



## A qualitative exploration of social support during treatment for severe alcohol use disorder and recovery



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### ABSTRACT

**Introduction:** Severe alcohol use disorder (AUD) affects multiple aspects of an individual's life as well as their loved ones' lives. Perceived social support has the potential to help or hinder recovery efforts.

**Methods:** In this analysis we seek to understand the changes of social networks among individuals with severe AUD (n = 33) throughout their recovery process and the potential relationship between the quality and nature of those networks and sustained sobriety as they transition from an inpatient research facility providing rehabilitation treatment back to the community. Interviews were conducted in 2014 and 2015. We conducted in-depth thematic analysis of themes related to social support using an exploratory approach.

**Results:** The most common types of social support mentioned in both inpatient and outpatient settings were instrumental and emotional. Participants most frequently mentioned Alcoholics Anonymous (AA), an abstinence-based support system, as a source of support and often used the inpatient program as an exemplar when describing their ideal social networks.

**Conclusion:** These data provide insight into the complexity of the issues and barriers that individuals in recovery may be facing across “transition periods.” From an intervention standpoint, it may be beneficial to focus on helping people choose environments and their accompanying social contexts and networks that are most conducive to recovery. Further elucidating the concept of social support and its role in recovery could provide information on unique needs of individuals and guide clinicians in engaging patients to develop new or sustain healthy existing social networks that result in continued sobriety.

### 1. Introduction

Excessive use of alcohol is the fourth leading preventable cause of death in the United States, making its prevention a public health priority (CDC, 2015). In 2014 alone, 16.3 million adults 18 years of age and older had an alcohol use disorder, only 8.9% of whom received treatment (NIAAA, 2016). Recently, the Diagnostic and Statistical Manual (DSM-5) reclassified substance use disorders, integrating what was formerly referred to as “alcohol abuse” or “alcohol dependence” into a single disorder called “alcohol use disorder” (AUD) with mild, moderate, and severe classifications (NIAAA, 2016). Severe AUD (often still referred to as “alcoholism” or “alcohol dependence”) affects multiple aspects of an individual's life as well as their loved ones' lives. Two recent studies revealed that 59–70% of individuals who undergo inpatient treatment relapse after 30 days (Seo et al., 2013; Sinha et al., 2011). Perceived social support has the potential to help or hinder

recovery efforts. This may be particularly true for individuals with severe AUD who receive intensive inpatient treatment over the period of detoxification and rehabilitation and are faced with the transition to becoming an outpatient in returning to “normalcy” (Brooks et al., 2016). This transition is associated with many challenges: accessing health services, maintaining motivation for sobriety, and ultimately learning how to re-integrate in their homes and communities as a sober individual.

#### 1.1. Link between alcohol use and social support

The relationship between alcohol consumption and perceived social support is complex; perhaps even more so among those with severe AUD. Epidemiological data suggest that social network size and diversity is smaller among those with alcohol dependence (Mowbray, Quinn, & Cranford, 2014). Moreover, lower levels of perceived social

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support can influence drinking rates, entry into treatment, and ultimately ongoing sobriety following treatment (Mericle, 2014). The relationship between perceived social support and maintaining sobriety is also demonstrated in Alcoholics Anonymous (AA), one of the most commonly-utilized abstinence-focused self-help groups for individuals with severe AUD. Stevens and colleagues demonstrated a positive relationship between social support and abstinence-specific self-efficacy, sense of community, and AA affiliation, as well as the role of sober living houses (environment) on perceptions of social support (Stevens, Jason, Ram, & Light, 2015). Individuals living in a structured sober living home reported gaining more from the sense of fellowship than the spirituality aspect of the AA meetings (Nealon-Woods, Ferrari, & Jason, 1995). Alcoholics Anonymous (AA) attendance may also simultaneously facilitate decreases in pro-drinking social ties and increased involvement with pro-abstinent social ties (Kelly, Stout, Magill, & Tonigan, 2010). Increasing sober social support while limiting the support of those who may have a “triggering” influence is supported by research suggesting that the drinking patterns of individuals in one’s social networks are just as strong of a predictor of developing alcohol dependence as is having two parents with alcohol problems (McCutcheon, Lessov-Schlaggar, Steinley, & Bucholz, 2014).

Conversely, a lack of perceived social support can have detrimental effects on recovery. Among individuals who are alcohol-dependent who achieve abstinence, social exclusion may contribute to relapse (Zywiak, Longabaugh, & Wirtz, 2002). The importance of social networks in recovery has further been demonstrated in analyses that utilize dynamic social network modeling to understand relationships in sober living environments (Jason, Light, Stevens, & Beers, 2014). Convincing evidence suggests that social network composition is a causal predictor of alcohol outcomes, even for follow-up periods as long as three years (Stout, Kelly, Magill, & Pagano, 2012).

Finally, individuals with severe AUD often suffer a range of comorbid conditions (Boschloo et al., 2011; Gilpin & Weiner, 2016; Petrakis, Gonzalez, Rosenheck, & Krystal, 2002), and managing these conditions could potentially necessitate additional support in recovery. One relatively common example comorbidity is reflected among individuals who are alcohol-dependent with comorbid PTSD (Dutton, Adams, Bujarski, Badour, & Feldner, 2014).

### 1.2. Defining social support

Perceived social support is conceptualized as the “cognitive appraisal of being reliably connected to others” (Barrera, 1986, p. 416). Based on a conceptual analysis of theoretical and operational definitions of social support, four of the most frequently named types of social support are emotional, instrumental, informational, and appraisal support that individuals perceive to be meeting some type of need. Social support can be “tangible” or “intangible” and the outcomes of effective social support include but are not limited to health maintenance behaviors, effective coping behaviors, perceived control, and sense of stability (Langford, Bowsher, Maloney, & Lillis, 1997).

### 1.3. Purpose of study

Perceived social support and social networks are particularly variable for individuals with severe AUD who were recently discharged from inpatient facilities, based on two overarching factors: 1) their social networks in place prior to entering treatment and 2) what type of post-discharge environment the person is entering. An example of this is as follows: an individual who has a job and lives with their partner may be more likely to return to that environment and their level of support may depend solely on one person (their partner). An alternate example is a person who was single and jobless prior to entering inpatient treatment may be more inclined to enter a structured living facility such as an Oxford House. Oxford Houses are democratically-run, self-supporting sober living residences for people with a past history of

substance abuse, with a main requirement for admission being the desire to abstain from drugs and alcohol (Oxford House, Inc., 2008). In these two examples, returning back home versus returning to structured living are two very different environments and have obvious implications for the type of support that the individual receives. Both of these examples represent unique situations and potential needs which may not be captured by traditional quantitative approaches to inquiry. In this analysis, we seek to understand the changes of social support networks among individuals with severe AUD throughout their recovery process and the potential relationship between the quality and nature of those networks and sustained sobriety as they transition from an inpatient research facility providing rehabilitation treatment back to the community. To our knowledge, changes in perceived social support have not yet been explored in a qualitative manner; these data may provide insight into the complexity of the issues and barriers that individuals in recovery may be facing. These results stem from a sub-analysis of themes related to social support identified in transcripts from semi-structured interviews with 33 individuals from a larger research study (NCT #02181569).

## 2. Methods

### 2.1. Study overview/participants

This study was approved by the NIH Addictions Institutional Review Board (IRB) at the National Institutes of Health (NIH; NCT #02181659). All participants in this analysis ( $n = 33$ ) were recruited from a clinical research facility providing abstinence-based rehabilitation treatment and enrolled onto a screening and assessment protocol for individuals with severe AUD. Table 1 outlines participant demographics and clinical variables. All participants received continued physical evaluations, medication management, inpatient treatment of alcohol withdrawal, psychosocial management, and an educational treatment program. Participants were offered twelve-step facilitation and motivational interviewing in the form of motivational enhancement therapy. Patients could receive up to six or more weeks of inpatient treatment followed by 16 weeks of optional outpatient treatment. Refer to Brooks et al., 2016 for a detailed description of study procedures.

### 2.2. Study timeline and procedures

Specific measures collected during the inpatient admission as part of the screening and assessment protocol were used to characterize patients who participated in this study. Interviews were conducted and questionnaires were administered within one week of participants’ scheduled discharge date and again four to six weeks post-discharge when they returned for an outpatient follow-up visit or via phone. Most interview questions/prompts were based on the Social Cognitive Theory (Bandura, 1986).

This qualitative analysis was based on individual phenomenological semi-structured interviews focused on the “lived experiences” of individuals in recovery conducted in 2014 and 2015, which were audio-recorded with the interviewees’ consent. The interview questions were reviewed and pilot-tested by clinicians and investigators with extensive experience working with individuals with severe AUD. A second interviewer was present at all interviews and introduced to the participants with an explanation that he or she would observe, take notes, and probe additional questions based on the participant’s responses. This strategy was employed to decrease potential bias of only having one interviewer asking follow-up questions based on participant responses. We explained the role of the second interviewer to the participant to make them feel more comfortable and participants were assured that there were no “right” or “wrong” answers and that they could skip any questions or stop the interview at any time. Table 2 displays a selection of interview prompts employed specifically to gain a deeper

**Table 1**  
Participant demographics and clinical variables (n = 33)<sup>a</sup>.

	n (%)	
Gender		
Male	22	(66.7)
Female	11	(33.3)
Race/ethnicity		
Black/African-American	15	(45.4)
White	16	(48.4)
Other/multiracial	2	(6.0)
Relapse status (post-discharge, n = 28)		
Relapse	7	(21.2)
No relapse	7	(21.2)
Missing	14	(42.4)
Marital status		
Single	22	(66.7)
Divorced	7	(21.2)
Married	3	(9.1)
Not provided	1	(3.0)
PTSD (not mutually exclusive categories)		
Current	4	(12.1)
Past	7	(21.2)
Lifetime	9	(27.3)
Mood disorders (SCID) <sup>c</sup>	18	(54.5)
Anxiety disorders (SCID) <sup>c</sup>	17	(51.5)
Other substance use disorders (SCID; excluding alcohol)	21	(63.6)
Age	Range 25–59 years	Mean (s.d.) 44.42 (10.43)
TLFB – number of drinking days (out of 90 days prior to admission)	12–90 days	65.55 (26.88)
TLFB – number of heavy drinking days (out of 90 days prior to admission)	11–90 days	62.70 (28.69)
TLFB – average drinks per day (in the 90 days prior to admission) (Range: 4.2–33.0)	4.2–33.0 drinks	13.27 (5.95)
Baseline depression (CPRS) <sup>b</sup> (n = 32)	2–37	18.0 (7.7)
Baseline anxiety (CPRS) <sup>b</sup> (n = 32)	2–30	13.2 (6.6)

CPRS: Comprehensive Psychopathological Rating Scale. TLFB: Timeline Follow-Back. SCID: Structured Clinical Interview for DSM Disorders.

<sup>a</sup> If n ≠ 33 (data were missing), it is noted in the left column.

<sup>b</sup> “Baseline” denotes day 2 of inpatient treatment.

<sup>c</sup> Denotes proportion of participants with one or more mood/anxiety disorders.

**Table 2**  
Interview prompts specific to transition from inpatient to outpatient.

Inpatient interviews
<ul style="list-style-type: none"> <li>● Describe the process of how you adjusted to being an inpatient in the Clinical Center.</li> <li>● Talk me through what your experience has been throughout the process of rehabilitation here at NIH.</li> <li>● Think about the first few days after you leave here and go home. Walk me through what you think it will be like.</li> <li>● Describe in as much detail as you can any expectations you have about transitioning back into your home environment.               <ul style="list-style-type: none"> <li>○ Probe: What barriers or facilitators to recovery do you expect?</li> </ul> </li> </ul>
Outpatient interviews
<ul style="list-style-type: none"> <li>● It's been about a month since you left the Clinical Center. Talk me through what the transition has been like as you returned to your home environment.               <ul style="list-style-type: none"> <li>○ Probe: Different environment, support system...</li> <li>○ Probe: Describe any barriers or facilitators to recovery you have experienced.</li> </ul> </li> </ul>

understanding of social networks throughout “transition” periods in recovery.

### 2.3. Analyses

Each audio-recorded interview was transcribed verbatim and

quality checked prior to analysis. We included all participants' interviews in this sub-analysis (n = 33 at baseline and n = 28 at follow-up). A codebook was developed based on emergent themes from the interviews and the overarching constructs of the Social Cognitive Theory. Each code was accompanied by an operational definition that allowed for clarity and consistency in the coding process. A team of two coders (AB and MK) independently reviewed a sub-set of transcripts. After data were transcribed and cross-checked, NVivo (version 10.0) was utilized for further qualitative analyses. Using NVivo, inter-rater reliability percentages were calculated and exceeded 80% which was the target. Discordant coding was discussed until consensus among the coding team was achieved. A detailed description of the process of validating themes and ensuring creditability, auditability, and fittingness of the data is available in Brooks et al., 2016.

For the sub-analysis included in this paper, three independent research team members (AB, MML, and AR) conducted an in-depth thematic analysis of pre-established themes related to social support using an exploratory approach. Based on more in-depth analyses of these four themes and the previously outlined conceptual and operational definitions of social support, a final list of sub-themes outlining sources and types of perceived social support as well as emphasis on post discharge environment was created after four rounds of consensus building, presented in Table 3. A fourth independent research team member (GW) evaluated the proposed list of themes and quotes then met with the remainder of the three reviewers to finalize the themes. This final thematic analysis led to the reorganization and attribution of some quotes. The group met consensus and renamed two of the themes relating to environment and rebuilding social networks to better capture what participants were experiencing.

### 2.4. Operationalization of social support in analysis

We conducted our analysis in four main areas based on emergent themes presented in Table 3: 1) types of social support, 2) sources of social support, 3) potential role of the environment in social support, and 4) changes in social networks post-discharge from the inpatient facility. In our analysis, emotional support was operationalized as the “moral support” specific to recovery; supporters conveyed a sense of understanding the feelings of patients and provided encouragement. Instrumental support was characterized by the presence of tangible

**Table 3**  
Final theme list.

Types of social support
<ul style="list-style-type: none"> <li>● Spiritual</li> <li>● Instrumental</li> <li>● Informational</li> <li>● Appraisal</li> <li>● Emotional</li> <li>● Other</li> </ul>
Sources of social support
<ul style="list-style-type: none"> <li>● Spiritual leader/church community</li> <li>● Partner/spouse/significant other</li> <li>● Health professional</li> <li>● Friend</li> <li>● Family</li> <li>● Other</li> <li>● Alcoholics Anonymous (AA): sponsor, group meetings</li> </ul>
Potential role of the environment in social support
<ul style="list-style-type: none"> <li>● Inpatient setting</li> <li>● Sober group home</li> <li>● Environment <i>not</i> conducive to sobriety</li> </ul>
Social networks
<ul style="list-style-type: none"> <li>● Rebuilding support (assembling new network)</li> <li>● Isolation</li> <li>● Existing social networks adapting to sobriety</li> </ul>

support such as housing, assistance finding a job, or transportation to assist in the recovery process. Informational support was defined as receiving knowledge specifically related to their recovery such as referrals and recommendations for self-care (Langford et al., 1997). Appraisal support involved the communication of information relevant to self-evaluation and serves to affirm an individual's decisions, for example, becoming sober (House, 1981; Kahn & Antonucci, 1980). Spiritual support emerged as an additional category that encompassed references to religion, spirituality, church, God, and/or prayer. The subthemes under the category entitled “sources” included any and all people that participants cited as providing support. The potential environmental contribution of social support was dichotomized to understand the inpatient setting and the difference between living in a structured, sober group home and other environments, both structural and social in nature, that were explicitly stated by participants to not be conducive to sobriety. Lastly, we captured the changes that participants felt they needed to make to sustain sobriety in the “social networks” theme; characterized by references to actively trying to develop relationships with people who were supportive of their lifestyle change, preferring isolation in order to avoid individuals and situations that might trigger a relapse, and existing social networks adapting to sobriety.

### 3. Results

#### 3.1. Types of social support

The most common types of perceived support mentioned in both inpatient and outpatient settings were *instrumental* and *emotional*. The least-commonly mentioned types of support were *spiritual* and *appraisal*. Refer to Table 4 for quotes exemplifying each type of social support mentioned during the interviews. Even though most participants mentioned having at least one type of support, some also mentioned not having the type of support they felt they needed to sustain sobriety. For example, one participant felt that her husband was supportive in her staying sober at home, but would get upset when she wanted to go to a meeting. Another participant stated that his parents were supportive in providing a sober environment but felt like they did not understand what he was going through in recovery.

#### 3.2. Sources of social support

Participants most frequently mentioned AA as a source of support, which included AA meetings and sponsor support in both inpatient and outpatient settings. Family was the second most frequently mentioned source of support. Spiritual leaders and friends were identified as sources of social support, but less commonly than their family and AA meetings and sponsors. Health care providers were also mentioned as sources of support (most often providing informational support), as one participant outlined in Table 4.

#### 3.3. Environmental contributors to perceived social support

Patients often used the inpatient program as an exemplar when describing their ideal social networks: they referred to inpatient treatment as a “safe zone” and some expressed anxiety about being back in an outpatient setting in which there were potential triggers in their environment. Individuals appreciated having structure in treatment and Oxford Houses and there was often a sense of uncertainty as far as how various triggers in their pre-treatment environment would affect them:

“Once I get out there, it's a whole...it's a whole different [environment] than being in here. This is a safe zone. I know there's no alcohol in here. But you know how many liquor stores and, you know, street drugs they got out there - it's so many of them.” - Male, 55 (Sober)

Patients also speculated about returning to their pre-existing social

**Table 4**

Illustrative quotes demonstrating the overarching types of support that participants mentioned in their interviews.

Spiritual
<p>“Some people just wanna come to church and know that God loves them and they wanna leave out the door...and now, what's interesting – since I have been sober, I know that God really loves me now. So...that's – that's the difference.” – 53, Female (Sober)</p> <p>“I wake up in the morning, I pray before I get out of bed, say the Serenity Prayer all during the day and I pray before I go to bed. You know...let it go from there, you know, it's not up to me – 54, Male (Relapse Status Unknown)</p> <p>“I'm very spiritual, I do believe God was talking to me, like, hey, alright – you know, it's time to tighten up, for real this time.” – 35, Male (Relapse Status Unknown)</p>
Informational
<p>“But what I've learned here is...I don't have to drink when I'm uncomfortable. It's okay to sit through the discomfort. And, you know, most people already know that, but it took me coming here to – to feel it. To experience it, know I can get through it without drinking. So I'm hoping I can take that on with me.” – 57, Female (Relapsed)</p> <p>“...the meetings, I mean I just learned so much, you know...just...understanding how awful a disease this is, I mean...so much I've learned.” – 32, Female (Relapse Status Unknown)</p> <p>“I find [it] helpful a lot is because – this program is teaching me also how to take care of me. And learning methods for daily stresses – things to help me manage... difficult situations in everyday life, which would ordinarily make me turn to a drink to kinda just relax and calm myself, so...they have a lot of techniques here that assist with that.” – 52, Female (Relapsed)</p>
Emotional
<p>“Life is pretty daggone simple...I think...we're made...to love and be loved. And there, for a moment, I felt a little bit of love here that I've never had anywhere else.” – 60, Male (Relapsed)</p> <p>“...any time you have family...it could be your kids, your parents, your aunts, your uncle – if you have that support from outside...it makes you more comfortable, it makes you stress-free, because you know that it's somebody there that you could call, you could talk to, you can do things before you actually go back and pick up a drink.” – 55, Male (Sober)</p> <p>“Because, as I said, I've never...I've never been supported, or I don't recall having been...I feel like, unconditional love... the nurses and the staff and the doctors worked with me, were understanding...that just took me a long way. I really don't recall anybody ever...being willing to help me like that – 57, Female (Relapse)</p>
Instrumental
<p>“My significant other kind of changed everything up. My bar went to sodas and Gatorade.” – 47, Male (Sober)</p> <p>“...I have a very, very big support group. So, you know, like all my friends that I – all my friends that I hang out with, um – they've been helping feed the boys [...] yeah, so I ended up calling everyone, you know – circling the wagons, and, of course they helped feed them...properly.” – 49, Female (Sober)</p> <p>“And the people I'm renting from, they're very nice and that kind of ...it's scaring me, you know cuz how many people you know nowadays that's – you know - so giving? You know, but God blesses us in different ways, you know – that's just my belief...and they like giving me furniture and making sure I'm okay, you know, and I mean it's – it's weird, you know, but – it's still people out there like that.” – 55, Male (Sober)</p> <p>“They've given me so many tools...I had a job interview on Thursday, she helped me do my resume, she showed me how to interview – and I feel much more confident going in on an interview...if ___ didn't help me with that, I guarantee I would have never looked for a job. 'Cause I didn't have any confidence.” – 57, Female (Relapsed)</p>
Appraisal
<p>“Having a sober person living with me – huge difference. And I dumped it out, rinsed the bottle out, and went right to her and said – this is what I found, this is what happened. So, being accountable to another person that I live with helps a lot.” – 57, Female (Relapse Status Unknown)</p>

(continued on next page)

Table 4 (continued)

Spiritual
<p>“[...] As I've gone through some of the AA classes at St. Mark's, Potomac and the other places that they are, I wasn't alone in the third day fight-or-flight – it's – it's a normal thing that I – and they testify to that and they make a testimony to that in AA.” – 53, Female (Sober)</p>
<p>“he said – believe me, I know what you're going through because my sister just got out of rehab. I never knew that – all these years, you know, his sister's been an alcoholic for 20 years, you know...so, um – he's been very supportive.” – 35, Male (Relapse Status Unknown)</p>

networks which were often not entirely sober. They worried about being back in environments not necessarily conducive to sobriety with the same support systems they had while they were drinking:

*“If I go back home, and resume my normal life, the six to eight beers could become dangerous. I live - I work in an environment where it's accepted, all my friends do it. I mean if we have a cookout, if we watch a ballgame, there's just – [there's] always beer involved...”* - Male, 45 (Relapse Status Unknown)

Conversely, some patients felt confident that they would be able to maintain sobriety in these circumstances. Many, however, felt that they needed to isolate themselves from those potentially triggering social networks in order to maintain their sobriety:

*“My immediate family - they all drink, so I just got to stay away and get myself together before I go back around that way, don't have the urge to drink.”* - Male, 28 (Relapse Status Unknown)

Some patients cited isolation as a trigger for drinking and made plans to seek additional social networks upon discharge from the inpatient facility:

*“One of the big things that I figured out when I was here is that I really need to stop freelancing. Setting up this ‘work from home’ thing whether consciously or subconsciously, it gives me an out, and I have to deprive myself of that.”* - Male, 49 (Sober)

Others reflected on isolation being associated with their drinking prior to entering treatment and identified a need to form connections as “critical” to their recovery:

*“What I think is critical to my recovering - I really don't have anybody in my life as far as a supportive network. I think that's critical. ‘Cause I realize in here, I like being around people. I like having connections. And when I was drinking, I isolated.”* - Female, 57 (Relapsed)

The inpatient interviews reflected a balance between isolating from social connections that were not necessarily conducive to sobriety and also not isolating so much so as to not feel accountable for their actions. For many participants, the inpatient setting reflected a time of strong, sober social networks. Post-discharge, patients expressed a need to rebuild sober support systems and networks different from those that existed when initiating treatment. As outpatients, study participants described needing to isolate themselves from their pre-existing non-sober networks in order to avoid triggers and maintain sobriety:

*“I've been pretty much staying non-social, the first football game, you know, everyone wanted, to either hang out or go to someone else's house. And I told my husband no. You know ... I'm just not ready. I would be uncomfortable.”* - Female, 49 (Sober)

Patients often expressed that even when their networks were technically “being supportive,” there would often be feelings of guilt or anxiety that would detract from the positive impact of that support:

*“Some friends wanted us to go get dinner and I mean honestly, we could have, you know, taken down a 12-pack each, she and I on the back porch, you know - even though she's totally supportive, and I know she*

*wouldn't drink, in my head I'd be like - she's not drinking ‘cause of me, you know - and that would make me feel guilty so I wouldn't have as good of ...as good of a time.”* - Female, 49 (Sober)

One patient specifically discussed the opportunity to isolate himself as a factor that contributed to his relapse:

*“It's probably in part because I had an apartment open up where I was house-sitting and so ... I kinda just had freedom and isolation a little bit, and uh...had a girl over, and started drinking lots of whiskey, pretty heavily, and going out after that.”* – Male, 26 (Relapsed)

Similar themes of isolation and the reality of not being held accountable seemed to have a negative association with maintaining sobriety. This was not the case for all patients as some described lower levels of craving and felt that being surrounded by friends who were drinking was a non-issue:

*“Cause everybody around me - they're heavy drinkers, and it's funny, ‘cause since I left I've been around them...while they were drinking. And I look at them, like - nah, I'm good. I sit there like no, I'm good, I'm fine. I don't need it. And I thought that would be really hard for me - but I kinda test it to see my willpower and it's like yeah. Mm-mm.”* - Male, 27 (Sober)

Patients expressed positive sentiments about sober group homes and AA meetings keeping patients accountable and providing a built-in “network” of peers with similar goals:

*“...it makes you stress-free, because you know that it's somebody there that you could call, you could talk to, you can do things before you actually go back and pick up a drink.”* – Male, 55 (Sober)

*“I know how to go about situations now. If I need help, instead of picking up a bottle I can call my sponsor or...go to a meeting.”* – Male, 28, Relapse status unknown

Accountability as far as “built-in” social networks – being around individuals who were attending the same meetings and ongoing treatment - was a common theme. The sentiments expressed toward sober group homes seemed to embody the nuanced theme that emerged both during inpatient and outpatient interviews of needing social networks and accountability so as to not be isolated, however, not maintaining potentially “triggering” social networks that were not conducive to sobriety. Participants who went to a sober group home after inpatient treatment reported feeling more confident about their transition back into the community because they were in a more structured environment. They reported having stable housing, living with other people who are also trying to stay sober, and having in-house support such as group meetings. Some participants who did not go into a sober living space reported feeling like their current environment was not conducive to sobriety. They reported concerns for not being able to find a space or a community that would be supportive to them staying sober. Some reported that they felt like they needed to change their environment, such as quitting a job in the service industry or changing hobbies to ensure alcohol avoidance.

### 3.4. Social networks

This theme captured the active steps that research participants mentioned that they were planning on taking (during inpatient interviews) or had already taken (during outpatient interviews) to ensure that they stayed sober with regards to changing social networks. Participants mentioned cutting off ties with friends who were actively drinking and re-building connections with individuals including family who would be more supportive to them being sober:

*“I wanted to go back....but, me, alone, living in a studio around all my drinking friends who all go to school with me...probably better to chill out at my parents for a little bit.”* - Male, 26 (Relapsed)

Some expressed a desire to grow their sober networks:

*“What I think is critical to my recovery...I really don't have anybody in my life...a supportive network, I think that's critical...I like being around people. I like having connections. And when I was drinking, I isolated...I pushed everybody away.”* - Female, 57 (Relapsed)

One participant mentioned deleting numbers from his phone and re-routing his drive home to avoid triggers:

*“I cleaned out my phone of about 15 contacts of people that...I don't need to be...in contact with anymore...I got a list of changes – as far as rerouting when I'm coming home from work and staying away from certain things...I could easily find myself right back in front of a liquor store...”* - Male, 35 (Relapsed)

Although several participants felt that they could make some changes to find a supportive group of people, many participants mentioned that they felt like they completely had to isolate themselves to stay sober or had no support system in place.

*“My plan of action is to be fairly, just...lay low.”* - Female, 49 (Sober)

*“I kinda just need to keep a low-profile.”* - Male, 50 (Relapsed)

*“I was sober for ten years...stayed away from people...I stayed away from all that that...I just have to get back into doing that again.”* - Male, 54 (Relapse Status Unknown)

The changes in social networks captured and cited in this theme reflect the reality of re-building social circles or making concrete changes in existing support networks.

## 4. Discussion

### 4.1. Summary of results

These data provide insight into understanding the types of support that individuals in recovery report most commonly during the phases of rehabilitation as well as the support they feel is necessary for an “ideal” recovery trajectory. Research shows that a majority of individuals who go through inpatient treatment relapse (Seo et al., 2013; Sinha et al., 2011), thus it is critical to understand the experience of individuals transitioning from a structured environment back to their homes to understand why this is the case. To our knowledge, although changes in perceived social support have been quantified from the individual's lived experience during the transitions that occur in the recovery phase. Thus, these qualitative data may provide deeper insight into the complexity of the issues and barriers that individuals in recovery may be facing. The data also provide information on broader concerns that individuals face during their transition from an inpatient recovery facility to outpatient, including barriers, fears of readjusting, and their changing environments.

Our findings support the suggestion McCutcheon et al. (2014) on the important role of sober living environments and sober social support networks. Similar to findings reported by Nealon-Woods et al. (1995), participants identified that one of the major benefits of AA affiliation was the fellowship aspect and the fact that AA affiliation seemed to decrease pro-social drinking ties similar to findings by Kelly et al. (2010). Increased perceptions of social support understandably led patients to feel a sense of community similar to research by Stevens et al. (2015). Conversely, social exclusion or “isolation” as many of our participants phrased it was often mentioned by individuals who relapsed similar to findings by Mericle (2014).

Individuals who participated in this study identified the need to develop social networks conducive to sobriety, however, also communicated the difficulty of accomplishing this during the abrupt transition from an inpatient setting back into their homes and communities. This represents a potential point of intervention from clinical care teams. Structured (sober) group homes may ease individuals' transitions back

to independence, providing gradual or graded steps to sustained sobriety.

While quantitative data provide information on how many people relapse, the presence or absence of social support, and who may be most at-risk, qualitative data in general have the potential to describe why this is the case. Our data support the fact that AUD and sobriety is not an “individual” issue, but something that is perpetuated by multiple potential barriers: environment and/or lack of sober support networks. Furthermore, our data clearly demonstrates the complexity of AUD through the participants' perspectives. Often times, continuing to stay sober is not as simple as a participant deciding to stop drinking. Participants are constantly negotiating their sobriety when faced with environments and a social network that may not be conducive to sobriety.

### 4.2. Strengths and limitations

This study utilized semi-structured interviews and rigorous qualitative analysis techniques to provide a unique data source for understanding the facilitators and barriers of social networks patients with severe AUD face when transitioning from inpatient treatment back to the community. This analysis is not without limitations. The follow-up period for conducting the post-discharge interviews was relatively short (four to six weeks post-discharge). Additionally, our relapse data were largely based on self-report and missing in 50% of cases (Brooks et al., 2016). This analysis was based on individuals who participated in an abstinence-based approach to treatment, so results cannot be generalized beyond this group.

### 4.3. Future directions

Our findings demonstrate the importance of understanding perceived social support from a patient perspective. Severe AUD is inherently complex: although individuals may intend to make sustained behavioral changes, our data illustrate the structural, environmental, and social barriers that individuals may face when attempting to sustain sobriety. Many individuals who returned to the same environment believed that they did not have adequate social networks to sustain sobriety. Addressing strategies to maximize positive social support among individuals in recovery is an important social and environmental aspect of a multicomponent model. Recognizing strengths and weaknesses in social networks should be a focus for interdisciplinary health care teams providing comprehensive treatment and transition from inpatient treatment into the community. From an intervention standpoint, it may be beneficial to focus on helping people choose environments and their accompanying social contexts and networks that are most conducive to recovery. Participants could be encouraged to share strategies for building, re-building, or re-structuring social networks after discharge from an inpatient treatment program. Such strategies could include facilitating education of existing networks on recovering individuals' evolving needs post-discharge, engaging in discussions with patients to help them build new sober support networks, or opting for a structured environment, such as an Oxford House, to aid with the transition. Additionally, individuals in recovery need clear guidance for setting boundaries in relationships that are not conducive to recovery and, in some cases, cutting social ties, perhaps through role-playing activities during the inpatient treatment phase. Health care providers, who may not traditionally view themselves as providing social support to patients, should understand that many patients do view them as providing various types of support. At a minimum, patients' changing social support and social networks should be tracked post-discharge so that clinical care teams understand evolving environmental contributions and needs. Further elucidating the concept of social support and its role in recovery could provide information on unique needs of individuals specifically during the potentially tumultuous transition from an inpatient facility back to the community and guide clinicians in engaging

patients to develop new or sustain healthy existing social networks that result in continued sobriety.

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