Motivations for Treatment Engagement in a Residential Substance Use Disorder Treatment Program: A Qualitative Study

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ABSTRACT

AIMS: The aim of this study was to explore perspectives on motivations for treatment engagement from substance use disorder (SUD) clients in a long-term residential rehabilitation program.

DESIGN AND METHODS: A convenience sample of 30 clients who were enrolled in a year-long SUD treatment program at a residential rehabilitation facility took part in in-depth interviews. Interview transcripts were analyzed using the directed content analysis approach.

RESULTS: Participant accounts indicated that their treatment engagement was motivated by factors that aligned with the six primary constructs of the Health Belief Model: (i) perceived susceptibility (eg, believing that their substance use required intervention and that they were prone to relapse), (ii) perceived severity (eg, substance use negatively impacted their health and harmed their close relationships), (iii) perceived benefits (eg, opportunities for a better life, reconnecting with family members and close friends, & avoiding legal consequences), (iv) perceived barriers (eg, the length of the treatment program), (v) cues to actions (eg, decisive moments, elements of the treatment program, & faith and spirituality), and (vi) self-efficacy in remaining abstinent (eg, treatment program provided them with skills and experiences to maintain long-term sobriety).

DISCUSSION: Our analysis indicates that participants' treatment engagement was linked to their beliefs regarding the severity of their substance use disorder, their treatment program's ability to help them avoid future relapse, and their own capability to act upon the strategies and resources provided by the treatment program. A theoretical understanding of these aspects can contribute to the future planning of precision interventions.

KEYWORDS: addiction, substance use disorder, treatment engagement, recovery, Health Belief Model, qualitative methods, directed content analysis

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Introduction

Over 20 million people in the United States were diagnosed with a substance use disorder (SUD) related to their consumption of alcohol (15.1 million) or illicit drugs (7.4 million) during 2016.[1] Despite the proven effectiveness of SUD treatment for those whose recurrent use is associated with impaired physical and/or social functioning,[2] only 3.8 million people received any substance use treatment in 2016—with about 2.2 million receiving their treatment at a specialty facility.[1] For those who access SUD treatment, premature treatment dropout and relapse are major barriers to maximizing its therapeutic benefits. Between 20% and 70% of clients receiving residential substance abuse treatment will dropout before completing it.[3-6] Among those who complete SUD treatment, an estimated 40% to 60% of them experience a post-treatment relapse.[7]

Given the challenges associated with retaining clients in SUD treatment, addressing their biopsychosocial needs (eg, co-occurring disorders, housing, employment, etc.) and helping them sustain long-term abstinence, scholars have increasingly called for research that can "improve the delivery of treatment services and maximize treatment benefits" by identifying factors associated with *treatment engagement*, which is defined as "treatment participation and positive treatment experience."[6 p.1474] Several quantitative studies have identified treatment engagement as an important predictor of favorable treatment outcomes.[8-10] More specifically, these studies indicate that SUD clients who report positive relationships with counselors and staff members[11,12] and perceive that their needs are being met[10] tend to stay longer in treatment and experience favorable treatment outcomes—including long-term sobriety, improved psychological well-being, and lower two-year mortality.[13,14]

Previous studies also suggest that treatment engagement is associated with organizational factors, such as staff ratings of professional attributes (eg, staff growth, efficacy),[15] staff members' self-reported stress,[15,16] and effective staff utilization (ie, relying on staff members who are more willing or able to implement treatment innovations).[17]

While acknowledging the value of quantitative studies related to SUD treatment engagement, scholars have, in recent years, advocated for qualitative studies that capture detailed accounts of critical factors contributing to successful engagement with treatment.[6,17] Although they are relatively small in number, extant qualitative studies offer important insights pertaining to SUD clients' treatment experiences, in general, and their treatment engagement, in particular. These studies note, for example, that clients' treatment engagement is influenced, in part, by interpersonal relationships with staff members,[17-20] the availability of tangible resources (eg, birth control, diapers, housing assistance, childcare),[17,18] and clients' internal motivations.[20] A recent qualitative study by Yang et al.[6] examined treatment engagement from the perspective of 60 clients receiving SUD treatment in a short-term inpatient facility located in the Southern United States; drawing on semi-structured, one-on-one interviews, authors identified four interconnected factors associated with treatment engagement: (i) perceived treatment needs, (ii) trust and counselor support, (iii) peer inspiration, and (iv) organizational barriers.[6]

We build upon and extend this previous work in the present qualitative study by examining SUD treatment engagement from the perspective of 30 clients who were participated in a long-term (ie, 12-month) residential rehabilitation program located in the Mid-South region of the United States. Grounded in the framework of the Health Belief Model (HBM),[21,22] the present study addresses the stated need for theoretically-informed qualitative studies that can inform practitioners, researchers, policymakers in their efforts to develop treatment programs designed to address SUD and its associated adverse outcomes in the United States.[6,23-25]

The HBM framework has been applied to many behavioral contexts—including to predict the adoption and maintenance of treatment for a diagnosed illness, adherence to medical treatment, and engagement in preventative health behaviors, such as exercise, health screenings, and vaccinations.[26-28] It has also been applied to SUD behaviors, such as alcohol consumption,[29-31] illicit drug use,[29,31] and smoking.[30,32] Furthermore, despite mixed results regarding its efficacy as a predictive model in behavioral and intervention studies,[26,27] scholars have in recent years argued for the HBM's utility as a descriptive framework to examine first-person accounts of help-seeking behaviors related to specific health conditions[33] and to inform SUD education and treatment programs.[34] To our knowledge, however, this is the first study to use the HBM to examine SUD clients' perspectives on their treatment engagement in a long-term, residential rehabilitation program.

To summarize, the present study addresses the stated need for theoretically-informed addiction research[23,24] that offers "in-depth, nuanced, and multiple-perspective accounts of treatment engagement."[6 p. 1476;25,35-37] It also supports previous arguments regarding the HBM's utility as a descriptive framework for understanding help-seeking behaviors, including SUD treatment, and its potential to inform educational interventions designed to improve SUD treatment experiences.[33,34]

Materials and methods

Research setting and participants

The present study included in-depth interviews with clients who participated in a year-long SUD residential rehabilitation facility located in an urban area in Tennessee, USA. The facility offers treatment services for SUD and co-occurring mental health disorders. This agency serves approximately 500 clients each year, including many with a history of legal issues. Clients typically reside at the facility for a full year and are required to contribute to the day-to-day work of maintaining the facility by completing assigned chores (eg, cleaning, cooking, laundry, etc.) while participating in the treatment and vocational programs. Clients are also required to participate in an external work assignment at one of the organization's community partners, for example, convenience stores, hotels, golf courses, warehouses, and a local zoo.

The participants were recruited in the present study through counselors making announcements during group meetings and gauging clients' interest in the project. We then contacted those clients who expressed initial interest to explain the study further and seek the informed consent. Eventually, 30 clients agreed to participate; this sample size was deemed sufficient for data saturation. Within this study sample, 18 participants (60%) were male and 12 (40%) were female. The majority of participants (n = 21, 70%) were African American; the other nine participants (30%) were White. Approximately half of the participants (n = 14, 46.7%) were aged 40 to 49 years, seven (23.3%) were aged 50 to 59 years, four (13.3%) were aged 20 to 29 years, another four (13.3%) were aged 30 to 39 years, and one participant (3.3%) was aged 60 to 69 years. The majority of the participants (n = 21, 70%) reported receiving treatment for cocaine/crack addiction. The other nine participants (30%) reported receiving treatment for polydrug, alcohol, methamphetamine, prescription pill, or cough syrup addiction (see Table 1 for a summary). All participants had completed the active phase of the treatment and were continuing in the program for their long-term recovery.

Data collection and analysis

Data collection involved in-depth, semi-structured interviews. Interview topics included substance use initiation, treatment engagement, recovery, and maintaining post-treatment

Table 1. Participants' socio-demographic characteristics.

DEMOGRAPHICS	(N = 30) N (%)
Race	
African American	21 (70.0%)
White	9 (30.0%)
Age	
20-29	4 (13.3%)
30-39	4 (13.3%)
40-49	14 (46.7%)
50-59	7 (23.3%)
60-69	1 (3.3%)
Primary Substance	
Cocaine/crack	21 (70.0%)
Polydrug	4 (13.3%)
Alcohol	2 (6.6%)
Cough syrup	1 (0.3%)
Methamphetamine	1 (0.3%)
Prescription drugs	1 (0.3%)

abstinence. The full interview guide is available upon request from the corresponding author (SKK). The interviews took place in a private space at the treatment facility. All interviews were audio-recorded with participants' permission and later professionally transcribed. The interview transcripts were uploaded to *Dedoose*, a web-based qualitative analysis application.[38] The study protocol was approved by the Institutional Review Board at the University of Memphis.

The data analysis process began with two research assistants independently coding the interview transcripts. The initial codes were constructed inductively, line-by-line, without the use of a priori coding scheme. Upon reviewing the initial codes, the first two authors (PJD & SKK) recognized that the participants' responses pertaining to treatment engagement were consistent with the Health Belief Model (HBM) framework; the authors then reanalyzed the interview transcripts using a process akin to the directed content analysis approach.[39] Next, following the steps outlined by Hsieh and Shannon,[39] the first two authors jointly developed operational definitions of the HBM's key constructs and then used these definitions as sensitizing concepts when analyzing the interview transcripts.[39] This process resulted in a thematic framework that aligned with the HBM's six constructs while simultaneously identifying the unique ways the constructs apply to the study's specific context.

Results

Perceived susceptibility

Within the HBM framework, *perceived susceptibility* refers to a person's beliefs regarding whether they are likely to be negatively impacted by a health behavior or condition. As it pertained to study participants' treatment engagement, perceived susceptibility was tied to two specific issues: (i) believing that their SUD behaviors were beyond their control and, thus, required formal intervention, and (ii) believing that without maximizing their treatment experience, they would be prone to relapse.

In recounting their experiences before treatment, the majority of participants indicated that they once considered their SUD behaviors to be "manageable" or "under control." As they continued using alcohol and/or illicit drugs, however, they reached a point where they began viewing it as an addiction that required formal SUD treatment. For example, a female client who was treated for crack addiction explained:

> *I functioned and used for, for a long time, but what happened was when my addiction progressed, then I was wanting more, so it did interfere with [my life] and then that's when I started doing things like shoplifting and prostitution. . .Before I entered treatment, I was using every single day. . .I had to have it.*

Another participant, a female client, who was also treated for crack addiction, shared a similar sentiment, noting that she was motivated to engage with her treatment because she couldn't maintain sobriety on her own:

> *I would always try to say 'I'm going to stop using'. . .I might throw the dope away, but. . .it wouldn't work because I didn't have a safe place to do it.*

Participants also described being motivated to engage with the treatment program because they viewed themselves as susceptible to relapse. Such perceptions were often linked to clients' previous unsuccessful attempts at completing treatment or maintaining long-term sobriety. For example, a male participant who was treated for cough syrup addiction explained that he had completed short-term treatment (ie, between 15 and 30 days) five times in the past but had never remained sober for more than a day after being released; he felt his previous treatment attempts were unsuccessful because, rather than being engaged, he was "just waiting to get out."

Perceived severity

Perceived severity denotes a person's perception of the seriousness of the consequences associated with a health behavior or condition. In the present study, participants' treatment engagement was motivated by the negative experiences tied to their past substance use and the fear that similar (or worse)

consequences would occur if their treatment was unsuccessful. Specifically, participants recounted how their substance use negatively impacted their physical, mental, and emotional health; they also noted how addiction harmed their relationships with family members and close friends. For instance, a female client who was treated for crack addiction shared:

> *The main thing that I lost was myself. And my family and my kids, you know. I lost a lot of material things, but the love and the trust of my family and loving myself and being able to be a mom or a friend or somebody real. . .You know, my oldest child is about to be thirteen and I've been gone like, eight years of his life, and I don't even know who he is. . .My four-year-old and my two-year-old, they only know me by a picture.*

Additionally, participants identified ways that their addiction had placed them in dangerous relationships and situations, where they were frequently at risk for physical violence, including sexual assault. For example, a female participant who was treated for alcoholism and crack addiction stated:

> *I've been kidnapped and raped and held hostage for hours on end. [I've experienced] physical and sexual abuse from a boyfriend I had. . .It was connected with [drug use] because I wouldn't have been in the situations, I was in.*

Participants cited these experiences, rife with severe consequences, as motivating them to engage with and complete their treatment.

Perceived benefits

Participants' treatment engagement was also motivated by the perceived benefits associated with completing the treatment program. According to the HBM, *perceived benefits* refer to people's perceptions of the positive impacts of engaging in an advised action. In the present study, participants identified three primary benefits that motivated them: (i) opportunities for a better life, (ii) reconnecting with family members and close friends, and (iii) avoiding legal consequences.

A major incentive for participants to engage with their treatment program was the belief that doing so would provide them with an opportunity for a "better" or a "more fulfilling" life. For many participants, the "better life" that awaited them involved the opportunity to reconnect with their family members and close friends. For example, a male client, who was treated for crack addiction, recalled neglecting his wife and young daughter at the height of his addiction—once going as far as trading his daughter's infant car seat for drugs; he described regaining his family's trust as his primary motivation.

In a more immediate sense, several participants described being motivated by the opportunity to avoid legal consequences—most notably, in the form of extended jail time. For instance, a female client who was treated for crack addiction explained:

> *The day that we went to court, my public defender, he suggested it, and the judge said, we'll let her go to [the] treatment for one year. . .He said, if you don't complete this treatment, you're going to violate your eight years' probation, we're going to charge you with these two new felonies, and you'll have a twenty-year sentence. But if you complete this program, the robbery and the receiving stolen property charges will be dropped, and then you'll go on with your eight years' probation. So that's what I'm doing now.*

In other instances, participants were not court-ordered to pursue treatment, but were motivated to do so because of multiple arrests; for example, a male client who was treated for alcoholism and crack addiction described being arrested for a crime he did not remember committing, which led him to voluntarily enroll in the treatment program.

Perceived barriers

Within the HBM framework, "*perceived barriers*" include people's perceptions of the costs associated with engaging in an advised health-related action. In the present study, only one predominant recurring theme about barriers emerged which might prevent clients from engaging with their treatment: the length of the treatment program. Several participants noted that they were "shocked" when they learned that they were signing up for or being required to attend a year-long program. One participant—a male client who was treated for alcoholism—emphasized that "a year is a long time" and that completing the program required a great deal of "attention and focus"; he later explained that he had to continually make the decision to persist and remain engaged with his treatment:

> *I just had to keep that in my mind [staying focused]. . .if I wanted to walk out of here. What do I want? What will it take, if I leave, before I get a hold of this thing?*

Cues to action

In contrast to identifying a singular barrier to treatment engagement, participants identified several *cues to action*—that is, factors that facilitated their active engagement with the treatment program. These specific factors fell into three broad categories: (i) decisive moments, (ii) elements of the treatment program, and (iii) faith and spirituality.

Several participants identified decisive moments or turning points that motivated them to initially seek treatment and to continually engage with the treatment program. In most cases, these turning points allowed participants to view themselves or their SUD behaviors from a different perspective. This sentiment was perhaps best captured by a male client who was treated for crack addiction; he recounted:

> *One time we [were] in an alley, [a] little boy, about. . .seven or eight years old. [He said], 'What you junkies doing?'. . .I think that that kind of touched me more than anything. . .kind of made me want to go to*

treatment, too. . .In high school, when they used to show [us] homeless people or drug addicts and everything; that wasn't nothing [anything] I wanted to be.

As this participant described, clients used the memories of these decisive moments, and the internal motivation they offered, as cues to action for treatment engagement.

Participants also described how various elements of the treatment program helped facilitate their continued engagement over time. In particular, clients identified how the general structure of the program—including its length, various forms of counseling (individual and group), and the work requirement—were both motivating and effective. Several participants contrasted their experiences in short-term treatments (typically 15 to 30 days) with the lengthier stay in the current treatment program—noting that the longer program offered them an opportunity to progress over time while removing them from the negative social environments that facilitated their substance use. For example, a female client, who was treated for crack addiction and had previous experience with a 30-day program, said:

And I did a 30-day thing there [at another treatment center]. I did pretty good. But I still didn't get the [benefit], I didn't get what I really needed versus what you get [in long term treatment]. Because you can't do it in 30 days. You cannot deal with issues. You cannot deal with sex issues. You cannot deal with those issues in thirty days.

As this client stated, participants also emphasized how the treatment program allowed them to engage with multiple issues that were, both directly and indirectly, tied to their SUD behaviors. Beyond the classes themselves, participants also described counselors' efforts to build supportive, trusting relationships with clients. A female client who was treated for crack addiction shared the following example:

[The counselors] make you feel really, really comfortable about talking about whatever's going on with you. . .They're good at getting to the root of problems.

In addition to offering support, staff members also pushed clients to be their best through a process they called "staffing," where multiple counselors would meet with a single client to challenge and encourage them. A male client who was treated for crack addiction offered the following example:

I went in there and [heard] from five or six counselors. . .[and they helped me realize that] I had to do more than the bare minimum. . .I had to really dig down deep and that staffing helped me to realize [it]; [they said] 'I know you're happy [and] we're glad you're here, but there's some more to be done.

Participants also identified the treatment program's work requirements (both inside and outside the treatment center) as a cue to action. For instance, when reflecting on his work responsibilities within the facility, a male client stated:

I did jobs that I'd never done, (chuckling) like working the laundry, working the kitchen. Well other than when I was a youngster, I did kitchen work, but doing somebody's laundry? Well, I guess you could say it gave me a little humility. . .I've always been quite a selfish person, especially in my addiction. . .I never would have thought doing somebody else's laundry [would help me, but] it gave me a lot of humility.

Clients also spoke positively about their external work experiences—noting that they were learning job skills that would allow them to build a better life after completing treatment. A male client who was treated for alcoholism and crack addiction said:

Yeah, I'd say working helps with sobriety because. . .you feel like you're actually doing something [productive].

Finally, several participants cited their faith and spirituality as cues that motivated their treatment engagement. Participants described how having faith and "talking to God" through prayer motivated them to remain abstinent. Several clients, including a female who was treated for crack addiction, believed that God had placed them in the treatment program:

I know that God placed me here to get what I needed to get.

These clients felt a responsibility to make the most of their treatment experience.

Self-efficacy in remaining abstinent

Self-efficacy identifies the sense of confidence that people have in their ability to engage in a particular health-related action. Within the study sample, participants explained that they were motivated to remain engaged in the treatment program because they sensed that it was providing them with skills and experiences that would help them to maintain long-term sobriety.

More specifically, participants noted that many features of the treatment program gave them confidence in their ability to function effectively after completing it. Clients reported that they knew that they would not be discharged from the program until they were ready, which several participants contrasted with their previous experiences in short-term treatment. They also cited their work experiences outside of the treatment facility helped them transition back to the "real world" while managing the temptations they would face when the program ended. For example, a female client who was treated for crack addiction explained that working at a hotel showed her that she could function in a workplace and build relationships with people who were not drug users. She credited this growing confidence with helping her to maintain her sobriety, even when she discovered drugs in one of the hotel rooms that she was cleaning. A male client who was treated for cough syrup addiction shared a similar experience—describing that he gained confidence in his ability to maintain long-term sobriety while working at a golf course:

[I realized that I] could've walked across the street and got drugs. And so, I guess I pretty much dealt with the temptation, learned to deal with that [while at work].

Beyond these personal experiences, participants also noted that their counselors and the classes that they attended were helping them develop the knowledge and skills that would be necessary to maintain sobriety outside of the treatment program. For instance, a female client who was treated for crack addiction described how the treatment program helped her learn to overcome the "cravings" she had to use the substance again:

All of a sudden. . .the thoughts [about using crack]. . .And then once you learn how to get rid of the thoughts, it makes it a whole lot easier. Because they do hit. They do hit. You have to know what to do with them. And going to the meetings and being here a whole year taught me what to do with them.

Participants also linked their sense of self-efficacy in remaining abstinent to observing other clients successfully finishing the program and knowing that these "graduates" stayed connected to each other. For example, a male client who was treated for cocaine addiction explained:

We have an alumni group here. That was a real help in me staying sober. Participating, being around [the treatment facility], staying close to the circle of recovery, around people in recovery.

As this participant stated, anticipating that they would have an outlet to stay connected to others in recovery enhanced clients' confidence in their own ability to abstain from alcohol and illicit drugs.

Discussion

Responding to the call for qualitative, patient-centered research that offers richer, more nuanced descriptions of SUD treatment experiences,[6,25] the present study explored the construct of treatment engagement from the perspective of 30 clients who participated in a year-long residential rehabilitation program. More specifically, our analysis drew upon the Health Belief Model (HBM) to provide a detailed overview of factors that motivate SUD clients to actively stay engaged with their treatment program. Taken together, our findings suggest that clients' treatment engagement was motivated by their beliefs pertaining to (i) the severity of their substance use disorder, (ii) the treatment program's ability to equip them to avoid future relapse, and (iii) their ability to act upon the strategies and resources offered by the treatment program.

A recent qualitative study by Yang et al.[6] indicated that a primary predictor of clients' engagement in a short-term inpatient rehabilitation program was their perceived need for treatment—a finding that aligns with a number of quantitative studies[40-42]; the authors further noted that perceived treatment need and motivation for treatment engagement were more pronounced among those whose cumulative life experiences allowed them to appreciate the negative impacts of SUD.[6] Likewise, participants in the present study recounted often lengthy histories of negative consequences associated with SUD, including deteriorating health, fractured relationships, and legal consequences. These accumulated experiences, coupled with previous failed recovery attempts, led participants to perceive their substance use behaviors as being outside of their control and, thus, required formal long-term treatment in order to achieve and maintain sobriety. In addition to its consistency with existing scholarship,[6,37] this finding also aligns with the HBM's framework, which suggests that a precursor to intentional behavior change is the belief that one is susceptible to negative consequences associated with a health behavior (eg, substance use) and that such consequences are severe enough that the person is motivated to avoid them.

Beyond the perceived severity of their substance use behaviors, participants' treatment engagement was also motivated by their beliefs pertaining to particular elements of their treatment—specifically that the program was equipping them with the skills and resources necessary to achieve and maintain sobriety. Similar to findings from the literature, participants cited the value of integrated treatment for SUD and co-occurring disorders,[43] including post-traumatic stress disorder (PTSD) associated with various forms of trauma.[44,45] Recognizing the utility of this integrated approach, participants also highlighted the benefits of participating in a year-long program—frequently contrasting it with their previous experiences with short-term treatment. While the recommended length of time in treatment should be an individualized decision based on clinical assessment and medical necessity,[46] our findings are consistent with published studies indicating that increased treatment length is associated with improved outcomes, especially for those with psychiatric co-morbidities[47-49] and those previously involved with the criminal justice system.[50]

Participants' narratives also emphasized the importance of the program's work requirements. They suggested that the external work requirement, in particular, helped them to feel "productive" and develop job skills that would help them build a new life outside of the treatment facility, which, in turn, helped motivate their continued engagement. Securing and maintaining employment has long been a challenge for people with a history of substance use disorder, leading some treatment programs to integrate vocational training and support[51-54]; while the results of these programs have been mixed,[52,53] our findings indicate that working outside of the facility during long-term treatment can provide additional benefits, including motivating clients to remain engaged with their treatment.

Participants' descriptions of the work requirement also highlighted the third primary factor associated with treatment engagement—that is, their sense of self-efficacy in remaining abstinent. For example, several clients noted that

going to work each day outside of the facility and dealing with the temptations that accompanied these experiences helped them gain confidence that they could maintain sobriety after completing the treatment program. Similar to Yang et al.'s[6] findings, study participants also described how counselors, other staff members, and their peers helped to enhance their confidence and motivate them to remain engaged in their treatment. They also cited watching other clients "graduate" from the treatment program and remain abstinent as an additional source of motivation. Beyond providing motivation, seeing former clients remain connected to the facility, especially through support groups, also reassured current residents that the facility and their peers would continue to support them after they completed the program, which aligns with studies indicating that the continuity of treatment services is an important factor in promoting SUD long-term recovery.[55] The extant literature has demonstrated that improved self-efficacy in remaining abstinent, in addition to limiting drug availability, is a critical factor in preventing relapse.[56-58] Our findings suggest that increasing self-efficacy in remaining abstinent may also promote improved engagement, which may, in turn, allow participants to maximize their treatment experience.

In terms of application, our findings imply that clients are more likely to engage with their treatment when they perceive their SUD as severe—which is consistent with other research.[59] Although participants in the present study largely described reaching the conclusion that their substance use behaviors were severe enough to warrant formal treatment, other scholars have argued that facilitating greater recognition of the need for SUD treatment will require widespread screening and, when appropriate, brief interventions in settings where the general population is accessible, such as primary care practices, emergency rooms, or community care centers.[59] One promising method is the screening, brief intervention, referral to treatment (SBIRT) service program; this approach has been shown to increase referral rates for SUD treatment and is associated with improved treatment outcomes.[60,61]

Our findings also underscore the importance of clients' perceptions regarding the efficacy of their treatment and their own self-efficacy. Existing literature indicates that clients are more satisfied with SUD treatment and, in turn, more likely to persist when their mental health needs are being met[62,63] and if they are receiving adequate social support.[64] Treatment providers can address these factors by providing holistic care (including treatment for CODs) and facilitating supportive connections with providers and other clients.[63] According to a review conducted by Kadden and Litt,[65] there is evidence that practitioners can also enhance clients' self-efficacy using techniques such as motivational interviewing and other forms of coping skills training; these findings were supported by a recent study focusing on dual diagnosis clients receiving cognitive behavioral therapy.[66]

Limitations and strengths

This study has several limitations tied primarily to our use of a convenience sample that included clients from a single facility in a particular geographic area. The study sample was also limited to clients who, at the time of interview, successfully maintained their sobriety; their perspectives likely differ from those who have discontinued treatment or experienced a relapse during or after the treatment. Furthermore, the study did not utilize triangulation (or use of other methods besides interview), which would have enhanced the credibility of our results.

We also did not explore the perspectives of SUD counselors and other staff members; including them in future studies may offer a more holistic understanding of treatment engagement in long-term residential programs. Finally, it is important to note that our findings are limited to describing factors that enhance treatment engagement; they do not demonstrate that treatment engagement was necessarily responsible for improving participants' outcomes. Despite promising results in previous studies,[8-10] there is a need for additional research to further explore the relationship between treatment engagement and outcomes.

However, this study also has some strengths. The study methodology conforms to the criterion of trustworthiness whereby the interview protocol was developed with rigor and interviews conducted with precision and included accurate transcription. We believe the details provided in this manuscript account for coherence and will facilitate reproduction of this approach elsewhere thus contributing to transferability of the results. Finally, we have been neutral in the interpretation of the results and have utilized a theoretical framework, thus adding to the confirmability of the findings.

Conclusion

Amidst the well-documented challenges associated with retaining clients in SUD treatment and sustaining long-term abstinence among those who complete treatment programs, scholars have identified treatment engagement as an important predictor of positive treatment outcomes. The present qualitative study explored this construct from the perspective of clients who participated in a year-long substance use disorder (SUD) treatment program at a residential rehabilitation facility. By analyzing participants' first-person accounts through the lens of the Health Belief Model, our findings indicate that clients' treatment engagement was linked to their perceptions regarding the severity of their SUD, the treatment program's ability to help them avoid future relapse, and their own ability to act upon the strategies and resources provided by the treatment program. These behavioral aspects can be considered as priority areas for future planning of precision interventions at residential facilities treating SUDs. Specifically, the present results suggest that helping clients recognize the severity of their SUD, using an integrated approach to SUD treatment that concurrently addresses

associated trauma and co-morbidities, and using program graduates as role models are potentially viable strategies for enhancing treatment engagement.

Authors' Note

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Author Contributions

SKK is the study principal investigator and, along with PJD, developed the theoretical background and conceptualization of the study. SKK, PJD, and OI contributed to the data analysis and writing. MS edited and helped to finalize the manuscript. All authors reviewed and approved the final draft.

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