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"In their mind, they always felt less than": The role of peers in shifting stigma as a barrier to opioid use disorder treatment retention

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ABSTRACT

Introduction: A substantial, national need exists for culturally acceptable, accessible opioid use disorder (OUD) treatment. Medication for opioid use disorder (MOUD) is regarded as effective in treating OUD; however, retention in MOUD programs remains low nationally. One known barrier to MOUD retention is stigma, particularly within ethno-racial minority communities. Peer recovery specialists (PRSs), individuals with shared experience in substance use and recovery, may be particularly well suited to support patients in MOUD treatment, and may have capacity to play a key role in decreasing stigma-related barriers to MOUD retention.
Methods: This study used qualitative methods to solicit feedback on how patients receiving methadone treatment (MT) experience stigma (i.e., toward substance use [SU] and MT). Study staff also gathered information regarding how a PRS role may reduce stigma and improve retention in care, including barriers and facilitators to the PRS role shifting stigma. Study staff conducted semi-structured qualitative interviews and focus groups (N = 32) with staff and patients receiving MT at an opioid treatment program as well as PRSs in Baltimore.
Results: Participants identified experiences of internalized, as well as enacted and anticipated, MT and SU stigma, and described these as barriers to treatment. Participants also identified opportunities for PRSs to shift stigma-related barriers for patients receiving MT through unique aspects of the PRS role, such as their shared lived experience.
Conclusions: Reducing stigma surrounding SUD and MT is critical for improving MOUD outcomes, and future research may consider how the PRS role can support this effort.

1. Introduction

An estimated 1.6 million Americans currently live with opioid use disorder (OUD; Substance Abuse and Mental Health Services Administration, 2020). The fatality rate attributed to overdoses continues to increase during the COVID-19 pandemic—estimated opioid overdose exceeded 100,000 between April 2020 and April 2021, a staggering ~29% increase from the previous year (CDC, 2021). Opioid-related fatality rates continue to rise among ethno-racial minority populations (Wilson, 2020; James and Jordan, 2018). Recent studies found a 40% increase in opioid overdose rates among Black populations compared to White counterparts between 2018 and 2019 (Larochelle et al., 2021). Overall increases in recent opioid overdose deaths have been greater in Black and African American communities (Khatri et al., 2021; Patel et al., 2021).

A clear and substantial need exists for accessible, culturally aligned treatment for OUD, particularly for historically underserved, ethno-racial minority populations. Federally approved medications for opioid use disorder (MOUD), including methadone treatment (MT) and buprenorphine, are efficacious for treating OUD (Mattick et al., 2009, 2014). However, retention is a persistent challenge in MOUD programs, with six-month retention rates below 50% nationally (Morgan et al., 2018; Williams et al., 2017; Williams et al., 2019). Further, low-income, ethno-racial minorities are at the highest risk of treatment dropout (Manhapra et al., 2017; Samples et al., 2018; Stahler & Mennis, 2018; Weinstein et al., 2017).

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Stigma—or the devaluation and discrediting associated with a personal attribute, mark, or characteristic such as race, ethnicity, or sexual minority orientation (Goffman, 2009)—is a barrier to OUD treatment access and retention. Stigma surrounds both substance use disorder (SUD) more broadly (Hammarlund et al., 2018; Van Boekel et al., 2013) and MOUD specifically (Earnshaw et al., 2013; Madden, 2019). Stigma-related barriers to MOUD retention are particularly salient for ethno-racial minority communities (Brener et al., 2010; Hammarlund et al., 2018; Jones et al., 2015), where substance use has been further stigmatized and compounded by historically racist U.S. drug policies (Hart & Hart, 2019; Kunins, 2020).

Theoretical frameworks of stigma conceptualize stigma as occurring through three mechanisms: internalized, enacted, and anticipated (Earnshaw & Chaudoir, 2009). Internalized stigma refers to the degree to which someone endorses negative beliefs and feelings toward themselves, enacted stigma is one's perceived experiences of discrimination, and anticipated stigma is the degree to which people expect to experience stigma/discrimination in the future (Earnshaw & Chaudoir, 2009). Stigma exists at multiple levels, including the individual (Earnshaw et al., 2013; Hammarlund et al., 2018), provider, organizational, and societal levels (Madden, 2019; Van Boekel et al., 2013). SUD and MOUD stigmas at each of these levels and mechanisms contribute to poor OUD outcomes and poor retention in OUD care (Earnshaw et al., 2013; Hammarlund et al., 2018; Madden, 2019; Van Boekel et al., 2013).

Further, current stigma literature argues that researchers must examine stigmatized identities from an intersectional approach, as they do not exist in isolation but rather operate at multiple levels to shape individuals' experiences and health experiences (Williams & Fredrick, 2015). Stigmatized identities cannot easily be unraveled from one another and typically have an interdependent relationship (Turan et al., 2019; Williams & Fredrick, 2015). Thus, we must acknowledge that stigmas experienced by racial/ethnic minority individuals with OUD cannot be considered in isolation. Compounding internalized, enacted, and anticipated SUD and MOUD stigmas, low-income, minority individuals with OUD face numerous other health comorbidities, which are also often stigmatized (i.e., mental health, infectious disease-related), and may also experience race/ethnicity-related stigma and discrimination (Zerger et al., 2014). We must consider how multiple types of health- and race-related stigmas further diminish treatment outcomes for low-income, minority individuals with OUD, particularly in the context of the devastating health disparities of COVID-19 (Gold et al., 2020). Therefore, an urgent need exists to develop and evaluate innovative strategies to reduce stigma at these multiple levels among low-income, ethno-racial minority individuals to improve engagement in care.

Peer recovery specialists (PRSs), individuals with lived substance use and recovery experience, bring their shared experiences into their interactions with clients and thus may have the capacity to play a unique role in reducing stigma. Various studies have speculated that PRS engagement has decreased client SUD stigma within both their samples and communities (e.g., Haberle et al., 2014; Walsh et al., 2008); however, studies directly measuring these effects among people with SUD are sparse. To our knowledge, only one study published to-date reported a decrease in patient internalized substance use stigma following PRS engagement (Vayshenker et al., 2016). While studies examining the effect of PRS contact on client experiences of both SUD and MOUD stigma have been limited to-date, PRS models may reduce stigma by sharing their lived experience, and thus normalizing the experience of living with an SUD and being in recovery (ASTHO, 2020). Further, PRS engagement may buffer or protect individuals from the negative impacts of enacted stigma, based on social support theory (Vaux, 1988). PRSs may also have the potential to reduce stigma around different forms of treatment, such as MOUD, especially if MOUD was part of the PRS's own path to recovery. Unfortunately, however, PRSs may also perpetuate stigma if they view MOUD as a less appropriate path to recovery. Evaluating the impact that PRSs could feasibly play in the mitigation (or perpetuation) of multiple levels of stigma, and the downstream effects this may have on patient-level treatment outcomes, including retention in OUD care, is essential.

The current study aimed to understand: (1) how stigma manifests at multiple levels (including internalized MT and SUD stigma, as well as enacted and anticipated MT and SUD stigma) among predominantly low-income, ethno-racial minority individuals in MT from various perspectives (patient, staff and PRS); and (2) how a PRS role may reduce stigma and improve retention in OUD care, including barriers and facilitators to the PRS role in shifting stigma.

2. Methods

2.1. Setting

The study team conducted this study as part of a larger parent study [NCT04248933] that was adapting and piloting a PRS-delivered behavioral intervention to support successful MT outcomes. This study took place at the University of Maryland Drug Treatment Center (UMDTC), a community-based, outpatient substance use treatment center in West Baltimore which provides MOUD, including MT. Study staff collected data between September 2019 and March 2020 and conducted analysis from December 2020 to January 2021.

2.2. Participants

Participants for this study ($N = 32$) included patients currently enrolled in MT at UMDTC ($n = 20$), as well as providers, staff, and PRSs ($n = 12$). A majority of participants identified as male and Black or African American (see Table 1 for demographic data and patient characteristics). UMDTC staff participants ($n = 8$) included drug treatment counselors, case managers, nurses, and physicians, and PRSs ($n = 4$) were working in community and SUD treatment settings in Baltimore.

2.3. Procedures

We purposively sampled UMDTC staff based on their roles in patient care and program administration. We recruited PRSs working in SUD treatment and community settings in Baltimore City through networking with a PRS research collaborator and community-based organizations. We recruited patients receiving MT at UMDTC via flyers and word of

Table 1
Participant demographics and other characteristics.

	Patient participants ($n = 20$)	Staff participants ($n = 7$)	PRS participants ($n = 5$)
	n (%)	*n* (%)	*n* (%)
Race			
Black or African American	12 (60.0)	5 (71.4)	4 (75.0)
White	6 (30.0)	1 (14.3)	1 (25.0)
Other	2 (10.0)	1 (14.3)	
Gender			
Male	14 (70.0)	4 (57.1)	1 (25.0)
Female	6 (30.0)	3 (42.9)	4 (75.0)
Mean age (SD)	48.4 (10.0)	52.4 (11.9)	44.6 (7.8)
Highest level of education			
Some high school	7 (35.0)	0 (0.0)	0 (0.0)
High school diploma or GED	8 (40.0)	1 (14.3)	2 (40.0)
Some college	3 (15.0)	0 (0.0)	1 (20.0)
Associate's degree	2 (10.0)	2 (28.6)	1 (20.0)
Bachelor's degree	0 (0.0)	1 (14.3)	1 (20.0)
Master's degree or higher	0 (0.0)	3 (42.6)	0 (0.0)
Average years working in SU treatment (SD)	–	11.1 (9.0)	7.5 (5.1)
Disclosed SU history	–	5 (71.4)	5 (100.0)

SU = substance use; PRS = peer recovery specialist.

mouth, as well as referrals by treatment program staff who identified patients who were both struggling and consistent with MT adherence to receive feedback from both perspectives.

The study gave all participants the option of participating in focus groups (n = 22) or individual interviews (n = 10) to accommodate varying work schedules and personal preference given the sensitive nature of the proposed topics, which was in alignment with stakeholder feedback. The study audio recorded interviews and focus groups; all participants provided informed consent, which included permission for audio recording. Participants chose to participate in a focus group or individual interview, but could not participate in both. Patients only participated in focus groups with other patients, and staff and PRSs participated in focus groups together. Four focus groups took place with a maximum of six participants each. The study provided all participants a $25 gift card compensation for their participation.

The University of Maryland, College Park IRB reviewed and approved all study procedures, with an Authorization Agreement (IAA) approved by the University of Maryland, Baltimore.

2.4. Qualitative analysis

Local key stakeholders, including a PRS on our team, informed interview guide adaptation, which was iteratively adapted throughout the study based on feedback from participants. Study staff transcribed and de-identified all recordings and reviewed them for accuracy. For this analysis, we focused on how stigma manifests at multiple levels and feedback on how a PRS could shift stigma. Using thematic analysis, the coding team iteratively developed a codebook outlining themes, subthemes, and definitions in the transcripts and modified the codebook as new concepts arose (Boyatzis, 1998). The coding team used rapid qualitative analysis methods, modeled after Gale et al. (2019) who observed consistent findings among traditional, in-depth, and rapid analysis. One coder initially reviewed and coded each transcript for stigma-related themes. Then, a second member of the study team coded each excerpt from the first round at the node-level. A third, a doctoral student arbiter, reviewed all codes. The coding team met weekly to discuss findings and resolve questions and discrepancies.

3. Results

Several themes emerged from the patient, staff, and PRS interviews and focus groups, following our two primary study aims: (1) to understand how MT and SUD stigmas manifest among low-income, minority individuals in MT at multiple levels through enacted, internalized, and anticipated stigma mechanisms; and (2) to understand if/how a PRS role may reduce stigma and improve retention in care, including barriers and facilitators to the PRS role in shifting stigma. Participants described internalized and enacted MT and SUD stigma at the patient, organizational, and societal levels (see Fig. 1) as barriers to reaching successful treatment outcomes (Aim 1). Participants expressed that working with a PRS may reduce stigma and improve retention in care through qualities unique to the PRS role, as well as through PRS actions/behaviors (Aim 2). However, participants noted that the PRS having a different recovery pathway may contribute to stigma experienced by the patient, which could in turn act as a barrier to a PRS reducing stigma and improving retention in care (Aim 2).

3.1. Aim 1: how stigma manifests among individuals in methadone treatment from patient, staff, and PRS perspectives

3.1.1. Internalized SUD and MT stigma

Patient participants described their experiences of internalized stigma surrounding both their own SUD and receiving MT treatment—both of which acted as barriers to successful treatment outcomes. Patients shared negative views of themselves as a result of their substance use. For instance, one patient participant reflected on his belief that, due to his substance use history, he had "ruined" his brain and "[will] never fix it, which is pretty sad." Patients described feeling abnormal as a result of their substance use and that they hoped to be "normal" through receiving treatment.

In addition to negative views about oneself as a result of their SUD, patients also shared negative attitudes toward themselves regarding use of MT. For instance, one patient stated that he felt that it "sucks that a guy like me needs that [methadone]." Another patient shared the feeling that taking methadone meant that he was still using drugs:

> *So, I just went from one drug to the other drug and then the methadone itself is a drug. They tell me it's a pain reliever, or blocker. What is it blocking?*
>
> – [Patient Participant, Black, mid-50s]

Providers and staff also shared a perspective that acknowledged internalized MT stigma among their patients. For instance, one provider shared how they could see societal stigma toward MT internalized in their patients:

> *It's the stigma of society…I've had some client[s] that was bouncing back into society. You look at this person, you would never know they got high. But in their mind, they always felt less than … people would plant the seed that if you're on prescribed medication, you still getting high…it's the stigma that has to be broken.*
>
> – [PRS Participant, Black, early 60s]

Other staff members echoed this sentiment, stating that some of their patients "worry that they won't be accepted and wonder if they're, especially when it comes to the self-help groups, whether they're still really clean."

3.1.2. Enacted and anticipated stigmas

Participants described enacted and anticipated stigmas, for both SUD

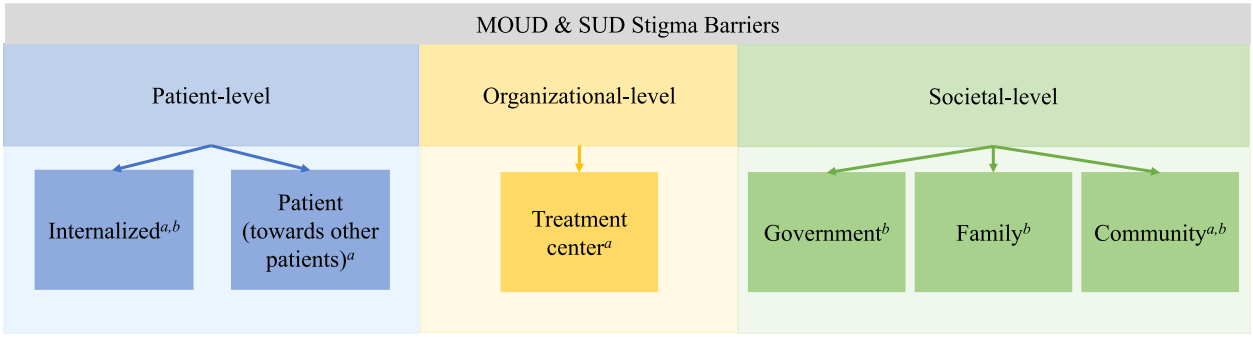

Fig. 1. Identified levels of stigma.
Note. [a]Indicates SUD stigma, [b]Indicates MOUD stigma.

and MT, at multiple levels, including at the patient level, provider/staff level, within institutions (e.g., the treatment center), and broader societal, political and cultural levels.

3.1.2.1. Patient-level enacted SUD/MT stigma. Patient participants on an abstinence-based recovery pathway perpetuated stigmatizing views toward other patients who received MT services while remaining in active use. One such patient participant described other patients who still use as "their willpower not being strong enough," and not caring to get well. Other participants described their belief that patients on MT who are still in active use only use MT as a "gate shot" (i.e., using MT to avoid withdrawal-related illness), and that this was an inappropriate use of MT.

3.1.2.2. Provider/staff-level enacted SUD/MT stigma. Patients and staff described stigmas perpetuated by staff and through policies at the treatment center. One patient described feeling as though they were being nitpicked and labeled as "incompliant," due to loitering and parking issues, which made it hard for them to move forward in treatment. Multiple patient participants discussed experiences with one counselor who continuously referred to patients as "junkies."

3.1.2.3. Familial-level enacted MT stigma. Patient participants described that their families' stigmatizing views toward their engagement in MT was a barrier to treatment/reaching their goals. One patient participant described their family encouraging them to discontinue treatment due to their negative attitude toward MT:

> *I was staying with my daughter. I was going through a whole lot of stuff. And, my daughter, she wanted me to get off methadone, and she said it wasn't a good idea and, you know, and I was doing it, you know, just because I was just hearing her voice.*
>
> – [Patient participant, White, mid-30s]

3.1.2.4. Community-level enacted stigmas. Participants described stigmas toward low socio-economic status, racial/ethnic minority status, MT, and SUD as existing at the general society level and within the government (i.e., officials holding stigmatizing views). Further explaning the stigma toward MT, one staff participant described an unfair image being painted of patients:

> *It's not a real image of what methadone and that's what only thing that people zoom in on. They zoom in on the negatives of the city where there's so much positive good stuff that goes on. They zoom in on the person you see noddin' but in reality, the person that's sitting beside you at that job may also be on methadone. You just don't know about that. So, you're only seeing part of it.*
>
> – [Staff Participant, Black, early-50s]

Another staff participant described how these various stigmas compound one another, creating an overwhelming experience for patients to handle:

> *There just so, so many layers of stigma that can be attached to basically being a poor person of color in Baltimore City with a heroin addiction. And if you add, you know, trauma, you know, suffering any kind of violence or exposure to violence, you know, on top of that, it's a lot for any one person to handle.*
>
> – [Staff Participant, White, late 20s]

One participant also identified the role of government officials in contributing to misinformation as a factor in perpetuating MT stigma within Baltimore City:

> *Speaking of stigma, we once had a mayor that got on television and said everybody who's noddin down the market is on methadone. The leader of our city, uninformed people who's watching her on television…Guess what their perception is now? And it's totally wrong. That's miseducation… that's what this is all about to me.*
>
> – [Staff Participant, Black, early-50s]

3.2. Aim 2: perspectives on how a PRS could shift stigma

3.2.1. Peer qualities that could impact stigma

Staff and patient participants described potential qualities in a PRS that may shift multiple forms of stigma, including shared experience, particularly when the peer and patient have similar paths to recovery, and specific peer behaviors that could support shifting stigma.

3.2.1.1. Shared experience: normalization. The shared experience between PRS and patient may normalize the MT and SUD experience and can give the peer credibility such that they will not make a patient feel judged:

> *Having a peer, there's just a certain level of credibility that's already there… being somebody with whom he could speak without necessarily being judged. And I think that that's another key thing about peers; is that I think there's this inherent understanding that there really isn't room for that it's a judgment free zone.*
>
> – [Staff Participant, White, late-20s]

One patient highlighted that a peer may be able to connect to the patient in ways that the counselor cannot due to having that shared experience:

> *My counselor … she's never actually walked in my shoes. That's always, to me, always better when you have someone that's been there, that you can relate to on a deeper level when it comes to addiction because there's so many facets to this thing and it's not just one, it's not black and white. So, I think that would be a good thing … a peer probably could reach the client in places that a counselor may not*
>
> – [Patient Participant, Black, early-50s]

3.2.2. Peer actions/behaviors

Staff and patient participants described how the peer could potentially impact stigma at multiple levels.

3.2.2.1. Supporting clients and other treatment team members. Peers can support patients by creating healthy relationships with them and creating open spaces where patients can disclose information safely due to lack of judgment. Many of the patients do not have safe spaces like this outside of the clinic; thus, having peers who support them in this way may keep them engaged in treatment:

> *I think having healthy relationships which many people do not have outside of here is one piece that keeps them coming back. They feel safe here, they're able to come and even disclose information that they may not disclose anywhere else because, you know, speak openly and feel safe in doing so.*
>
> – [Staff Participant, Black, early-50s]

3.2.2.2. Dispel myths and stigma. Many patients may come into MT with very little information on what to expect, or with misunderstandings of or myths surrounding MT. Staff participants described an opportunity for patients to receive quality information from peers once they come into treatment and, thus, reduce miseducation, stigma, and confusion:

It's about education first and helping them relate to what's going on. Because they just don't understand and what they do understand, they don't understand. And they've got to understand information. And that's confusion. That's confusion right there.

– [Staff Participant, Black, early-50s]

3.2.2.3. Shift organizational stigma. Having peers working within the context of MT treatment programs may help in shifting the stigma that exists within the organization itself by seeing someone in recovery contribute to the organization. Further, peers directly support staff, which may help to alleviate stigma toward people in recovery, and in turn, the staff aid the peers by giving them responsibilities that benefit the organization:

It reduces stigma within the organization because now clinicians, regardless of their own internal bias, are seeing that people with lived experience are benefiting to the organization, which creates opportunity for the clients to have a beneficial contribution.

– [PRS Participant, White, early-30s]

3.2.3. Barriers to PRSs shifting stigma

One patient participant noted that there may be "differences in recovery paths" between the peers and the patients. These differences could cause the patient to feel that the peer is "looking down on [them]" and could potentially cause the patient to "close right up like a book" or be less open during sessions. Indeed, patients and PRSs having different recovery pathways may amplify stigma and be a barrier to how a PRS may provide supportive, nonjudgmental services.

4. Discussion

The overall aim of this study was to understand how stigmas manifest at multiple levels among low-income, minority individuals in MT and to gather feedback on how a PRS role may impact stigma. Findings highlight how MT and SUD stigmas exist at multiple levels and serve as barriers to reaching successful MT outcomes. Participants described both internalized and enacted MT and SUD stigmas, and their roles in hindering patients' recovery progress. Participants shared that PRSs may be able to shift stigma and remove barriers to treatment through their shared experience. Participants identified various qualities and acts/behaviors that may help reduce stigma among patients, and potential barriers when the PRS and client have different pathways to recovery. Findings suggest that future work should continue to explore how PRS-integration in treatment teams can decrease organizational stigma.

SUD and MT stigma exist at multiple levels, including internalized within the self, among providers, and patients' communities and families. These results are in line with previous qualitative research that identified enacted and anticipated stigma against SUD and MT from friends and family, coworkers and employers, and health care workers (Earnshaw et al., 2013), as well as stigma toward MT, wherein patients receiving MT treatment are stigmatized as still using drugs (Madden, 2019). This study also highlights patient internalized SUD and MT stigma, and how these stigmas may act as barriers to patients' treatment goals. Previous research has examined whether enacted and internalized SUD stigma predict treatment behaviors (Brener et al., 2010; Hammarlund et al., 2018) and has found that perceptions of discrimination predicted treatment dropout, as well as mixed findings on whether stigma influences treatment seeking. However, little research has examined how these barriers continue to persist throughout treatment to affect retention in MT care. Participants in this study described their perception that MT stigma followed them throughout their treatment experience; some patient participants described feeling as though they were still using drugs due to the conceptualization of MT as just a substance substitution. Similarly, participants described feeling as though they were still perceived by community members as being in active addiction due to receiving MT.

The experiences of MT and SUD stigma that participants in this study described are similar to the levels of stigma reported in qualitative studies with predominately White samples, including at the societal level (Browne et al., 2016) and institutional level (e.g., health care systems; Murney et al., 2020), and how these stigmas act as barriers to entering and/or staying in MT. Nonetheless, these stigmas are also more pervasive when coupled with ethnoracial discrimination and cultural misunderstandings. Racial discrimination by health care providers is more commonly experienced by people who receive MT vs. other MOUD (Pro & Zaller, 2020). Furthermore, MT is often portrayed using images of Black individuals who use heroin and are involved in criminal behavior, which creates challenges related to engagement and retention for people experiencing multiple sources of marginalization (Goedel et al., 2020). Indeed, when understanding how MT and SUD stigmas affect MT/SUD treatment experiences among racial-ethnic minority populations, an intersectional lens helps to take into account the various other forms of discrimination and health care discrepancies that these populations face. Further, more work needs to be done to understand other factors that may impact the effects of SUD and MOUD stigmas on treatment outcomes, such as frequency of discriminative/stigmatizing experiences, and the degree of internalization following stigmatizing experiences.

Working with a PRS may increase accessibility to SUD treatment services in underserved, low-income, minority populations, while also reducing the stigma-related barriers that participants in this study identified. Participants revealed that PRS-shared experience with substance use and recovery may act to normalize and destigmatize substance use, thus, shifting patient internalized stigma, particularly when aligned on shared recovery pathways. Moreover, participants described that, through having an interventionist who is in long-term recovery themselves, they would be able to look to this person as inspiration for steps they may take in their own life. Of note, participants also described that integrating PRSs into treatment centers may shift organizational stigma toward SUD, which has been reported as a barrier to treatment (Van Boekel et al., 2013), through modeling what persons in long-term recovery may contribute to the workplace. Evaluating the effects of PRS interventions on stigma at these multiple levels is an important area of future research. Further, future research should aim to understand the limitations of PRS interventions for shifting stigma, and in what scenarios other intervention strategies may be necessary, such as in addressing other systemic factors at organizational and societal levels.

This study takes a step toward gathering key stakeholder perspectives on stigma as a barrier to MT retention and how a PRS may support shifting stigma. With feedback that working with a PRS is perceived as having the capabilities to destigmatize substance use and MOUD care among clients in an MT program, this qualitative study has informed data collection for our ongoing work to evaluate a PRS-delivered behavioral activation (BA) intervention [NCT04248933]. Given that qualities unique to the PRS role, such as shared-experience, are perceived to be a key component of PRS interventions, additional work is needed to incorporate assessment of self-disclosures and clinical competency as part of evaluating the PRS role (Kohrt et al., 2015). Further, future research should continue to specify aspects of the PRS role that may affect stigma-related outcomes and other patient-level outcomes, such as intervention/treatment retention, including both barriers and facilitators.

Future work should also gather additional stakeholder perspectives regarding the intersection between SUD and MT stigmas with other health-related stigmas and racial/ethnic discrimination. Though sparingly, participants described how these stigmas compound one another, similar to the syndemic effects that other barriers to MT have on one another (Kleinman et al., 2020). Yet a stronger focus on the intersection of SUD and MT stigmas with racial/ethnic discrimination is sorely

needed. The interview guide in this study did not probe on intersectionality specifically, which is an important immediate future direction of this work. To understand how to adapt a PRS intervention to shift MT and SUD stigma and promote retention in care, these multiple intersecting stigmas must be considered together.

4.1. Limitations

These results should be considered within the context of study limitations. While themes surrounding stigma emerged from qualitative interviews, this was a secondary analysis of a larger study focused on adapting BA for PRS delivery and barriers to MT retention. Additionally, we acknowledge that subjectivity exists in the definition of stigma; thus, what coders identified as stigma may differ from what patients feel as stigmatizing, which may also differ on a case-by-case basis. Coders' personal backgrounds may have affected what they defined as stigmatizing and influenced their coding. However, weekly meetings focused on resolving discrepancies and discussing perceptions to be as aligned as possible in what constituted stigma. While this framework informed our analysis, future research that uses the Stigma Mechanisms Framework (Earnshaw & Chaudoir, 2009) to design qualitative and quantitative assessment measures will be essential to further delineate anticipated and enacted stigmas. Finally, the study recruited study participants from a single treatment center in Baltimore and all received MT, which may impact generalizability.

4.2. Conclusions

Improving our understanding of the experiences of SUD and MOUD stigma within ethnoracial minority communities and identifying accessible intervention strategies using peer supports is critically important for improving engagement in care and care experiences for this population. Stigmas around SUD, OUD, and MT exist at multiple levels, which may act as barriers to engaging in and remaining adherent to MT. Moreover, results suggest that working with a PRS may offer a unique opportunity to shift stigma through normalization of SUD, modeling long-term recovery, as well as educating and supporting clients. However, a risk exists of peer stigmatization of clients who have different recovery pathways; future research should explore the importance of PRSs and their clients sharing recovery pathways and impacts on treatment outcomes. Future work is needed to rigorously evaluate how a PRS intervention can shift stigma at multiple levels.

CRediT authorship contribution statement

Morgan S. Anvari: Conceptualization, Methodology, Validation, Formal analysis, Writing – original draft, Project administration, Data curation, Visualization.

Mary B. Kleinman: Conceptualization, Methodology, Formal analysis, Project administration Writing – review & editing.

Ebonie C. Massey: Formal analysis, Writing – original draft.

Valerie D. Bradley: Project administration, Writing – review & editing.

Julia W. Felton: Writing – review & editing, Supervision.

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