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Contents lists available at ScienceDirect

Journal of Substance Abuse Treatment

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

“No home to take methadone to”: Experiences with addiction services during the COVID-19 pandemic among survivors of opioid overdose in Boston

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ARTICLE INFO

Keywords:

Addiction treatment
COVID-19
Methadone
Buprenorphine
Harm reduction

ABSTRACT

Introduction: We conducted a qualitative study to explore the impact of the COVID-19 pandemic on experiences with addiction treatment and harm reduction services.

Methods: The study recruited participants from Boston, Massachusetts, aged 18–65 who had a history of opioid use disorder and overdose, from a parent study (REpeated dose Behavioral intervention to reduce Opioid Overdose, REBOOT) to participate between August and October 2020. In-depth individual interviews explored the impact of the COVID-19 pandemic on addiction service experiences. We conducted a grounded content analysis that examined codes related to addiction service access and engagement during the pandemic to compare and categorize participants according to their experiences.

Results: The study enrolled twenty participants. The mean age was 42 years; most identified as white ($n = 16$); ten participants identified as men, nine as cis-gender women, and one as a trans-gender woman. Participants described their experiences with COVID-19-driven changes to addiction care (methadone take homes, televisits for either buprenorphine or behavioral health services, and syringe service outreach) access and engagement as: 1) *liberating* ($n = 7$), 2) *destabilizing* ($n = 8$), or 3) *unjust* ($n = 5$). Participants in the *liberating* group found adaptations allowed for increased flexibility, freedom, and safety from COVID-19. This group was mostly housed and had strong social supports that facilitated participation in adapted treatment programs. COVID-19-related changes to addiction treatment disrupted routine and community supports among those in the *destabilizing* group. Participants in the *unjust* group felt that adaptations exacerbated inequities as a lack of housing and other social supports prohibited them from benefiting from the relaxed restrictions to methadone or buprenorphine. This group was mostly unhoused and found that adaptations did not adequately mitigate other inequities worsened by public health mandates for unhoused people who use drugs.

Conclusion: Relaxed restrictions on medications for opioid use disorder created opportunities for improved patient-centered care. Concrete measures that address service barriers, such as phone or transportation access, may have reduced destabilizing and unjust experiences reported by our participants. However, addiction care inequities will persist if drivers of marginalization, specifically a lack of housing, remain unaddressed.

Abbreviations: OUD, opioid use disorder; COVID-19, Coronavirus disease 2019; MOUD, medications for opioid use disorder.

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<https://doi.org/10.1016/j.jsat.2021.108655>

Received 18 June 2021; Received in revised form 13 September 2021; Accepted 2 November 2021

Available online 4 November 2021

0740-5472/© 2021 Published by Elsevier Inc.

1. Introduction

The United States is experiencing the deadly effects of the confluence of two public health emergencies: the coronavirus disease 2019 (COVID-19) pandemic and the overdose crisis. In May 2020, 9192 drug overdose deaths occurred in the United States, establishing this as the deadliest month on record, and representing a 58% increase in deaths over May 2019 (Friedman & Akre, 2021). Though factors driving overdose deaths during the pandemic are currently under investigation, preliminary data suggest that one element may be the increased rates of depression and anxiety related to social and physical isolation (Columb et al., 2020; Holt-Lunstad, 2020), which studies have previously shown to drive substance use and overdose (Fendrich et al., 2019; Suffoletto & Zeigler, 2020). Additionally, changes in access to harm reduction and substance use treatment services, which have historically relied on in-person interactions, may also be contributing to increased overdose rates (EMCDDA, 2020). People with opioid use disorder (OUD) and a history of overdose, many of whom have co-morbid physical and mental health conditions, may be particularly vulnerable to the effects of the COVID-19 pandemic (King et al., 2021; Larochelle et al., 2019; Leece et al., 2015; Weiner et al., 2017). One effective opioid overdose prevention strategy is treatment with medications for opioid use disorder (MOUD), which have been historically highly regulated in the United States (Larochelle et al., 2019; Pearce et al., 2020; Sordo et al., 2017).

To mitigate community spread of COVID-19 and maintain access to MOUD, the Substance Abuse and Mental Health Services Administration (SAMHSA), the Drug Enforcement Agency (DEA), and private payers liberalized several restrictions on initiating and continuing people on MOUD in the United States during the pandemic. To reduce daily clinical encounters for patients on methadone, SAMHSA reduced the period required to qualify for 28 days of unsupervised, take-home methadone; stable patients and less stable patients could receive up to 14 days of take-home methadone (Substance Abuse and Mental Health Service Administration, 2020; Substance Abuse and Mental Health Services Administration, 2020). Counseling required as a companion to methadone was permitted to be delivered virtually. The DEA instituted emergency changes to their regulations to allow tele-initiation and prescribing of buprenorphine (Drug Enforcement Administration, 2020). Addiction treatment providers commonly reduced the frequency of required toxicology testing to facilitate telemedicine and social distancing.

Preliminary studies have assessed these nascent changes to addiction care delivery. Thus far, qualitative studies have examined the impact of care delivery from the clinician perspective of delivering office-based buprenorphine during the COVID-19 pandemic (Uscher-Pines et al., 2020). With increased hours, staffing, and support, one observational study showed that telemedicine for buprenorphine expanded treatment access (Buchheit et al., 2021). Early data on the transition to more liberal methadone take-homes among opioid treatment programs in New York and Connecticut did not document any overdose deaths (Brothers et al., 2021, p. 19; Joseph et al., 2021); however, more research will help us to understand how these adaptations impacted access to care and treatment retention. The work to date has not focused on the perspectives of people using these services. Patients' perspectives can provide a critical context for observed outcomes (e.g., efficacy of changes, impact on overdose deaths) and have the potential to guide and inform future research.

Given the high potential for fatal overdose among people with OUD and an overdose history, an urgent need exists to understand how this population has experienced the changes made to addiction treatment access and delivery. The field needs to understand how physical and social isolation have impacted engagement with addiction services. To address this research gap, we conducted a qualitative study among survivors of opioid overdose from Massachusetts to broadly understand the COVID-19 pandemic's effect on people at high risk for overdose. This analysis aimed to explore how the COVID-19 pandemic impacted MOUD

and addiction service experiences.

2. Materials and methods

Our research team developed the study out of a parent study, titled REpeated dose Behavioral intervention to reduce Opioid Overdose: A two-site randomized controlled efficacy Trial (REBOOT) (Coffin, 2019, Clinicaltrials.gov: NCT03838510). The REBOOT study includes participants age 18–65, with OUD who had experienced an opioid overdose in the past three years. For this study, we sought to recruit 20 Boston site participants who gave their permission to be contacted about additional research studies (Ando et al., 2014). REBOOT participants were contacted by phone or in-person by a member of the study team (AL) who had experience working with these individuals through REBOOT between August and October 2020. Upon connecting, study staff briefed potential participants on the study purpose, risks, and benefits, and provided informed consent before interviews. The Institutional Review Board at Boston University reviewed and approved this research. We conducted our study following the consolidated criteria for reporting qualitative research (COREQ) best practices (Tong et al., 2007).

The research team developed an open-ended, semi-structured interview guide; the team included addiction medicine specialists who participated in public health and clinical COVID-19 activities and a health services researcher. The interview guide was informed by clinical care and public health experiences and covered six primary domains: (1) experiences with COVID-19 stay-at-home orders, (2) perceptions of COVID-19 risk, (3) COVID-19 infection control behaviors, (4) changes to and drivers of substance use during the pandemic, (5) changes to the drug supply and the street environment during COVID-19, and (6) experiences accessing health care and harm reduction services (Appendix A). This analysis focuses on domains one, four, and six.

Interviewers (MTHH, AM) were trained in qualitative interview methods and piloted tested interview guides ($n = 2$) before study initiation. Staff not involved in activities related to the parent study or clinical care of the participants conducted the interviews. Interviews lasted approximately 45–60 min (mean length was 55 min), were completed via secure phone lines, and participants received \$40 compensation via reloadable debit cards at interview completion. All interviews were audio-recorded and professionally transcribed verbatim. Research staff (AM, MTHH, AL) verified the accuracy of transcripts against audio files to assure fidelity before analysis.

2.1. Data analysis

Study staff imported de-identified transcripts into NVivo qualitative data management software version 12.1 (NVivo, 2012) for analysis using a thematic analysis approach (Charmaz, 2006). The lead author (MTHH) drafted a codebook with deductive codes generated from the interview guide domains. To test the codebook, two individuals independently coded five transcripts. Together, the coding team (MTHH, AM, AL, CG) amended the codebook to clarify concepts and incorporate inductive themes (Ando et al., 2014). The remaining 15 transcripts were independently coded, and the coding team met to review and resolve any coding uncertainties and to add any inductive codes that had emerged.

Next, we created participant summaries that highlighted participants' characteristics, addiction care experiences, and other central topics that participants had brought up within each interview (Miles et al., 2018). Using these summaries, we inductively compared and categorized participants according to their experiences with addiction service access and engagement during the pandemic. After identifying three groups, we then reviewed our line-by-line coding to create a data matrix depicting group profiles and their attributes relating to addiction care experiences, supports and disruptors to services, and substance use goals. The broader research team reviewed the groups and discussed the defining characteristics through an iterative process before finalizing

participant assignment.

3. Results

Forty participants were eligible for enrollment. Of these, the study team reached and screened 22, two were unable to schedule an interview, leaving a study sample of 20 participants. Table 1 displays the participants' characteristics. From the thematic analysis, three distinct groups emerged. Participants described their experiences with COVID-19-driven changes to addiction care access and administration as: 1) *liberating* ($n = 7$), 2) *destabilizing* ($n = 8$), or 3) *unjust* ($n = 5$). Within each group, we identified distinct characteristics and descriptions of supports versus barriers to achieving substance use and treatment goals (Fig. 1). We describe each group next by focusing on specific participants' stories that exemplify the core features of the group.

3.1. Liberating

Seven participants described changes established in response to new COVID-19 policies to be liberating. All the participants in this group found that new or adapted addiction treatment services (methadone take-homes, televisits for either buprenorphine, or behavioral health services) provided them with flexibility and were easily accessed. Jayla and Jeremy articulated these liberating experiences.

Jayla, a 41-year-old woman, had been on methadone before the pandemic and transitioned from a sober home to her own apartment with her husband early in the pandemic. She describes the freedom afforded to them by more liberal methadone policy changes:

When the coronavirus came, me and my husband had never missed group...we [never] gave [the methadone clinic] a dirty urine. So me and my husband, apiece, we have six bottles. So we only go to the clinic once a week, and in two months, we're going to get another three bottles...I like it because I can do anything [with] my time. I go

and I stay in bed, or I can get up. I can make coffee, drink my coffee, go back to bed. Lay down. When you got to go to the clinic, you got to go to the clinic.

Unlike Jayla who had been stable on methadone before COVID-19, Jeremy, a 27-year-old man, had been court-mandated to enter addiction treatment at the beginning of the pandemic. He chose to complete his treatment in jail rather than other residential treatment facilities to ensure he could continue to access methadone, as methadone was not universally available at other residential treatment facilities. After release from incarceration, Jeremy also enjoyed not needing to attend a clinic daily:

Methadone is a medical thing. I'm trying to come off methadone now. But if it wasn't for methadone, I probably would've died...It's actually nice that they give out take-homes. So I only go in twice a week...I go in, they give me bottles. I bring a lockbox, and they give me bottles. I go home.

Notably, all participants on methadone and buprenorphine who found treatment changes to be liberating had stable housing during the pandemic, which facilitated keeping their medications safe. Jeremy explained, "I put [the methadone] in the lockbox and lock it up at home."

Participants described how their social supports were critical to their being able to take advantage of adapted addiction treatment programs. For example, support from family and friends facilitated access to methadone take homes:

Well my uncle let me stay at his house, thank god, when I got out [from jail]...He helped me out. He brought me to a clinic and everything...My buddy has been driving me, thank god. So he's been helping me a lot too. (Jeremy)

Jayla described talking with her partner as an important outlet that helped her to manage her anxiety and maintain her recovery. Being housed and having Internet access also allowed her to engage in things like online cooking classes, which helped her stay busy and "out of her head". Car access also afforded Jayla and Jeremy a reliable form of transportation needed to access methadone treatment.

For the participants on buprenorphine and one participant who was not on MOUD, telephone access was critical to maintaining connections to their providers and prescriptions, as well as syringe service program staff after the closure of physical spaces. Telephone visits were efficient, "just five to 10 minutes [and then they] send that prescription" (Selena, 55-year-old woman). Participants who found changes to the addiction treatment liberating were mostly housed, and all had strong social supports that were critical to maintaining their treatment goals and managing the stress associated with the pandemic.

3.2. Destabilizing

Eight participants described changes established in response to new COVID-19 addiction treatment policies to be destabilizing. The participants in this group found that adapted addiction treatment policies (methadone take-homes, televisits for either buprenorphine or behavioral health services, and transition to syringe service outreach) resulted in fractures to daily routines and community. Participants viewed telemedicine as inaccessible or of lower quality, which disrupted care. Viviana and Edison explain these destabilizing experiences.

Viviana, a 52-year-old woman, was stably managed on methadone and recently housed at the beginning of the pandemic. She described changes to addiction treatment as disruptive to her routine. Her transition from daily to weekly methadone clinic attendance reduced her connection to "positive people" and disrupted her treatment goals:

Table 1
Participant Characteristics ($N = 20$).

| | n (%) |
|--|-------------|
| Age | |
| Mean | 42 years |
| Range | 27–61 years |
| Gender | |
| Cisgender Men | 10 (50%) |
| Cisgender Women | 9 (45%) |
| Transgender Women | 1 (5%) |
| Race | |
| White | 16 (80%) |
| Other or More than One Race | 4 (20%) |
| Ethnicity | |
| Hispanic/Latinx | 6 (30%) |
| Non-Hispanic/Latinx | 14 (70%) |
| Housing status | |
| Housed (e.g., Apartment, staying with family) | 8 (40%) |
| Group Housing (e.g., long-term residential program, SRO) | 3 (15%) |
| Unhoused (e.g., street, shelter, couch surfing) | 9 (45%) |
| Participant Had COVID-19? | |
| Yes | 3 (15%) |
| No | 16 (80%) |
| Unknown (symptoms present, but not tested) | 1 (5%) |
| Participant Knew Someone Who Had COVID-19 | |
| Yes | 11 (55%) |
| No | 8 (40%) |
| Unknown/Missing | 1 (5%) |
| MOUD Received During COVID-19 | |
| Methadone | 10 (50%) |
| Buprenorphine | 4 (20%) |
| None | 6 (30%) |

COVID-19; coronavirus disease 2019, SRO; single-room-occupancy housing, MOUD; medication for opioid use disorder.

*Mean interview length was 55 min (range 34–91 min).

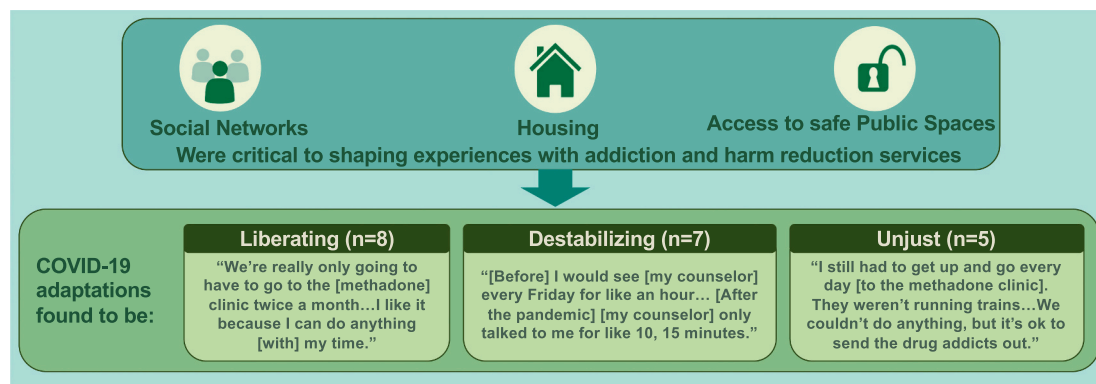


Fig. 1. Findings from qualitative interviews ($n = 20$).

When you're on the clinic, you go every single day, which means you got to get up and leave the house, and just go. Now, they were giving people take-homes, which means some people got three, and six, whatever. I ended up getting six bottles so I could stay home. In a way, it helped me, but then in a way it hurts too because I started that feeling again of not leaving the house...I think I probably shouldn't have got any take-homes and just continued going daily, and seeing the nurses and the counselors that were there. (Viviana)

Edison, a 37-year-old man, had also been recently housed and stable on methadone at the start of the pandemic. Edison described preferring daily attendance as it helped him to manage his dose and start his day:

I found [the methadone take home] very hard to do because I would drink a little extra on day four, and it would leave me running on empty...So I basically told on myself and told [the clinic] that I was having trouble with the take-homes, so they stopped giving them to me...I like it better because [going to the clinic] gets me up and ready for the day. I get up early, so I'm not sleeping all day. So it gets me motivated.

For some participants on MOUD, daily or bi-weekly attendance provided structure. Viviana and Edison both advocated for themselves to return to daily dosing as they saw daily attendance as important for their stability.

Viviana and Edison both found the shift from communal to independent living in combination with the COVID-19 stay-at-home orders challenging. Viviana describes how her recent placement in housing contributed to her feeling isolated and anxious:

I was lonely and I was scared. You live in a shelter with 222 women a day and then you go and you move into your own apartment, which believe me, I love now that I'm used to it. It was like, oh my god. It was quiet and I thought I was going crazy. I did. I thought I was losing my mind.

Edison similarly found it difficult to get used to his new living environment during the pandemic.

I got so used to living, last 10 years I've been homeless and staying at shelters and stuff like that, that once I finally got the place, I'm so used to someone always being there...I'm just so used to community living that now that I got my own spot and stuff like that, it's uncomfortable. I get anxiety really easy.

Changes, especially social isolation from stay-at-home orders, were described by participants as leading to boredom and, for some, affecting their drug use: “I don't know why I'm using more, maybe because I'm so bored or whatever it is” (Tania, 34-year-old woman). Many participants, across all groups, noted that isolation and boredom disrupted their

substance use goals.

Pandemic-related changes fractured behavioral health supports, connections to family, group recovery activities, and the community of people who use drugs at local syringe service programs. Alternative care delivery models, like telemedicine visits with providers, counselors, or groups from methadone clinics, were often described as less meaningful or less therapeutic:

[Before] I would see [my counselor] every Friday for like an hour... When I go to meetings I like to see people. I like to associate, not over the phone. [After the pandemic] [my counselor] only talked to me for like 10, 15 minutes because he had a lot of clients. (Viviana)

I got a really short attention span, so [meetings] got to be in the moment kind of thing. I got to be in the room, or I wonder. My mind wanders...[So] in person, you feel much more connected to the people. (Edison)

Like therapeutic services, community fostered in syringe service programs and group support activities were disrupted during the pandemic. Viviana was a leader of a peer-led advocacy group for people who use drugs and describes how her loss of community and sense of purpose she felt in doing this work contributed to her subsequent relapse:

This [advocacy group] was really, really working hard...Trying to get a safe injection site out here...And we were so proud of ourselves and then boom, the COVID hit and everything just shut down...That's the first time that I ever really put my all into the addiction and helping not only myself but other people. And then stupidly I ended up relapsing over it.

Participants' disruptions in routine, community, and feelings of isolation impacted engagement with addiction care: those on MOUD reported stolen medication or had doses reduced or temporarily stopped, while those not on MOUD had reduced access to sterile supplies and connections to other care, like detox referrals, that had been available through syringe service programs.

For some, getting back on stable medication doses and connecting with a supportive community helped them to regain stability. Viviana shared her experience:

I liked [Zoom recovery meetings]...I was still kind of using, but people don't judge. Nobody was judging me and I was honest and I told them, "Hi, I'm an addict and I'm struggling right now. I'm having a hard time. I'm living alone and I'm scared." It was just so nice to be able to see other people. [laughs] Because the world was like gone, it was empty. It was horrible at that time.

People who found changes in care driven by COVID-19 to be

destabilizing had either been recently housed or were experiencing homelessness. They expressed feeling isolated, and the disruptions in routine and community negatively impacted their engagement with addiction services.

3.3. Unjust

Five participants described how changes to addiction treatment policies were unjust. Participants in this group described how some adaptations to services (methadone take-homes) were unjustly distributed, and how other changes (televisits and/or outreach for buprenorphine, behavioral health, and syringe services) did not adequately mitigate the added challenges posed by COVID-19 public health mandates to unhoused people who used drugs. These served to exacerbate inequities. In particular, participants felt it was unjust that they had to risk COVID-19 exposure to access MOUD and shelter services. Aiden and Maurice exemplify these unjust experiences.

Aiden, a 40-year-old man, was unhoused, on methadone, and using non-prescribed opioids at the start of the pandemic. He articulated challenges keeping himself safe from COVID-19 and how his lack of housing unfairly impacted his access to methadone take-homes.

It's also been very difficult trying to stay clear of the virus...I ended up getting COVID, and I ended up having to be placed a quarantine in a hotel for two weeks. So I had a hard time getting my dose, 'cause I couldn't get there daily. I need to have the dose brought to me... And since then I had to go to the clinic daily after that...I didn't qualify for take-homes. I don't have a home to take [methadone] to. I didn't qualify for a lockbox full of meds that I could give to anybody that was in a position of being able to watch me. Because nobody's in that position over me, I'm homeless. These are the roads and the bumps and the twists and turns that people don't understand that addicts, we deal with a lot of bullshit because we're the black sheep of the community. (Aiden)

Aiden shared the added challenges of accessing methadone following changes to public transportation during the COVID-19 stay-at-home orders.

I still had to get up and go every day. They weren't running trains. They weren't running the buses...I'm five miles away from [the] inner city. And here I am having to fucking ride the bike down the highway...We couldn't do anything, but it's okay to send the drug addicts out. The homeless guys out so that they can go get their food stamps and fucking methadone.

Participants described how some syringe programs increased outreach during the pandemic, bringing people injection equipment and/or increasing phone check-ins, to overcome barriers such as transportation. While some participants from the *liberating and destabilizing* groups found outreach efforts adequate, participants in the *unjust* group did not find that outreach sufficiently mitigated barriers and did not replace other benefits derived from direct service access.

Maurice, a 31-year-old man not receiving MOUD, was "sleeping out" at the start of the pandemic but had been attending the local syringe service program regularly. Like participants in the *destabilizing* group, Maurice and others in this group found COVID-19 service adaptations to be disruptive to their community and supports. Maurice describes how the local syringe service program had been a multi-purpose brick and mortar space that fostered community, created safety, and served as more than a sterile syringe distribution center.

The needle exchange is one of the places that couldn't stay open... They couldn't hire anyone new ... It sort of ruined a lot of opportunities for me that way...The needle exchange it used to be, it was a place where... It sort of had a social aspect to it. People who knew

each other and we were all friends with the employees. We all hung out there and we were friends and it was a very nice area. Especially for homeless people to have a place to hang out... It's very damaging to drug addicts to not have other people looking out after them.

Like those in the destabilizing group, participants in this group found that disruptions to their supportive communities negatively impacted substance use and treatment goals. Aiden describes how having COVID-19 and being in a shelter disrupted his support community, which added to stresses related to his health, family relationships, and addiction.

It's been very difficult trying to see my family, with me being as sick as I was, I needed to just stay away from everybody... I'm trying to deal with my low immune system, getting COVID, dealing with hepatitis C, trying to deal with addiction issues, trying to deal with the stress of parenting from afar, trying to deal with the stress of being a son from afar.

Aiden found this combination of factors to be "just too much on my shoulders", which made him "feel like I earned a break or something", which resulted in escalated substance use.

Some participants in this group described how the COVID-19 stay-at-home orders resulted in unjust increases in attention from police:

The cops where they would come around and kicking us out everywhere that we would be trying to sleep. We'd run out of options... And then it was just like everywhere a homeless group would gather the cops would come tell us to leave. (Maurice)

Maurice described how being moved along disrupted access to syringe service outreach efforts and he mourned the loss of a "safe, warm, and dry" place to be following the closure of the syringe service building. Participants also shared challenges meeting their daily needs, "there were no bathrooms available...water became difficult to get for most people even" (Maurice), following the closure of business and public spaces.

Though participants in this group perceived the COVID-19 addiction and public service adaptations to be unjust, participants remained committed to their substance use and treatment goals. For some, establishing a therapeutic MOUD dose, using telemedicine to connect with behavioral health services, and maintaining close connections with key supports (e.g., family members, relationship partners) helped them to achieve their goals and stay engaged with addiction services.

I give a lot of the credit also to the therapy and the medication because when I get up in the morning, I go get my medicine. I'm not sick. I talk to somebody on the way in, so I'm getting therapy on my way to get my meds...I've already done therapy for the day, so I don't have to worry too heavily about something weighing on my conscience and shit. And I can get on with my day. (Aiden)

However, for some leveraging these supports did not overcome the additional challenges posed by the COVID-19 public health mandates and adaptations to services that they found exacerbated inequities associated with being unhoused and using drugs. Participants in the *unjust* group were mostly unhoused, either sleeping out in the street or living in homeless and/or temporary COVID shelters. In summary, for all three groups, housing, access to safe public space, and maintaining community connections were critical to MOUD access, safer drug use, and people's substance use goals.

4. Discussion

In this qualitative study, 20 survivors of opioid overdose described the COVID-19 pandemic changes to addiction treatment, harm reduction services, and other social services as either *liberating*, *destabilizing*, or *unjust*. Compared to other participants, those who described adaptations

as *liberating* were mostly housed, had access to reliable transportation, and had strong social supports that facilitated success in treatment and substance use goals. COVID-19-related changes to addiction treatment disrupted routine and community supports among those in the *destabilizing* and *unjust* groups, and those who felt changes to be *unjust* noted service adaptations either exacerbated or did not adequately mitigate inequities worsened by public health mandates for unhoused people who use drugs. For all three groups, housing, access to safe public spaces, and having the means to engage with support networks were critical to addiction service access and safer drug use.

Early findings suggested that the regulatory changes to MOUD access and administration designed to slow the spread of COVID-19 have increased buprenorphine access (Komaromy et al., 2020; Stringer et al., 2021), and have not led to increases in adverse events in methadone programs (Brothers et al., 2021; Figgatt et al., 2021). Our study findings show that some participants on methadone found receiving take home doses more challenging than expected, and others described telemedicine for therapy or buprenorphine treatment as less meaningful and lower quality. Clinicians have also cited concerns that telemedicine may reduce the quality of office-based buprenorphine care (Hollander & Carr, 2020, p. 19). Longstanding evidence shows that patient-centered health care—care that is consistent with the needs, values, and desires of patients and involves patients in health care decision making—is associated with superior outcomes in chronic disease management (Constand et al., 2014). Patients' perspectives garnered in our study highlight opportunities to meaningfully integrate patient preferences in MOUD delivery. For example, involving patients in treatment access choices in terms of mode (in-person or telemedicine) and dosing frequency (daily or longer) could help to advance patient-centered MOUD in the United States (Joseph et al., 2021).

For patient-centered care to be equitable, supports must be in place to ensure those facing structural marginalization can benefit from and participate in shared decision-making. Concrete steps that may have alleviated the destabilizing and unjust experiences described by our participants include: providing cell phones to those who needed them to access telemedicine and online recovery supports, transportation to health services, and expanding clinic hours to allow for social distancing and treatment access flexibility (Harris et al., 2021; Stringer et al., 2021). For those newly housed, conducting home visits and active outreach may have identified the destabilizing impacts that changes in a daily routine had for people who were accustomed to daily methadone clinic attendance (de Vet et al., 2013; Kertesz et al., 2013). Future responses to public health crises must include supports designed to facilitate ongoing access to care to structurally marginalized populations.

Importantly, our findings build on others that show community-based addiction services for people who use drugs or those experiencing housing insecurity were multi-purpose spaces that offered more than harm reduction and social services (King et al., 2021). Before their closing, these brick-and-mortar institutions offered safe places for people who use drugs to be and connect with their community daily. Reducing in-person access to these services had substantial costs that should be carefully weighed against the mandates for physical distancing in the current and future infectious disease outbreaks (Roxburgh et al., 2021).

Additionally, our participants' experiences were consistent with other studies that have described how inadequate service infrastructures for unhoused people who use drugs exacerbated their substance use and COVID-19 risks (Baggett, Keyes, et al., 2020; Friedman & Akre, 2021; Richard et al., 2021). The lack of stable affordable housing drives marginalization in this population (Baggett, Racine, et al., 2020; Perri et al., 2020). Among our participants, those who were newly housed needed more support. Those who were not housed, needed housing more than ever before as conditions for unhoused people during the pandemic worsened. Namely, unhoused participants described an inability to meet their daily needs with the closure of public spaces and increases in policing, which reduced access to things like harm reduction

supplies, clean water, and bathrooms. These findings are in line with other studies that similarly found shuttering of community resources exacerbated inequities experienced by unhoused people who use drugs (King et al., 2021; Parkes et al., 2021). Policy makers must consider the risks associated with increased surveillance or policing and reducing access to public services for structurally marginalized populations while designing policies to protect other, less marginalized, community members (Grebely et al., 2020; Perri et al., 2020).

The findings of our exploratory study must be interpreted in the context of its limitations. The study pulled its convenience sample from an existing study focused on survivors of opioid overdose recruited from an urban area where homelessness was common. Additionally, our sample is from one geographic location and lacked racial diversity and participation from younger adults. The study team, not the participants, defined the categorization of addiction service adaptations experiences as *liberating*, *destabilizing*, or *unjust*. The stability of these groupings remains uncertain, as individuals' perspectives and behaviors change over time and our data provided a snapshot of their experiences. Future longitudinal studies should examine shifting perceptions along with shifting policies. However, across those who we interviewed we did identify common experiences during the pandemic with addiction treatment and harm reduction services that can inform improvements to and can mitigate harms from disruptions to these services in the current and a future public health crises.

5. Conclusion

The COVID-19 stay-at-home orders and adaptations to addiction services impacted survivors of opioid overdose addiction care experiences in different ways; some found changes *liberating*, while others found them *destabilizing* or *unjust*. Our findings describing patients' experiences with COVID-19-related changes to MOUD access and administration in the United States suggest an opportunity to offer more patient-centered MOUD. However, patients facing structural marginalization may continue to experience addiction care inequities if services are not paired with concrete measures to reduce access barriers and address drivers of marginalization, specifically a lack of housing.

Contributors

All authors have materially participated in the research and/or article preparation.

CRedit authorship contribution statement

Miriam T.H. Harris: Designed the research question and lead the study design, conducted participant interviews, data analysis, coding, sub coding and iterative analysis, and manuscript preparation.

Audrey M. Lambert: Participated in study design and data collection instrument development, conducted participant recruitment, data analysis, coding, and manuscript editing and review.

Ariel Maschke: Participated in study design and data collection instrument development, conducted participant interviews, data analysis, coding, and manuscript editing and review.

Sarah M. Bagley: Participated in data collection instrument development, and manuscript editing and review.

Alexander Y. Walley: Participated in study design and data collection instrument development, and completed manuscript editing and review.

Christine M. Gunn: Participated in study design and data collection instrument development, conducted participant recruitment, data analysis, coding, and manuscript editing and review.

Source of funding

This research was supported by a National Center for Advancing Translational Sciences (NCATS) pilot grant (1UL1TR001430). Miriam

Harris is supported by the International Collaborative Addiction Medicine Research Fellowship (NIDA R25-DA037756).

Declaration of competing interest

None declared.

Acknowledgements

We respectfully acknowledge that the land where this research took place is on the traditional, unceded territory of the Massachusetts and their neighbours, the Wampanoag and Nipmuc Peoples, who have stewarded these lands for hundreds of generations, and continue to do so today.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jsat.2021.108655>.

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