of pills and expecting you to take them on time." (P18)
	"A lot of people would turn around if somebody would reach out to them. They just want somebody to care about them." (P24)
Street medicine staff	"That's all you can do…Being there for somebody just to say hi. 'I care for you'. That means a lot to somebody. And I think that's what you guys do. You guys do a good job of just coming up to people and saying, 'How you doing?' And it works. Because a lot of people come back to you guys." (P24)
	"[My doctor will] call me and see if I'm all right and let me know, 'You have a doctor's appointment tomorrow.'… It makes you feel like somebody actually does care about you somewhere there." (P47)

for themselves. So you'll run through multiple [sexual] partners in a day and not think about it… the last thing on your mind… is like, 'Hey, let me go see about going to the doctor to get checked up'" (P41).

Healthcare systems have a role to play in facilitating the social inclusion and integration of PEH. In the next section, we transition to discussing an example of a model demonstrating this with features of structural competency.

Rebuilding relationships: an example of a street medicine team promoting trust

A major facilitator to participation in STI screening and other preventative health services was trust in the establishment and staff providing care. Approximately half of our participants had exposure to this street medicine team (see table 1). These participants expressed trusting attitudes and positive experiences with this team, distinguishing it from more conventional, brick-and-mortar medical settings. Contrasting the street medicine team with other medical settings, one participant described, "When you go to a regular doctor's office, it's like, 'Eh. Yuck. This lady had it.' That's not the type of environment you want to be in if you do have an STI" (P6).

PEH described the street medicine team as facilitating trust-building and engagement with healthcare due to institutional, clinical and interpersonal levels. As we describe below, the combination of the physical structure of the street medicine team and staff who worked in the street medicine team made PEH experience care as safer and more accessible, therefore contributing to the reinclusion of PEH.

Physical structure

The street medicine van facilitates logistical convenience by making rounds to the same community locations on the same day of the week every week to deliver direct primary care services. This abolishes the need to travel and leave possessions or pets unattended, as well as paperwork and uncomfortable encounters in waiting rooms, where some expressed fear of judgement from staff or other patients. Participants expressed that this provides an increased opportunity to stay engaged in care: "Coming around once a week is kind of a reminder and opportunity enough" (P13). Other participants expressed appreciation that the street medicine van is direct and convenient; a reliable, regular presence; less overwhelming than the clinic and efficient; and facilitates increased access to other needed services, like case management or behavioural health.

The visibility of the services and sharing of positive experiences by word-of-mouth can help uplift more stigmatised forms of care including STI testing. One participant affirmed the importance of the STI screening services offered on this street medicine van, "[Word about STI services] will go around because everybody will talk about it" (P7).

An important aspect of direct care delivery is a sense of safety, including acknowledgement of structures that have perpetuated harm within medicine, and providing a safer alternative. One participant explained, "They're driving around, coming to see the people, not waiting for the people to come there because these people that are homeless, they're so angry they won't go to the hospital… What they're [street medicine team] doing…is the best thing they can do. That right there is everything" (P10).

Participants expressed a unique sense of safety from law enforcement, which provides "reassurance too, that if they're addicts, it's okay. They're not going to get in trouble… They're not going to be no cops involved" (P16). See table 2 for additional examples.

Street medicine staff

Participants expressed that positive interpersonal experiences with providers facilitated their trust and engagement with care. One participant who previously avoided seeking medical attention, in part due to having been dismissed as 'drug-seeking', described that "[this street medicine team]'s where I finally got comfortable with the doctor" (P1).

Participants commented that street medicine staff acknowledged the challenging realities of homelessness and complex barriers to healthcare. The clinic's staff chose to work with PEH and were motivated to consider the nuanced circumstances around homelessness. Personnel themselves may therefore be viewed as an intervention on both the interpersonal and institutional level, as the hiring process takes into consideration structural knowledge of patients' conditions. Additionally, case managers and community health workers, some of whom have lived experience with homelessness, sometimes served as an initial bridge between patients and medical providers in addition to directly supporting participants. As one participant summarised, "A case manager can get more personal and see what other needs they might need and meet each other. Especially if the case manager and the patient have a good relationship, then they can be more open and honest and trusting and guide them the right way" (P19).

Participants perceived staff to be non-judgmental, caring and both trustworthy and trusting of patients. These attitudes contribute to therapeutic and restorative relationships with the team, which fostered both engagement with care and improved self-worth. One participant explained that "[street medicine provider] gave me a sense… that I'm still good and deserve to be healthy like anyone else" (P38). She noted that without this team, "I wouldn't have done anything and I just would've kept suffering." She explained, "I live here in [city] now but I still see Dr. [street medicine physician]. So I'll take the bus [to a city 12 miles away], I don't care. I'd rather see him… He gave me a sense of pride…a sense of worth, and that even though I made mistakes, that I'm still good and deserve to be healthy like anyone else. So it was a real turnaround point for me" (P38).

Participants highlighted open-mindedness and listening as key features of care providers, emphasising the importance of structural humility, or the appreciation of patient and community 'expertise' and knowledge rather than centering the medical perspective. One participant explained, "It's not to know, but it's to get to know. Just really giving someone the time of day…Get to know them. Become a friend…Deep listening. It actually helps… That's all it should be, physician or not" (P28) (see table 2 for additional examples).

Direct care delivery and structurally competent staff are two features that together communicate appreciation and value of patients as humans with complex experiences, a rare experience in other medical settings. These features build trust and encourage PEH to engage with their healthcare, demonstrating how a structurally competent approach can challenge the prior experiences of dehumanisation in and beyond the healthcare setting.

DISCUSSION

Our qualitative study demonstrates that overall PEH desire and appreciate STI screening as an important health service. However, stigma around homelessness and prior discriminatory experiences serve as major deterrents from seeking healthcare services, particularly those perceived to be less urgent, such as STI screening. Participants experienced recurrent breaches in trust affecting not only their engagement with healthcare services, but also their sense of self and social identity. Our data suggest that this may be a stronger factor than shame and embarrassment surrounding sexual health behaviours cited in prior literature.[7] Our participants' experiences underscore the 'social pariah' status of PEH as described by Bourgois and Schonberg: the experience of existing on the fringes of society, feeling unseen, unwanted, a burden to society, and desired to be eliminated.[27] This long-standing exclusion, experienced also in healthcare settings, is a critical backdrop needed to understand STI testing as part of any other form of routine or urgent medical care.

Participants who had previously received care from the street medicine team expressed higher trust in this team compared with 'conventional' medical settings, and subsequently higher motivation to participate in offered medical services. Participants expressed that a key factor increasing trust with the street medicine team compared with other environments is staff comfort, knowledge and humility in working with PEH. Altogether, our results encourage an approach that broadens the definition of 'care' to more than health outcomes. The street medicine's outreach team serves as a literal and figurative way to meet people where they are, addressing barriers through both physical and interpersonal means.

We view this street medicine team as an example of 'structurally competent' care for a vulnerable population. The movement towards models of care grounded in 'structural competency', a term coined by Jonathan Metzl and Helena Hansen, draws from medical and extra-medical literature to "[attempt] to bridge the gap between individual and institutional drivers of inequality." They define structural competency as:

> The trained ability to discern how a host of issues defined clinically as symptoms, attitudes, or diseases … also represent the downstream implications of a number of upstream decisions about such matters as healthcare and food delivery systems, zoning laws, urban and rural infrastructures, medicalization, or even about the very definitions of illness and health.[32]

We argue that structurally competent care, as delivered through this street medicine clinic, increased PEH's motivation to engage in care for themselves and reinforced the humanity and value of PEH in this study. Exploring ways to integrate structural competency in other care settings may be one step towards the restoration of trust among PEH, support of PEH in re-engaging with healthcare, and uplifting the humanity of PEH.

The ongoing examination of our individual-level relationships with PEH and the role of bias remains essential. Here, particularly given the systematic exclusion PEH shared with our team, we focus on the longer term, institutional-level approach to advance structural competency. Building more structurally competent education and health systems will allow a more sustainable collective shift in the relationship of PEH and healthcare. We propose several examples of feasible systemic changes within and beyond clinical environments to promote medical and social inclusivity of PEH.

First, close, integrated collaboration between medical professionals and allied social services is one important feature necessary for institutions to holistically support PEH. For example, this street medicine team partners with county homelessness services and case managers. Second, structural competency can be promoted beyond clinical establishments: in medical education, policy advocacy, and community engagement with the goal 'to attend to institutional pathologies that lead to clinical pathologies'.[33–36] Social medicine and structurally competent models may be integrated into classroom settings starting as early as pre-medical and medical school curricula. Metzl and Hansen describe a 'walking classroom' model of understanding health inequities in the community where a given school is located as well as the role of the medical institution in the health of these communities.[37] As an example within clinical curricula, this street medicine team provides shadowing opportunities to medical students and clinical rotations for resident physicians. Training opportunities surrounding working with PEH must also be available to other healthcare workers, including those outside of clinical roles such as hospital or clinical administrators, who are also essential to the development of inclusive care systems.

Critical to the embrace of structural competency is the recognition that good health will always be difficult to achieve in complex social settings such as homelessness.

Health inequities are the product of inequitable systems grounded in histories of exclusion and control, rooted in the original slavery-based economy of the USA. Health inequities are shaped by long-standing inequities in housing, education, and other upstream systems. It is estimated that clinical care is responsible for only 10–20% of the variation in health outcomes.[38] The reinclusion of PEH in medical care therefore requires advocacy within and beyond the medical field. Widespread efforts must be ongoing not only to address health-related social needs, including housing, for PEH, but also to reshape the broader social forces that stigmatise PEH and prevent PEH's willingness to access health services.

Even within a structurally competent model like street medicine, fostering trust and encouraging engagement is a challenging task. Despite the positive remarks and relationships described by clients of the street medicine team, the motivation for this study was low uptake of STI testing, indicating that PEH may still sometimes avoid services in a setting perceived as safer and more welcoming. This serves as a humbling reminder that some routine forms of care may still be devalued and low priority even when a structurally competent model is available, including a well-trained care team with whom patients feel safe and seen, and that it is still difficult to overcome histories of exclusion and reshape interactions and relationships with the healthcare system.

Our study findings should be interpreted in the setting of several limitations. There may have been sampling bias as most participants had a relationship with partner organisations, making our sample a more 'connected' PEH population. A future study could recruit more participants through the Police Department Homeless Outreach Team or Harm Reduction Services to encounter participants less connected to medical and social services. Only English-speaking participants were enrolled; it was challenging to have a native Spanish speaker available for the unpredictable interview times. During data analysis, there may have been some reflexivity bias, particularly as there was only one data coder. Finally, as RB was a medical student and had a relationship with the street medicine team, there may have been social-desirability bias around the discussion of the team and STI screening: for example, expressing the belief that routine healthcare such as STI screening is a positive intervention with which a participant would want to engage.

In conclusion, this study highlights how PEH viewed STI testing as an extension of other forms of medical and social exclusion. We aim to convey the structural nature of social exclusion faced by PEH, which perpetuates a cycle of low self-esteem and poor self-care beyond engagement with formal health services. We illustrate street medicine as an example of a structurally competent model which interrupts this negative cycle and rebuilds trust, self-worth and engagement in healthcare among PEH. By learning directly from PEH and understanding their experiences from a structural point of view, we can begin to reimagine healthcare models fostering greater safety and welcomeness. Building more structurally competent models of care may even promote 're-inclusion' into society, by establishing restorative and healing environments and systems. Embedding structural competency training in medical education will empower future providers and healthcare leaders to appreciate the complex social fabric underlying healthcare systems, to contribute to building more inclusive systems, and to return the healing to healthcare.

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