FISEVIER

Contents lists available at ScienceDirect

Journal of Substance Abuse Treatment



Barriers and facilitators to successful transition from long-term residential substance abuse treatment



Jennifer I. Manuel ^{a,*}, Yeqing Yuan ^a, Daniel B. Herman ^b, Dace S. Svikis ^c, Obie Nichols ^d, Erin Palmer ^d, Sherry Deren ^e

- ^a New York University Silver School of Social Work, 1 Washington Square North, New York, NY 10003, United States
- ^b Silberman School of Social Work at Hunter College, 2180 Third Avenue @ 119th St., New York, NY 10035, United States
- ^c Virginal Commonwealth University Department of Psychology, 806 West Franklin Street, Richmond, Virginia 23284-2018, United States
- ^d Services for the UnderServed, Inc., 305 Seventh Avenue, 10th Floor, New York, NY 10001, United States
- e New York University Rory Meyers College of Nursing, 433 First Avenue, 7th Floor, New York, NY 10010, United States

ARTICLE INFO

Article history: Received 1 October 2016 Received in revised form 22 November 2016 Accepted 3 December 2016

Key words: Substance abuse Residential treatment Care transitions Continuing care Socio-ecological model

ABSTRACT

Although residential substance abuse treatment has been shown to improve substance use and other outcomes, relapse is common. This qualitative study explores factors that hinder and help individuals during the transition from long-term residential substance abuse treatment to the community. Semi-structured interviews were conducted with 32 individuals from residential substance abuse treatment. Based on the socio-ecological model, barriers and facilitators to transition were identified across five levels: individual, interpersonal, organizational, community, and policy. The major results indicate that primary areas of intervention needed to improve outcomes for these high-risk individuals include access to stable housing and employment, aftercare services and positive support networks; expanded discharge planning services and transitional assistance; and funding to address gaps in service delivery and to meet individuals' basic needs. This study contributes to the literature by identifying transition barriers and facilitators from the perspectives of individuals in residential treatment, and by using the socio-ecological model to understand the complexity of this transition at multiple levels. Findings identify potential targets for enhanced support post-discharge from residential treatment.

© 2016 Elsevier Inc. All rights reserved.

1. Introduction

An estimated 21.5 million people have a diagnosable substance use disorder (SUD), representing 9% of the U.S. population, and approximately 40,000 more people engage in misuse that is considered medically harmful (McLellan & Woodworth, 2014; Substance Abuse and Mental Health Services Administration, 2015). Epidemiological and clinical studies suggest that SUDs follow a chronic, relapsing course, with cycles of recovery and relapse, over the course of several years (Dennis & Scott, 2007). Alcohol and drug abuse and related problems contribute substantially to the burden of disease in the U.S., costing an estimated \$400 billion annually (Research Society on Alcoholism, 2015; Substance Abuse and Mental Health Services Administration, 2015).

E-mail addresses: jennifer.manuel@nyu.edu (J.I. Manuel), yeqing.yuan@nyu.edu (Y. Yuan), dhe0014@hunter.cuny.edu (D.B. Herman), dssvikis@vcu.edu (D.S. Svikis), onichols@sus.org (O. Nichols), EPalmer@sus.org (E. Palmer), sherry.deren@nyu.edu (S. Deren).

For individuals with chronic SUDs, long-term residential substance abuse treatment provides intensive services combined with safe housing and assistance with daily living. Residential treatment has shown modest improvement in post-discharge substance use outcomes (Gossop, Marsden, Stewart, & Rolfe, 1999; Hubbard et al., 2007), Yet, relapse following discharge is common and may deplete or reverse improvements made during treatment (Carter et al., 2008; Hubbard et al., 2007; Ouimette, Moos, & Finney, 1998). In clinical studies, rates of relapse (e.g., substance abuse, hospitalization, incarceration, readmission to residential treatment) following residential treatment range from 37% to 56% within the first year of discharge (Brunette, Drake, Woods, & Hartnett, 2001; Ouimette et al., 1998; Sannibale et al., 2003). Although engagement in aftercare services has been shown to help maintain the gains achieved during residential treatment (Sannibale et al., 2003), only about half make initial contact with outpatient care and very few complete the recommended duration of aftercare services (Arbour, Hambley, & Ho, 2011; Lash & Blosser, 1999; Sannibale et al., 2003).

Upon discharge, individuals enter a life transition in which there is often difficulty navigating aftercare services and reconnecting with family and friends. Despite the chronic, relapsing nature of SUDs and

^{*} Corresponding author.

associated problems, traditional substance abuse treatment has operated under an acute care model that assumes successful recovery from substance abuse after a single treatment episode (Dennis & Scott, 2007). Individuals who enter the public SUD treatment system often need longer term care, comprising multiple treatment episodes of varying levels of intensity (Dennis & Scott, 2007; Dennis, Scott, Funk, & Foss, 2005; Scott, Foss, & Dennis, 2005). While residential programs typically provide discharge planning with referrals to aftercare services, few residential programs offer active monitoring and assistance as people transition back into the community (White & Kurtz, 2006).

We know little about the transition barriers and facilitators from long-term residential substance abuse treatment from the perspectives of individuals with SUDs. Using the socio-ecological model as a guiding framework, this study explores the individual, interpersonal, organizational, community, and policy factors that impede and facilitate the transition from residential substance abuse treatment from the perspectives of individuals with SUDs who are anticipating discharge from treatment. The socio-ecological framework posits that an individual's health and behavior both shape and are shaped by factors at multiple levels: individual factors (background factors including race/ethnicity, age, education, employment, housing); interpersonal factors (family and friendships); organizational factors (program-related issues, quality of services); community (community resources, socioeconomic climate); and policy (funding, regulations) (McLeroy, Bibeau, Steckler, & Glanz, 1988). The socio-ecological model is used because it highlights the complexities of transition at multiple levels and considers how multiple layers of influence intersect to shape a person's health and behavior.

In this article, we report transition-related barriers and facilitators, ranging in scale from micro to macro, and provide recommendations that take into account the synergistic nature of these levels. This study is the first phase of a larger initiative to develop a transition assistance model for individuals leaving residential substance abuse treatment. Findings from this study will inform future intervention development that aims to significantly improve short- and long-term outcomes among people with SUDs leaving residential treatment. Knowing what helps and hinders individuals' connections to community resources and aftercare services will provide important information to improve discharge planning efforts and post-discharge strategies to provide effective support during such transitions.

2. Materials and methods

2.1. Setting and participants

We conducted semi-structured interviews with individuals from a long-term residential substance abuse treatment program in New York City. The residential program uses treatment phases to demonstrate resident progress, moving from more restrictive (e.g., limited visitor and outside privileges) to less restrictive (e.g., working and weekend passes) services. The four treatment phases include: Orientation, which does not allow outside privileges in the first 30 days; Level I, which allows day passes; Level II, which allows day and overnight passes; and Level III, which allows advanced privileges including working and weekend passes. The average length of stay at the residential program is approximately 6 months.

A purposive sample of individuals who were enrolled in residential treatment for at least 30 days was invited to participate in the study. To ensure a broad range of experiences and expectations with regard to transition success, we sampled individuals who were at varying stages of their residential treatment. Due to limited resources, only individuals who could speak and understand English were eligible to participate. We recruited a total of 35 individuals, of whom 32 consented and participated in the study. Three individuals were discharged early and were not interviewed. Of the 32 individuals, we interviewed 10 from Level I treatment, 10 from Level III treatment, and 12 from Level III

treatment. Recruitment and data collection lasted approximately 4 months, from May 2015 to August 2015. All study procedures were approved by the institutional review board at New York University.

2.2. Recruitment and data collection procedures

Our recruitment strategy included posting flyers in the residential program and referrals from residential staff. Clients who expressed interest in the study met with research staff who explained the purpose and voluntary nature of the study, provided an information sheet, and obtained verbal consent from participants. A waiver of written consent was requested and approved for this study, given that the only record linking the participant and the research would have been the consent document and the principal risk would have been the potential harm resulting from a breach of confidentiality.

We employed semi-structured interviews to allow in-depth insight into individuals' expectations and perceived barriers and facilitators to transition from residential treatment. Three research team members conducted the confidential interviews in private settings at the residential facility. All interviewers had at least a master's degree or higher and prior research experience in qualitative methods. The interviewers received protocol-specific training on interviewing techniques, data management, and ethics and safety. Weekly meetings were held between the principal investigator and research staff to assess and troubleshoot any difficulties that occurred during the interviews.

Interviewers used an interview guide that included questions on prior and current substance abuse treatment experiences, including residential treatment; service needs; discharge plans and expectations; anticipated barriers and facilitators during transition from residential treatment; knowledge of aftercare resources and sources of support; recovery goals and expectations; and sociodemographic information. The core questions related to transition from residential treatment were as follows: 1) What are your plans after discharge from the residential treatment program?; 2) What are you doing to prepare for the transition?; 3) How would you define a successful transition from residential treatment?; 4) What types of supports will be helpful when you transition?; 5) What do you think will be difficult when you transition?; 6) What do you anticipate getting in the way of continuing substance abuse treatment? Have you ever stopped and re-started treatment for any reason? If so, what were the reasons for stopping treatment? Interviewers used follow-up probes to clarify and elicit more detailed information. The interviews lasted between 45 and 90 min in length. Individuals received a \$30 gift card for participating in the interview. Interviews were digitally recorded and subsequently transcribed by a professional transcription service. The first author reviewed each transcription for accuracy.

2.3. Data analysis

The research team developed an initial coding scheme a priori based on the ecological model described above. Transcriptions of digitally recorded interviews were converted into analyzable text and formally analyzed by three analysts using framework analysis (Pope, Ziebland, & Mays, 2000). The first (IM) and second (YY) authors were the lead analysts. This method allowed for an iterative coding process while also drawing upon the general structure of the socio-ecological model. We first developed broad categories of barriers and facilitators and then modified the categories as analysis continued. Transcripts were independently coded by level of the socio-ecological model by the two lead analysts and then validated by a third analyst. The coded segments in each transcript were discussed line-by-line by analysts and categories were refined using a constant comparative method to ensure consistency and accuracy of the themes according to the socio-ecological model. To increase methodological rigor, we used several strategies: (1) multiple analysts to ensure a broader range and depth of viewpoints and discussions; (2) regular meetings to discuss ambiguities and discrepancies

in coding until consensus was reached; and (3) discussion of rival explanations of codes and interpretations to facilitate refining and validating our findings (Padgett, 2017). In addition, expert checking with our residential transition advisory board, made up of staff, peers and researchers, enhanced the validity of the findings. To facilitate coding, we used Dedoose software (SocioCultural Research Consultants, LLC, (www.dedoose.com)). Representative quotes that most accurately reflected the themes were chosen among the coded text.

3. Results

The sample characteristics are summarized in Table 1. Consistent with the general population of clients at the residential program, the majority of participants were male (71.9%). Participants were an average age of 41.1 years, ranging from 23 and 55 years, and self-identified as Black (43.8%), Hispanic (34.4%), white (12.5%), and other (9.4%). The majority of participants reported having either less than a high school education (28.1%) or a high school degree or GED (40.6%). All but one reported receiving Medicaid benefits. Fifty-nine percent were currently mandated to treatment, and 90.6% reported being jailed or incarcerated in their lifetime. Most participants (76%) reported being homeless in their lifetime. Mental health and physical health needs were reported among 59.4% and 46.9% of participants, respectively. In the 6 months prior to entering residential treatment, approximately 66% were unemployed and 81% were homeless or living in temporary housing. Crack/cocaine (43.8%) and alcohol (40.6%) were the most frequently reported substances used prior to entering residential treatment.

A thematic analysis of data identified barriers (Table 2) and facilitators (Table 3) at the individual, interpersonal, organizational, community, and policy levels based on the socio-ecological model.

Table 1 Participant characteristics (N = 32).

	(00)
	n (%) or mean \pm SD
Gender	
Male	23 (71.9)
Female	09 (28.1)
Age, mean \pm SD	41.1 ± 9.5
Race/ethnicity	
Non-Hispanic Black	14 (43.8)
Hispanic	11 (34.4)
Non-Hispanic White	04 (12.5)
Other	03 (09.4)
Education	
<high education<="" school="" td=""><td>09 (28.1)</td></high>	09 (28.1)
High school degree or GED	13 (40.6)
Some college	08 (25.0)
College or graduate degree	02 (06.3)
Health insurance	
Medicaid	31 (96.9)
Uninsured	01 (03.1)
Mandated to treatment	19 (59.4)
Ever jailed or incarcerated	29 (90.6)
Ever homeless	32 (100.0)
Mental health condition	19 (59.4)
Physical health condition	15 (46.9)
Pre-treatment characteristics	
Unemployed	21 (65.6)
Homeless or temporary housing	26 (81.3)
Substances used	
Crack/cocaine	14 (43.8)
Alcohol	13 (40.6)
Marijuana	09 (28.1)
Heroin	08 (25.0)
MDMA	02 (06.3)
Stimulants	01 (03.1)

Table 2Barriers to transition from residential substance abuse treatment.

	N	%
Individual		
Unmet basic needs	20	62.5
Not ready to make a change	19	59.4
Feeling overwhelmed	13	40.6
Stigma	11	34.4
Cravings and withdrawal symptoms	10	31.3
Boredom, lack of structure	9	28.1
Money as a trigger	5	15.6
Interpersonal		
Limited or no support network	15	46.9
Strained relationships	14	43.8
Family and friends who use	13	40.6
Family responsibilities	5	15.6
Organizational		
Lack of staff availability	11	34.4
Group setting as a challenge	8	25.0
Power and control	7	21.9
Unaddressed needs of women and children	3	9.4
Community		
Neighborhood stress	10	31.3
Limited community resources	2	6.3
Policy		
Limited housing supply	11	34.4
Lack of job opportunities	3	9.4

3.1. Barriers to transition

The majority of barriers reported by participants were at the individual and interpersonal levels. The primary individual barrier was having unmet basic needs, including having financial stability, a job and a place to live (n=20,62.5% of individuals reporting this barrier). Individuals described the challenge of finding housing, and for some this delayed their discharge from residential treatment. One resident stated that the challenges of housing vary depending on a person's need,

...this guy right now, he's got about 22 months and he's here because he has no housing. They haven't been able to locate him no housing. It depends on what is their needs. Because some people

Table 3Facilitators and strategies to transition from residential substance abuse treatment.

	N	%
Individual		
Job and housing stability	30	93.8
Motivation, readiness to change	30	93.8
Coping skills	22	68.8
Being a role model	6	18.8
Interpersonal		
Emotional and practical support from family and friends	32	100.0
Self-help groups	20	62.5
Avoiding negative social relationships and situations	19	59.4
Develop new and repair old supports	11	34.4
Religious and spiritual supports	11	34.4
Organizational		
Discharge planning and preparation	22	68.8
Person-centered care	20	62.5
Aftercare services	18	56.3
Discharge follow up	12	59.4
Structured services of residential treatment	8	25.0
Family involvement	6	18.8
Community		
Access to community resources	6	18.8
Policy		
More funding for housing	1	3.1

[are] not ready to live alone. They have medical issues. They need medical attention on a daily basis. So they have to find some type of supportive housing where there's staff there that could help them.

A few described housing as their primary goal of residential treatment as reflected by one participant, "And a lot of people here need housing. A lot of people came here because of the rooms. There are people that didn't come here to get clean. They came here because they don't have nowhere to go, and if not, they're going to be out in the street." These individuals indicated being homeless prior to entering residential treatment. Others emphasized the link between education, getting a job, and having a place to live. For example, one person reflected, "Housing is a must. You don't want to go back to the streets. ... knowing that once I finish school, I have a job in place. That is very important, because how are you going to pay for things?" Another prominent individual barrier was expressed by participants who reported not being ready to make a change (n = 18, 56.3%), a sentiment which was often manifested through statements of being mandated to be in treatment against their wishes, denial that substance abuse is a problem, or self-doubt that change is possible. Other less prominent but notable barriers included feeling overwhelmed (n = 13, 40.6%) about managing responsibilities and "getting back to a normal life" after discharge; stigma (n = 11, 34.4%), which involved feelings of shame and embarrassment for having a substance use problem and getting treatment; difficulty managing cravings and withdrawal symptoms (n =10, 31.3%) from the addiction; boredom (n = 9, 28.1%); and having money as a trigger (n = 5, 15.6%) to use substances.

Common interpersonal barriers to transition included having limited or no support network (n = 15, 46.9%), strained relationships (n = 14, 43.8%), and family and friends who use (n = 13, 40.6%). While some participants described using drugs as a result of having limited friends, other participants described having a limited or strained support network because their family or friends use substances. For example, one individual reflected, "When I got involved with crack cocaine, you don't have no friends. It's just you. You isolate yourself." Another individual said, "I don't have many close friends right now. I burnt all those bridges. There wasn't a soul I could call and say anything." Another participant described the strain in his relationship with his mom, "When I leave, even though I was staying with my mother, I was using drugs in the house and one of the conditions was I was not supposed to, otherwise I would have to leave. So, I am not really welcome back." Participants also described the challenges with recovery when their family or friends use, as one person described,

My family is my Achilles heel. They are my weakest point. We share a real knitted bond. They know my likes and dislikes. However, there are certain things that we did, that I no longer do. However, separating from that...it is hurtful. But is it helpful? Yes. And is it healthy? Yes, for me.

A less frequently reported but important interpersonal barrier, family responsibilities (n=5, 15.6%), was reported among participants who described challenges of parenting or caretaking of older parents or sick loved ones.

At the organization level, the most frequently reported challenge was a lack of staff availability at the residential program (n=11, 34.4%). Participants indicated that residential staff have large caseloads and expressed interest in having more individual time with their counselor to discuss discharge planning activities, such as housing and employment. While some participants described their preference for treatment groups, others preferred individual over group work. Regardless of participants' preferences, they felt like the large size of groups in some treatment programs hindered their participation and prevented them getting full benefit from the group support. One individual described the potential benefit of smaller groups,

Because you can really open [up] more and say what's really bothering you. You can spend more time sharing instead of like three, four minutes and then you got somebody talking about a sensitive issue and you really want to talk more and now you got to shut down. You know what I'm saying?

Several individuals talked about their challenge with treatment programs that exerted too much power and control (n=7,21.9%) over their recovery and lives in general. There was concern among these participants about "feeling judged" or "[being] told what to do" by staff, which were based on prior treatment experiences. Among three female participants, there were concerns that substance abuse treatment, in general, was not suited to address the needs of women in terms of trauma, experiences of domestic violence, and child care. These women were worried about meeting their treatment needs and goals post-discharge while managing family and childcare demands.

Very few challenges related to transition were described at the community and policy levels of the socio-ecological model. Notably, the most frequent community barrier was returning to a stressful neighborhood environment post-discharge (n=10,31.3%). For example, one individual described the views of several by stating he wanted to move out of his neighborhood due to the, "violence, [and] a lot of people dying. They are going back to jail, coming home, going back to jail, more people dying. [This is] normal stuff, to us." Others described the limited treatment resources in their community (n=2,6.3%), especially in more suburban or isolated areas. At the policy level, 11 participants (34.4%) described the lack of housing available for people with a substance use problem only, emphasizing that more resources seemed to be available for those with co-occurring mental or medical health issues. Three participants (9.4%) described a lack of job opportunities, especially for those with a criminal record.

3.2. Facilitators to transition

At the individual level, the perceived facilitators to successful transition from residential treatment were job and housing stability (n=30,93.8%), being motivated and ready to change (n=30,93.8%), coping skills (n=22,68.8%), and being a role model (n=6,18.8%) for others struggling with addiction. The very basic need of finding a place to live was a primary goal for the majority of participants. Participants described their primary goal of finding their own place to live, as one individual reflected, "I came to this program to better my life, to get rehabilitated and re-enter society. I can't re-enter society into somebody else's home. I need my own space." Others discussed taking a series of steps before reaching their ultimate goal of having a place of their own, as reflected in the following:

The process is first for me to be in school and for them to find me transitional housing. Like, I guess, a three-quarter house or another facility like this, but with less rules. That way I can transfer and hopefully get my apartment once I start working. Then move on with my life.

The interest in finding a job in order to save money and secure independent housing was common. For many, having access to these basic needs facilitated their substance use recovery, giving them purpose and motivation not to use. Others described being motivated to change by "...creating my future. Having a vision and pursuing it, instead of just living moment to moment." The majority of participants recognized that coping skills are critical to recovery and managing their daily stressors. Notably, participants described the importance of having a "creative outlet," such as a hobby, listening to music, or exercising. Others talked about the need for "a daily routine" as well as "patience" with an understanding that recovery is a long-term journey. Finally, participants talked about wanting to be a role model or peer mentor after leaving residential treatment can help their own recovery as well

as others. One individual talked about being a role model like others had been toward him, "I [have] seen people that have been here and they've come back and they're working and they're back with their family. Stories like that are good because you know that it happens."

At the interpersonal level, many of the facilitators to transition were in response to the interpersonal barriers expressed by participants. The most prominent facilitator at this level was emotional and/or practical support from family and friends (n=32,100%). The type of support discussed most frequently was emotional support. Although fewer individuals had positive family and friends they could count on, there were several who said that their family was supportive and understanding of their struggle with addiction. One individual reflected,

[My family] give[s] me support by recognizing the fact that I'm capable of doing something and they don't have to do everything for me like I'm an invalid or something. The fact that you're doing a good job of keeping going. I mean the ability to allow me to, even though it is a crazy mistake, to get it done.

Participating in self-help or recovery groups (n = 20, 62.5%) was another important facilitator to transition, according to participants. Having a support network with similar experiences and understanding of addiction was key to keeping individuals focused on their recovery. Equally important was avoiding negative social relations and situations (n = 19, 59.4%). One individual expressed the views of many, "If somebody keeps doing something you don't like them to do, you can't be with them." However, this was easier said than done for some participants, as going back to their old neighborhoods was the only option. Participants also discussed the desire to develop new positive supports and repair old relationships that were strained due to their addiction (n = 11, 34.4%). While some participants preferred sober-free supports, others just wanted someone who was positive and understanding to talk to about their recovery. For several individuals, participating in religious or spiritual activities (n = 11, 34.4%) was an important source of support for their recovery.

The primary facilitators at the organizational level were discharge planning and follow-up (n = 22, 68.8%) and receiving person-centered care (n = 20, 62.5%). Almost all participants reported working with their residential counselor around discharge planning, with a primary focus on addressing housing and employment needs in addition to substance abuse aftercare. Other less prominent but important needs that were considered during discharge planning were mental health, physical health, legal, parenting, clothing and food needs, as well as access to benefits. An important aspect of discharge planning was having enough information to discuss and decide options with the counselor. Another important part of the discharge process was starting the planning process early, especially given the difficulty in locating housing. Finally, participants indicated that having a say in their discharge plan and goals was a key part to the discharge planning process. Participants appreciated this person-centered approach from staff and felt like their needs were being addressed. For example, one individual described his experience as follows:

"From what I have seen, they have these different transition houses and we can go see how it is. And if it does not seem right for the individual, then they will look up another. Something that best meets the needs of the person."

Not only does this exemplify the type of person-centered practice that participants expressed they appreciated, but it also speaks to the flexibility of the program in allowing visits to the community, which participants described as important in helping them prepare for discharge. Although currently not offered by the residential program, due to funding, several participants expressed interest in having post-discharge support in the form of a recovery check-up call or visit. Less prominent organizational facilitators included the importance of having structured treatment services (n = 8, 25%), like the residential program,

which helped participants to organize their lives and focus on their recovery goals post-discharge; the involvement of family in treatment services (n=6,18.8%), which participants thought would be helpful as a way to help mend relationships and provide family members with a greater understanding of addiction; and the consideration of substance abuse treatment as a safe haven (n=3,9.4%) so that those struggling with addiction are "not around the drugging and drinking," as one individual responded.

Few participants discussed facilitators at the community and policy levels, and the two identified were also identified as previously described barriers. At the community level, six participants (18.8%) identified access to community resources as a facilitator to transition. Example resources included going to a sober hangout to play pool and socialize or connecting with home base services for additional support. In describing the lack of housing opportunities, one individual (3.1%) described the need for more funding to develop these opportunities and to provide treatment programs to help link clients to stable housing.

4. Discussion

The socio-ecological model facilitated the identification of major categories of barriers and facilitators to inform transitional services to help people move back into the community and connect with formal and informal supports. Results indicate primary areas of intervention needed for these high-risk individuals include access to stable housing and employment, aftercare services and positive support networks; expanded discharge planning services and transitional assistance; and funding to address gaps in service delivery and to meet individuals' basic needs.

Stable housing and employment were identified as important facilitators to successful transition from residential treatment by the majority of participants. These basic needs were primary goals for most participants, who were largely unemployed (66%) and either homeless or living in temporary housing (81%) prior to residential treatment. The high rate of unemployment found in this sample is comparable to that found in adult treatment populations nationally (Substance Abuse and Mental Health Services Administration, 2008). Employment is one of the best predictors of positive treatment outcomes, including lower rates of relapse and less involvement in criminal activity (Arria & Topps-II Interstate Cooperative Study Group, 2003; Substance Abuse and Mental Health Services Administration, 2008; Vaillant, 1988). Many of our participants emphasized employment as a pathway to independent housing. However, finding a job was difficult for participants due to having a poor work history, low motivation, limited work skills, or limited employment opportunities. In addition, the majority of participants were mandated to treatment and reported a lifetime rate of incarceration of 90%, which exacerbated challenges to obtaining employment. Many of these individuals reported that, based on their experiences, employers were reluctant to offer employment due to their criminal background. Thus, assessment of employment needs and associated barriers, as well as recruitment and outreach to potential employers, are important strategies to incorporate into discharge planning in residential treatment. Education and advocacy on behalf of individuals with SUDs, especially those with a criminal background, can help broker employers' resistance to hire and create an important path for individuals to pursue legitimate work opportunities.

Although participants preferred their own housing, their options were limited by financial constraints and a costly housing market. As an alternative, most participants reported that they were planning to move into temporary housing, such as supportive housing, or doubling up with family or friends, emphasizing these were short-term solutions until they secured employment. These temporary housing arrangements are not without challenges. For those moving in with family or friends, participants worried about relapsing because of family or friends who were using or due to strained relationships. On the other hand, supportive housing environments can also be stressful. A recent study of facilitators and barriers to supportive housing found that

former and current residents often found themselves "stuck" in this type of housing because of the expense of moving out, lack of transition support around moving out, poor quality of housing, and fear of relapsing or being homeless again (Livingstone & Herman, in press). In addition to assessing housing needs and preferences, a critical part of the discharge planning process is discussing anticipated barriers and strategies to address these barriers regardless of the housing placement.

Our findings suggest the importance of informal (e.g., family and friends, self-help groups, and religious or spiritual activities and formal supports) and formal (e.g., aftercare substance abuse services) supports, to reinforce and continue the progress made in residential treatment. Although formal aftercare services were important to participants, the majority emphasized that having a positive informal support network of family, friends and people in recovery is a priority. The absence of these supports was reported by many as a hindrance to their ability to cope with daily stressors, such as finding work and permanent housing, and maintaining their substance use recovery. Yet, there were perceived challenges in reconnecting with informal supports and managing family responsibilities. Transitioning individuals and their families also need encouragement and hope that, despite the difficult circumstances they face, successful transition is a realistic expectation. Helping individuals reconnect with family and friends in a positive way or develop new supports should be incorporated into the discharge plan. The emphasis on informal supports may be due to individuals' perceptions that formal services lack individualized attention and person-centered practices. It may also be related to individuals feeling stigmatized by attending aftercare services or perhaps they are not ready to make a change, as we found evident in many of our participants. While aftercare substance abuse services are important and have been found to extend the benefits of residential treatment (Gossop et al., 1999; Hubbard et al., 2007), it is important for treatment providers to assess individuals' preferences around the type of services (e.g., formal aftercare, self-help groups, recovery community organizations, abstinence only versus harm reduction services).

Further, our findings indicate that discharge planning and preparation are critical to maximizing a successful transition from residential treatment. The planning activities prior to discharge from residential treatment provide an important opportunity to assess the type and level of needs of individuals, develop post-discharge priorities and goals, identify resources to address these goals, and troubleshoot any concerns and potential challenges with meeting these goals. Many of our participants were anxious about the discharge process and wanted to begin planning early on soon after admission. Previous research on discharge planning in hospitals suggest that starting the discharge planning process early can increase readiness for discharge because it gives individuals an opportunity to gather the information needed and weigh options (Anthony & Hudson-Barr, 2004). This pre-discharge period is also the time to help prepare individuals for discharge. Participants appreciated the freedom and flexibility of the residential program to visit potential housing placements or look for work. Further, the predischarge period can be a time when providers help individuals reconnect with family and friends (when indicated) who can support their recovery and begin developing positive connections and resources in the community. Educating individuals about the chronic nature of substance abuse and the treatment process may improve their understanding of addiction and increase engagement in services. Altogether, these discharge practices are consistent with using a person-centered approach, which was an important part of the treatment experience for participants. Prior research has reported similar results, suggesting a link between clients' desire and willingness to be involved in treatment planning and greater satisfaction of services and positive outcomes (Anthony & Hudson-Barr, 2004). For mandated clients, whose court mandate will continue post-discharge, treatment providers need to consider how to bestengage these clients in discharge planning in collaboration with their appointed parole or probation officers.

Our results suggest a clear interest and need among participants in enhanced support post-discharge from residential treatment. The type of support suggested varied from having an "open door" policy at the residential program for alumni and receiving periodic check-up calls for additional support to more hands-on assistance during the transition with making connections in the community, finding work, and securing stable housing. The transition from long-term residential substance abuse treatment to the community represents a "critical period," during which time individuals are vulnerable to relapse (Herman et al., 2011). The transition period, especially in the year following discharge, is typically one of disequilibrium and substantial stress for the individual, the family, and others in this network. The move from a highly controlled environment to one of limited structure makes this period one of extreme vulnerability. Individuals who are aiming to re-establish themselves within these places after having spent time in long-term residential treatment may benefit from some form of focused assistance during this critical transition period. Such interventions as Critical Time Intervention, an evidence-based practice designed to help people with severe mental illness and a history of homelessness transition from institutional settings to the community, may be potentially useful to adapt for this perilous period (Herman et al., 2011; Susser et al., 1997).

Our findings should be viewed with the following limitations in mind. First, our findings are based on data that were generated from a small, non-probability sample of mostly male individuals from a single long-term residential substance abuse treatment program and thus are not representative of other individuals in long-term residential treatment programs and their experiences. Second, our analyses rely on perceptions from individual clients and do not take into consideration the views of staff or policy stakeholders, who may perceive barriers and facilitators to transition differently. Third, data from the semi-structured interviews describe participants' expectations around transition and do not capture actual barriers and facilitators they faced following discharge from residential treatment. However, the majority of our sample had prior experience in residential treatment (63%) and often referred to these experiences when describing perceived barriers and facilitators. Nevertheless, our results identify key factors to consider during the transition from long-term residential treatment to the community, as well as important areas for future research. Fourth, less than a third of participants were women, making it difficult to describe potential gender differences in barriers and facilitators. Based on prior research (Polak, Haug, Drachenberg, & Svikis, 2015; Tuchman, 2010), women may experience additional barriers to transition, such as child care and mental health needs, which we found in the current study. The unique transition-related needs and barriers among women and men are important to explore in future research. Fifth, we were unable to match interviewers and interviewees based on their gender due to an all female research team, which may have influenced responses of participants, particularly men. However, we were reassured by the consistency and repetition of themes that emerged from the data. Finally, although we engaged in expert checking, we had limited time and resources to follow up with participants and request feedback on their responses, a process that would have added to the validity of the data.

In conclusion, individuals described important individual, interpersonal, organizational, community, and policy facilitators and barriers to successful transition from residential substance abuse treatment to the community. Findings from this research suggest that transitions from residential treatment are stressful, particularly as people balance competing priorities of meeting their basic needs with managing their addiction. Enhanced support post-discharge from residential treatment is critical to improving the quality of transitions and outcomes of individuals with substance use disorders.

Funding

This work was supported by the National Institutes of Health [grant numbers K01DA035330].

References

- Anthony, M. K., & Hudson-Barr, D. (2004). A patient-centered model of care for hospital discharge. Clinical Nursing Research, 13(2), 117–136. http://dx.doi.org/10.1177/ 1054773804263165
- Arbour, S., Hambley, J., & Ho, V. (2011). Predictors and outcome of aftercare participation of alcohol and drug users completing residential treatment. *Substance Use & Misuse*, 46(10), 1275–1287. http://dx.doi.org/10.3109/10826084.2011.572941.
- Arria, A. M., & Topps-II Interstate Cooperative Study Group (2003). Drug treatment completion and post-discharge employment in the TOPPS-II interstate cooperative study. *Journal of Substance Abuse Treatment*, 25(1), 9–18 (Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/14512103).
- Brunette, M. F., Drake, R. E., Woods, M., & Hartnett, T. (2001). A comparison of long-term and short-term residential treatment programs for dual diagnosis patients. *Psychiatric Services*, 52(4), 526–528. http://dx.doi.org/10.1176/appi.ps.52.4.526.
- Carter, R. E., Haynes, L. F., Back, S. E., Herrin, A. E., Brady, K. T., Leimberger, J. D., ... Liepman, M. R. (2008). Improving the transition from residential to outpatient addiction treatment: Gender differences in response to supportive telephone calls. *The American Journal of Drug and Alcohol Abuse*, 34(1), 47–59. http://dx.doi.org/10.1080/00952990701764599
- Dennis, M. L., & Scott, C. K. (2007). Managing addiction as a chronic condition. *Addiction Science & Clinical Practice*, 4(1), 45–55 (Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/18292710).
- Dennis, M. L., Scott, C. K., Funk, R., & Foss, M. A. (2005). The duration and correlates of addiction and treatment careers. *Journal of Substance Abuse Treatment*, 28, S51–S62. http://dx.doi.org/10.1016/j.jsat.2004.10.013.
- Gossop, M., Marsden, J., Stewart, D., & Rolfe, A. (1999). Treatment retention and 1 year outcomes for residential programmes in England. *Drug and Alcohol Dependence*, 57(2), 89–98. http://dx.doi.org/10.1016/S0376-8716(99)00086-1.
- Herman, D. B., Conover, S., Gorroochurn, P., Hinterland, K., Hoepner, L., & Susser, E. S. (2011). Randomized trial of critical time intervention to prevent homelessness after hospital discharge. *Psychiatric Services*, 62(7), 713–719. http://dx.doi.org/10.1176/ appi.ps.62.7.713.
- Hubbard, R. L., Leimberger, J. D., Haynes, L., Patkar, A. A., Holter, J., Liepman, M. R., ... Hasson, A. (2007). Telephone enhancement of long-term engagement (TELE) in continuing care for substance abuse treatment: A NIDA clinical trials network (CTN) study. The American Journal on Addictions, 16(6), 495–502. http://dx.doi.org/10.1080/10550490701641678.
- Lash, S. J., & Blosser, S. L. (1999). Increasing adherence to substance abuse aftercare group therapy. *Journal of Substance Abuse Treatment*, 16(1), 55–60.
- Livingstone, K. R., & Herman, D. B. (2016). Moving on from permanent supportive housing: Facilitating factors and barriers among people with histories of homelessness. Families in society (in press).
- McLellan, A. T., & Woodworth, A. M. (2014). The affordable care act and treatment for "substance use disorders": implications of ending segregated behavioral healthcare.

- Journal of Substance Abuse Treatment, 46(5), 541–545. http://dx.doi.org/10.1016/j. jsat.2014.02.001.
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15(4), 351–377. http://dx. doi.org/10.1177/109019818801500401.
- Ouimette, P. C., Moos, R. H., & Finney, J. W. (1998). Influence of outpatient treatment and 12-step group involvement on one-year substance abuse treatment outcomes. *Journal of Studies on Alcohol*, 59(5), 513–522.
- Padgett, D. K. (2017). Qualitative methods in social work research. Thousand Oaks: CA, SAGE Publications. Inc.
- Polak, K., Haug, N. A., Drachenberg, H. E., & Svikis, D. S. (2015). Gender considerations in addiction: Implications for treatment. *Current Treatment Options in Psychiatry*, 2(3), 326–338 (Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/26413454).
- Pope, C., Ziebland, S., & Mays, N. (2000). Analysing qualitative data. *British Medical Journal*, 320(7227), 114–116.
- Research Society on Alcoholism (2015). White paper: Impact of alcoholism and alcohol induced disease and disorders on America. Retrieved from http://rsoa.org/RSA-2014WhitePaperFinalVersionVH.pdf.
- Sannibale, C., Hurkett, P., van den Bossche, E., O'Connor, D., Zador, D., Capus, C., ... McKenzie, M. (2003). Aftercare attendance and post-treatment functioning of severely substance dependent residential treatment clients. *Drug and Alcohol Review*, 22(2), 181–190. http://dx.doi.org/10.1080/09595230100100624.
- Scott, C. K., Foss, M. A., & Dennis, M. L. (2005). Pathways in the relapse treatment recovery cycle over 3 years. *Journal of Substance Abuse Treatment*, 28, S63–S72. http://dx.doi.org/10.1016/i.jsat.2004.09.006.
- Substance Abuse and Mental Health Services Administration (2008,). The DASIS report:

 Employment status and substance abuse treatment admissions 2006. (Retrieved from Rockville MD:)
- Substance Abuse and Mental Health Services Administration (2015,). National Survey on Drug Use and Health, 2014. Substance Abuse and Mental Health Services Administration, Office of Applied Studies, Inter-university Consortium for Political and Social Research. http://dx.doi.org/10.3886/ICPSR34481.v3.
- Susser, E., Valencia, E., Conover, S., Felix, A., Tsai, W. Y., & Wyatt, R. J. (1997). Preventing recurrent homelessness among mentally ill men: A "critical time" intervention after discharge from a shelter. *American Journal of Public Health*, 87(2), 256–262 (Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/9103106).
- Tuchman, E. (2010). Women and addiction: The importance of gender issues in substance abuse research. *Journal of Addictive Diseases*, 29(2), 127–138. http://dx.doi.org/10. 1080/10550881003684582.
- Vaillant, G. E. (1988). What can long-term follow-up teach us about relapse and prevention of relapse in addiction? *British Journal of Addiction*, 83(10), 1147–1157 Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/3191263.
- White, W., & Kurtz, E. (2006). Linking addiction treatment and communities of recovery:

 A primer for addiction counselors and recovery coaches. (Retrieved from Northeast
 Addiction Technology Transfer Center Network. Retrieved from) http://www.
 williamwhitepapers.com/pr/2006RecoveryLinkageMonograph.pdf.