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Recovery Experiences During COVID-19

Emily LaFond

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Emily LaFond

Faculty Supervisor: Christian Williams, Ph.D.

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Abstract

People with substance use disorder are a particularly at risk population who experienced greater hardships during the coronavirus (COVID-19) pandemic, as previous literature revealed. The present study aims to explore the experiences of individuals with substance use disorder accessing recovery support services during the COVID-19 pandemic. Self-report survey data was collected from 144 participants who self-identified as having substance use disorder and engaged in recovery support services since COVID-19 began. Thematic analysis was used to analyze survey data and 4 main themes were identified: (1) Shifting terrains in recovery, (2) Connecting through a screen, (3) Heightened hardships, and (4) Grow through what you go through. Participants experienced greater challenges during the pandemic related to accessing virtual substance use support services, exacerbated mental health symptoms, and loss of relationships, which often led to decreased motivation for recovery. In the face of adversity, however, a number of participants expressed cultivating resilience and healthy coping strategies, leading some to derive a newfound sense of purpose in recovery. Future research should explore the present role of virtual services in recovery treatment and mental health conditions following the pandemic.

Introduction

The coronavirus pandemic (COVID-19), with its sudden onset, created significant changes to how individuals accessed substance use support and experienced personal recovery. Traditional recovery supports that rely on in-person communication and social connections were disrupted by stay at home orders and social distancing measures. While some providers and programs ceased providing services, others shifted their in-person service delivery to virtual platforms such as Zoom, Doxy, etc. to maintain continuity of care. However, the unintended consequences were heightened service disparities, leaving many individuals facing challenges in accessing services while others had to navigate recovery support services and treatment in unfamiliar ways. Many individuals with substance use disorder, without the support of in-person services and relationships, experienced exacerbated mental health symptoms and substance use cravings, which increased the likelihood of relapse (Carlyle et al., 2021). Others found themselves with greater free time in their social isolation, which provided opportunities to foster meaningful recovery activities and reflect on motivations for recovery (Shircliff et al., 2022).

Background

Addiction and Substance Use Disorder (SUD) has been recognized as a widespread problem in our society, with 46.3 million people meeting the criteria for SUD in the previous 12 months (Substance Abuse and Mental Health Services Administration [SAMHSA] 2023). The impact of SUD on individuals, families, and communities is extensive across all demographic groups, with consequences that are increasingly costly and lethal. In recent years, we have seen an unprecedented number of opioid overdose deaths, with 70,112 deaths reported in January of 2018 steadily increasing to an annual toll of 108,334 deaths in February of 2022 (Center for Disease Control and Prevention [CDC], 2023). COVID-19 overlapped with the existing opioid crisis, exacerbating overdose risk for individuals with SUD while also disconnecting them from communities of support (Schofield et al., 2022). These public health crises compound the already existing challenges and low rates of treatment engagement for individuals with SUD. While it was estimated that 43.7 million people met the criteria for formal SUD treatment in 2021, 40.7 million people did not receive treatment that year (SAMHSA, 2023).

COVID-19 created a crisis that fundamentally impacted every aspect of individuals' lives, including the ways in which resources were accessed and services delivered. Accompanying this crisis were risks to personal health and widespread fear of contracting COVID-19, which created a sense of uncertainty regarding safety, exacerbated mental health issues, and isolated individuals from the rest of society. People with SUD often experience confounding mental health issues, with 17.9 million people aged 18 or older experiencing co-occurring substance use and mental health disorders in 2021 (SAMHSA, 2023), placing them at heightened risk for negative mental health experiences in the face of COVID-19. When coupled with the negative economic impact of businesses closing and rising unemployment rates, individuals found themselves unprepared for the hardships that they faced. People with SUD were found to be more likely to experience increased symptoms of anxiety and depression in relation to pandemic stressors when they also had factors such as low socioeconomic status and "unmet basic needs," including access to housing or food resources (Banks et. al, 2022). Due to the often complex health and social care needs of individuals with SUD, this population is at heightened risk for adverse outcomes in the face of pandemic-related social isolation, economic instability, and disruptions to recovery activities and support services (Bergman & Kelly, 2020; Oesterle et al., 2020).

Individuals with SUD also faced greater health risks if they contracted the coronavirus. People with SUD are at risk for respiratory and cardiovascular diseases as well as immunosuppression (Baillargeon et al., 2021), placing them at increased risk for adverse outcomes in contracting COVID-19 (CDC, 2021). These risk factors were found to disproportionately impact black individuals with SUD when compared to their white counterparts, with black individuals experiencing higher rates of hospitalization and mortality after contracting COVID-19 (Wang et al., 2021). The presence of increased mental and physical health complications for people with SUD was only intensified by the greater barriers to treatment and support services that they experienced during the pandemic.

Individuals with SUD, facing the shifting terrain of service delivery during COVID-19, experienced many challenges to their recovery management and social support networks. SAMHSA (2022) defines recovery as a holistic experience that requires stable health, home, purpose, and community in order to maintain sobriety. Although recovery may vary from person to person, there is a common thread of the importance of connectedness, which is defined by Mahar and colleagues (2013) as the belief that one is valued and has trusting relationships within a community. Individuals who feel connected to others and have strong recovery support systems experience a sense of comradery that can be a motivating factor in sustaining recovery. This connection can occur through both formal and informal support networks, with Davidson and colleagues (2010) asserting that participation in peer recovery support is as effective in achieving long-term recovery as engagement in clinical treatment. Additionally, Zemore and colleagues (2018) compared involvement in 12 step groups such as Alcoholics Anonymous (A.A.) and Narcotics Anonymous (N.A.) to non-denominational mutual aid groups such as SMART Recovery and LifeRing, and found similar member retention between groups at 6 and 12 month

follow ups. These results support the importance of connectedness and involvement in a recovery community, regardless of the type of recovery support (Zemore et al., 2018). COVID-19 changed the way in which recovery supports were accessed, limiting these activities to virtual platforms or telephone, which forced individuals with SUD to navigate this new terrain for continuity of care.

Prior to the COVID-19 pandemic, substance use treatment and recovery support services were mostly provided in-person, with telehealth only being used in rare circumstances. Traditionally, informal recovery supports foster relationships based on the shared lived experience of addiction and recovery. Self-help programs such as A.A. and N.A. utilize concepts of mutual aid to share recovery experiences, provide guidance, and instill hope that long-term sustained recovery is possible (Royden, 2021; *The A.A. Group*, 2019). These mutual aid programs emphasize a nonprofessional approach to recovery by recognizing oneself as being addicted to drugs or alcohol (Kelly & Yeterian, 2011) and relating to members through the shared identity of addiction (Ostrow & Adams, 2012). In addition to self-help models, formal treatment for substance use recovery often employs group therapy and peer support models, highlighting the importance of connections and shared lived experiences in the recovery process (Lo Coco et al., 2019). Whether delivered via mutual aid, group therapy, or peer support, the goal of recovery activities is to build supportive communities to help guide individuals through their recovery journeys.

The abrupt discontinuation of in-person service delivery and shift to telehealth caused many individuals with SUD to experience a loss of social and therapeutic relationships, placing them at greater risk of relapse into substance use behaviors (Schofield et al., 2022). Moreover, telehealth was not widely accessible to all individuals with SUD, particularly those who did not have the necessary technology such as computers or phones with internet access (Jemberie et al., 2020). However, the implementation of virtual service delivery allowed for greater treatment continuity and presented opportunities through which people could access recovery support such as online self-help meetings.

To better understand the efficacy of telehealth in substance use treatment, Jones and colleagues (2022) contrasted medication assisted treatment (MAT) retention and overdose rates based on Medicare and Medicaid data from before and during the pandemic. The researchers discovered that MAT retention remained stable during the pandemic, along with finding that similar percentages of people experienced medically treated overdoses in comparison to pre-pandemic rates, indicating that telehealth played a role in treatment retention during the pandemic (Jones et al., 2022). Molfenter and Colleagues (2021) explored how clinicians perceived having to provide services via telehealth and found that they reported the services as being easy to use and were able to employ alcohol and drug screening instruments with similar reliability and validity to traditional paper and pencil methods used in the office. The participants in the study also shared a preference for being able to see patients via videoconferencing to using the telephone, though they recognized that telephonic methods were more accessible to some patients (Molfenter et al., 2021). While these benefits were found throughout the literature, questions remain about how individuals with SUD were negatively impacted by COVID-19.

Individuals with SUD, similarly to the general population, experienced the negative effects of social distancing measures and the resulting isolation. Horigian and colleagues (2021) studied 1,008 young adults ages 18-35 and compared their levels of loneliness and mental health diagnoses before and during the pandemic. They discovered that the participants experienced elevated feelings of loneliness, depression, and anxiety as well as decreased social

connectedness, with many individuals expressing alcohol dependency and severe drug use while in social isolation (Horigian et al., 2021). The researchers emphasized a potential correlation between individuals' exacerbated mental health symptoms and increased substance use during the pandemic.

Other researchers confirmed that individuals with SUD who experienced a co-occuring mental health diagnosis experienced increased cravings and greater difficulties maintaining sobriety during the pandemic. Carlyle and colleagues (2021) investigated changes in substance use and its connection to mental health during the pandemic by assessing survey responses from 325 individuals who sought substance use treatment from January 2020 onward. They found that increased alcohol use was associated with greater depression among people seeking SUD treatment during the pandemic, and that individuals participated in more frequent alcohol or other drug use in response to loneliness (Carlyle et al., 2021). Shircliff and colleagues (2022) performed a mixed methods study in which they interviewed 48 individuals who self-identified as being in recovery at two points during the pandemic, with the first interview in early spring 2020 and the second interview occurring from July 2020 to June 2021. Based on these interviews, the researchers found that participants who experienced worsening mental health conditions were more likely to have increased cravings and use substances (Shircliff et al., 2022). Shircliff and colleagues (2022) also found that those who took greater precautions against COVID-19 exposure via social distancing were more likely to undergo cravings and use substances, which they linked to these participants' greater emotional distance from their support systems and difficulty completing daily activities. Hurley and colleagues (2021) performed semi-structured interviews with 24 women with SUD in spring 2020 to explore their experiences with recovery and substance use treatment during COVID-19. Participants who maintained

sobriety expressed challenges in pursuing abstinence due to decreased in-person support, witnessing peers relapse, and boredom during the pandemic (Hurley et al., 2021). As people with SUD navigated their recovery in isolation, many faced greater challenges in maintaining sobriety and stability in their mental health than they did pre-pandemic.

Social distancing mandates forced individuals with SUD to explore their natural supports and contextual environments and the influence they have, both positive and negative, on recovery management. Individuals with healthy recovery strategies and social supports were able to utilize self-care strategies, engage in leisure activities, and build strong personal relationships to cope with pandemic stressors (Shircliff et al., 2022), mediating the impact of COVID-19 on personal recovery. Particularly, individuals who routinely participated in self-care whether through journaling, exercise, or positive self talk, experienced less instances of cravings and substance use (Shircliff et al., 2022). Participants also shared that social distancing measures allowed them greater free time to engage in hobbies and invest in personal relationships than they had before the pandemic, which helped them establish substance free habits and further safeguarded against substance use cravings (Shircliff et al., 2022). While COVID-19 significantly increased the stressors that many individuals with SUD experienced, engaging in social supports, healthy coping strategies, and continued engagement in services via telehealth lessened the negative burden for some.

While a great deal of research exists on substance use disorder (SUD), few studies have explored the experiences of people with SUD in accessing services and navigating recovery challenges during COVID-19. This study aims to fill the gap in qualitative research by exploring individual experiences of SUD support and services during COVID-19, which has the potential to inform future delivery and practices of recovery support services.

Methods

The purpose of this qualitative study was to explore how individuals with SUD experienced recovery and substance use services during COVID-19. For the purposes of this study, support services included formal and informal treatment models, as well as any activity that individuals engage in for recovery management and relapse prevention. In this study, experiences accessing services as well as barriers to engagement were explored.

Role of the Researcher

This project is a part of a larger study conducted by Dr. Christian Williams, titled *Substance Use Disorder Services During COVID-19*. My role as her research assistant in an honors fellowship for summer 2022 was to organize and interpret data collected via survey methods. Additionally, I organized participant demographics and utilized thematic analysis to interpret the results of the open survey questions. Upon gaining her permission to focus on this study for my honors thesis project, I completed a comprehensive literature review. I was not a participant in this study and I used previously collected survey data for my thesis project.

Participants

Self-report survey data was collected from 176 participants who self-identified as having SUD and engaged in recovery support services during COVID-19, with 144 participants completing the entire survey and being used for data analysis. The majority of the participants were ages 25-34, followed by those who were 45-54 years old. Out of 144 total participants, 74 identified as male, 66 identified as female, and 4 identified as nonbinary or another gender identity. Most of the participants were white at 79.63%, with the remaining 11% identifying as black, Asian, Hispanic, or American Indian. Most participants had also obtained a high school education or greater, were employed full-time, and lived in a house or apartment (See Table 1).

Table 1

Participant Demographic	Characteristics for Selected	Variables $(N = 144)$
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Variable	Category	n	%
Race/ethnicity			
	White	129	79.63
	Black, Asian, Hispanic, or American Indian	15	20.37
Age			
	18-25	10	7.55
	25-34	60	40.88
	35-44	8	5.66
	45-54	46	31.45
	55-64	15	10.69
	65-74	5	3.14
	75+	0	0
Gender identity			
	Male	74	51.38
	Female	66	45.83
	Nonbinary, genderfluid, demiboy, or other	4	2.77
Education			
	High school diploma or equivalent	18	12.5
	Some college or Associate's degree	52	36.19
	Bachelor's degree	46	31.94
	Master's degree, post undergraduate work, or specialist degree	24	16.67
	Doctorate or professional doctorate degree	3	2.08
	Other	1	0.62
Employment			
	Full-time employed	90	62.5
	Part-time employed	21	14.58

	Not employed for pay	16	11.11
	Caregiver, homemaker, student, or other	17	11.81
Form of residence			
	Own a house	62	43.05
	Rent house	11	7.63
	Rent apartment	38	16.38
	Other / did not specify	33	22.92

Materials

SurveyMonkey was the online platform used for data collection. Participants were first asked to provide informed consent, confirming their understanding of the study and their rights as research participants, before proceeding to data collection. They were then provided with a brief demographic questionnaire, containing 10 questions, and a survey that explored their experience of SUD and recovery support services during the pandemic, which contained 48 questions (see Appendix A). Data was exported from the SurveyMonkey platform to be analyzed and uploaded to MAXQDA, which was employed to assist with thematic analysis. All data was stored on password protected laptops and electronic files were also stored with password protection. No print copies were made at any time.

Procedures

Participant Selection

The selection of participants was done utilizing a criterion sampling approach to identify individuals who experienced SUD and engaged in recovery support services during COVID-19. To be considered as a participant in the study, individuals needed to be 18 years of age or older, currently using substances or have an identified history of substance use, and have participated in substance use recovery activities including formal or informal treatment during the pandemic. Individuals who attempted to access services but were unsuccessful were also included in the study.

Data Collection

Data for the study was collected in a cross-sectional manner using self-administered, anonymous, web-based surveys via the SurveyMonkey platform. Following IRB approval from Assumption University, the recruitment process commenced via distribution of a postcard with a brief study description to local agencies throughout Massachusetts that provide recovery support services to individuals with SUD. To obtain an adequate sample size that was diverse in nature, recruitment was conducted online via social media platforms such as Facebook, Twitter, LinkedIn, Reddit, and in online recovery support forums. A survey link to the SurveyMonkey platform was included in all posts as well as a QR code for access. Informed consent was embedded into the survey design so that no contact had to be made with the researchers, however, contact information was provided for questions and optional follow-up.

Data was collected anonymously through the online survey application SurveyMonkey from March to November 2022. Upon accessing the link to the survey, participants were first prompted to read and respond to an informed consent form. After providing their consent, participants were asked if they would like to continue with the survey. If they answered yes, they were then asked questions concerning their demographics and experiences of SUD support services during the pandemic. Participants were given the opportunity to elaborate on their recovery and/or sobriety experiences during the pandemic via open ended survey questions. All identifiable information was removed from participant responses, and participants were given numerical coding (P1-P144) based on the order in which they accessed the survey.

Data analysis

Thematic analysis was used to analyze participants' open responses to survey questions. Thematic analysis involves assessing data from participant responses and discovering common themes, which Braun and Clarke (2006) describe as concepts directly related to the research question that reoccur as patterns in the data. Braun and Clarke (2006) have established six phases of thematic analysis to allow for a reflexive and recursive approach towards qualitative data analysis. The first phase, familiarization with the data, involved close reading of each participant's survey responses and noting initial ideas (Braun & Clarke, 2006). The second phase of thematic analysis is generating initial codes, which are words or short phrases that summarize a concept evoked by a participant response (Saldana, 2016). Open response survey questions relevant to participants' experiences with SUD and recovery support services during the pandemic were all hand coded and then imported to MAXQDA software for further analysis. Each participants' response received at least one code, resulting in 3622 initial codes.

Similar codes were organized into sets using MAXQDA worksheets as a part of the third phase of thematic analysis, searching for themes (Braun & Clarke, 2006). The five themes initially created in this stage of data analysis were recovery is community, exacerbated barriers to access and equity, recovery in context, COVID-19 was a reality check, and COVID-19 challenged self-regulation.

The fourth phase is reviewing themes, which entailed reassessment of the codes within each data set, how they relate to the themes, and refinement of all the themes (Byrne, 2021; Braun & Clarke, 2006). In this phase, the most relevant codes and participant responses were reviewed to ensure they added to the unique narrative of each theme. The fifth phase of thematic analysis is defining and naming themes, which is important to precisely describe what is meaningful about the data (Braun et al., 2018). After careful consideration, the final themes were named (1) Shifting terrains in recovery, (2) Connecting through a screen, (3) Heightened hardships, and (4) Grow through what you go through. The sixth phase of thematic analysis is producing the report, in which the themes and relevant quotes are finalized and connected back to the research question and literature review (Braun & Clarke, 2006). The results are presented in the following sections.

Discrepancy in Experiences

While analyzing survey data, participants 19 and 113 expressed a caffeine dependency and equated it to SUD. P19 wrote that he had never used any drugs besides trying alcohol once, although he considered himself dependent on caffeine due to his RedBull intake. Similarly, P113 reported drinking a few cups of coffee a day. While both participants identified their dependency as problematic, their experiences with caffeine dependency were markedly different from those who reported using drugs or alcohol.

Results

The present study explored how individuals with SUD experienced substance use recovery support services during COVID-19. All participants responded to questions about their experience of substance use support services and/or recovery activities during COVID-19. Based on participant responses, 4 main themes were developed from data analysis: (1) Shifting terrains in recovery, (2) Connecting through a screen, (3) Heightened hardships, and (4) Grow through what you go through.

Shifting Terrains in Recovery

The pandemic incited worldwide concerns over how to keep ourselves safe and healthy, particularly for people with SUD, who faced greater health risks from the virus. This led to individuals feeling unsure if they should continue their regular activities even after stay at home orders were lifted. In the present study, several participants (P14, P39, P42, P64, P123, P162, P165) shared that they felt unsafe going out during the pandemic and felt forced to choose between accessing their in-person services and personal safety and well-being. P64 shared, "You cannot both access live services and protect yourself from Covid." Several participants felt that social distancing from in-person meetings was an unfortunate though necessary sacrifice to keep themselves safe (P14, P42, P64). While the preference for in-person meetings was clear in the present study, fears of contracting COVID-19 prevailed.

A large number of participants (n=100) in the current study had little experience or familiarity with virtual platforms as a service delivery option prior to the pandemic. While the shift to online settings was a means to maintain connection to recovery services, the abrupt transition left many navigating a completely new terrain. "Before covid I had never had an appointment on zoom or on a computer so this was all new to me" (P143). For some, virtual services did not decrease their barriers to recovery activities with many participants (n=80) sharing that they experienced challenges to accessing services virtually. The participants reported difficulty accessing online platforms (P158), not having the necessary technology and/or internet service (P62), and struggling to understand how to locate and engage in online recovery activities (P58, P150), such as A.A. or N.A. meetings.

For 14 participants in the current study, the transition to virtual services increased barriers to access during the pandemic. "I don't have regular internet, so when they stopped offering in person service, it became untenable" (P105). Other participants (n=12) shared that their SUD services shut down and never resumed through telehealth, resulting in some feeling cut off (P37, P65, P135) and reluctant to seek new services (P39). Additionally, a number of participants

(n=25) struggled to engage with virtual support services due to their limited access to the necessary technology. While most of the participants (n=115) in the current study had the required devices to connect virtually, they recognized the barriers that technological demands may have created for others attempting to access recovery support.

Although some individuals struggled to access services, a group of participants (n=21) found that the transition to virtual recovery services decreased barriers that they had been experiencing in accessing treatment. Participants shared that they found virtual services to be more accessible (P29, P114, P149), convenient (P68, P73, P101), and comfortable due to the greater anonymity they experienced (P48). Participants who had previously struggled to access services due to transportation issues (P68, P111) were now able to participate in recovery activities. P111 shared "not having to leave the place I live at is convenient because I don't own a vehicle." Other participants (P120, P172) shared that online services helped them to juggle family commitments that had previously kept them from attending in-person meetings. P172 shared that online meetings were beneficial to individuals with young children, allowing them to fit in competing but valuable activities.

As a mom of young children, I found the value of online meetings. They work for people with young children that otherwise couldn't come to meetings or are limited as to which meetings they can go to. It took away that excuse. The variety of time zones also took away schedule excuses, along with transportation excuses etc. It basically opened up a ton of options and online meetings are part of my toolbox now. (P172)

P157 shared that being able to participate in virtual mental health services decreased the barriers created by her mental health symptoms and increased her engagement in treatment. "It has been a little difficult dealing with this but also kind of a relief as I have social anxiety and talking on

the phone is a lot easier than being in person a lot of the time." For many participants, having the option of telehealth relieved the pressure to find transportation, rearrange their schedule, or juggle personal commitments in order to attend in-person meetings.

The widespread transition to virtual settings was not smooth, as individuals faced challenges in accessing SUD services due to inconsistent internet or technology access, struggles in using the online platforms, or cancellation of services. These experiences reflect that the total use of virtual settings for the pandemic, though necessary to continue service delivery, was often too general to account for individual needs and resource inequities. In addition to shifting terrains of SUD services, some had a sense of disenchantment due to the loss of personal connection they felt when using virtual services.

Connecting Through a Screen

Traditional recovery supports and services are built around the recognition of the power of the shared lived experience of SUD and the belief that individuals can be integral in helping one another to obtain and maintain recovery. This belief in the power of shared narratives highlights the importance of connection and interpersonal relationships as catalysts for long-term recovery. Many of the participants in the current study shared a profound sense of disconnect in the face of widespread lockdowns and social distancing measures. "In the beginning of the pandemic it was very difficult to find recovery support. They were not having in person meetings. It was a few months before they started having virtual meetings" (P73). In the absence of consistent recovery support, people with SUD felt isolated in their recovery and separated from their in-person connections.

When virtual meetings did begin, many participants in the current study shared that their feelings of disconnection were not resolved; some even shared intensified feelings of being cut

off from communities of support (n=48). Many individuals who were able to access virtual services expressed dislike for virtual meetings (n=61), citing that they were not as supportive as in-person settings. A significant number of participants (n=28) experienced online meetings as impersonal (P42, P111, P164) lacking the connection that being physically present with others had provided to their recovery. P150 shared "It's not like having someone to hug you when you really need it", and P123 explained "Talking to someone through a webcam or phone just doesn't feel the same as in person." Even with the presence of virtual meetings, participants still experienced the negative impact of social isolation on their recovery. "More isolation is a trigger for me, alone time and less responsibilities to other people in my life, hours cut at work etc" (P48). Though individuals in the current study attempted to engage with virtual services, many did not derive equivalent feelings of support as they had from in-person meetings, leading some participants to continue experiencing a sense of isolation and disconnection.

Despite the differences experienced between in-person recovery support and online recovery support, some participants did find that utilizing a virtual platform was helpful. This was particularly true for individuals who were already immersed in recovery communities before the pandemic. "Once I found AA online, it was much like in person meetings" (P109). Some participants (n=11) expressed that the level of connectedness they experienced did not change during the pandemic. P87 attributed their ongoing connections with their recovery community to implementing strategies that are common in mutual aid communities such as "messaging directly with other Luckiest Club members and exchanging cell phone numbers." P71 shared strategies they utilized to engage with peers: "we connected with remote skype calls." These participants were able to substitute online messaging or videoconferencing for in-person interactions experienced in their recovery communities. For some participants (P6, P48, P132, P163), the experience of connectedness to recovery supports increased during the pandemic. P48 shared, "I have increased connections in my recovery, especially with online Zoom meetings for AA/NA", emphasizing the value of virtual meetings in their recovery. However, some participants (P43, P81) in the current study had not accessed recovery support services prior to COVID-19 so they had nothing to compare their assessment of virtual supports to, which may explain their feelings of increased connection. Although virtual services were a novel concept to many, a number of participants expressed that they still allowed for connectedness in their recovery, especially those who had not engaged with in-person services.

Heightened Hardships

As stay at home and social distancing orders were put in place to enhance public safety, the cost was loss of recovery support systems for the participants in the current study. In the context of a "new normal," individuals were juggling not only their recovery, but the numerous losses and exacerbations in mental health symptoms that accompanied the COVID-19 pandemic. In light of these challenges, many felt that their motivation for recovery and ability to stay sober were tested greatly during the pandemic.

Loss was a complex and layered phenomena for many during the pandemic, causing individuals to experience multiple losses as they navigated the "new normal." On top of traditional losses such as the death of a loved one or friend, people with SUD were coping with loss of social supports, employment, health, and freedom, leading many participants (n=19) to experience some form of loss during the pandemic. Several participants expressed that their friends or family died during the pandemic (P37, P53, P60, P140, P142, P164), meaning some lost important members of their recovery support systems as well (P60, P140). P140 shared

"Some of my biggest supporters died during the pandemic." P60 talked about the vast amount of loss experienced, including the loss of individuals who they had been in recovery with. "A lot of people died. People who I have known for my entire recovery. A lot of other people relapsed and don't come around anymore." For P164, loss was experienced in several contexts, which combined to create a more difficult recovery experience. "I lost my job and relationship during Covid and I lost several friends due to Covid, so I really wanted to fall back into alcohol." The participants in the current study experienced loss in multiple areas of their lives, which occurred in the absence of consistent recovery support.

In addition to experiencing tremendous loss, many of the participants in the current study (n=104) expressed concerns related to mental health symptoms during COVID-19. Most of these participants reported symptoms of depression (n=51) and/or symptoms of anxiety (n=53) in addition to their SUD. A number of participants (n=20) expressed that when their mental health worsened during the pandemic, their motivation to maintain sobriety decreased. "It's more difficult to maintain sobriety during the COVID-19 pandemic. Depression makes me want to use more" (P127). Other participants (P58, P79, P115, P127) also reported that their anxiety increased during the pandemic, making abstinence more daunting. P164 shared, "The stress level has been unbelievable. Fighting my mind to stay sober has been much more difficult." With the loss, isolation, and general fear the pandemic caused worldwide, individuals with SUD experienced greater mental challenges as they navigated recovery.

For the participants in the current study, not all environments were created equal and afforded the same levels of recovery support. Many of the participants (n=21) expressed that their environment and the people within it positively or negatively influenced their substance use and their capacity to manage their recovery during the pandemic. For P136, limitations in their

environment due to social distancing requirements prevented them from experiencing the negative consequences of their substance use: "I am at home now so it is easier to be on my own schedule and I am less impacted by the negative impacts of my substance abuse." Fewer natural consequences enabled use and decreased motivation for recovery.

Some individuals felt overwhelmed between pandemic and environmental stressors, making substance use a coping strategy that they returned to in order to decrease uncomfortable feelings. "Being constantly surrounded by my family, no alone time, stressed about what was going to happen, anxiety, panic attacks, alcohol was the only thing that kept me calm" (P79). Other participants attributed their increased substance use to a lack of social obligations. "Lockdown made my drinking worse since I just stayed at home except buying food and alcohol at the supermarket" (P58). The decrease in daily routines and social interactions caused by nationwide social distancing mandates made substance use easier to get away with and more likely to be implemented as a coping strategy for pandemic related stressors.

For some participants (P33, P66, P131), their home environments buffered these stressors and increased their motivation to maintain sobriety. "Working from home motivated me to get my act together" (P131). P33 shared the need to change their home environment in order to achieve the same result. "It was very difficult for me because it was all around me all the time. Because of it I left my home and everything I had behind and moved in with friends who care for me and helped me with my sobriety. That's where I am now." When asked about those they interacted with during the pandemic, 60 participants (40.54%) identified that they had spent time with friends and family who are supportive of their recovery in the past 16-30 days. This reflects the presence of a support system for these participants, or at least a willingness to maintain their recovery by surrounding themselves with those who have their best interest at heart. Not every participant had access to supportive people during the pandemic though, with 29 participants (19.59%) sharing that they had only spent 1-3 out of the past 30 days with supportive people, and 26 participants (17.57%) identifying that they had not spent any time with supportive people. This shows that many individuals did not have the empathetic relationships that others were able to depend on in their preexisting support systems. COVID-19 left people with SUD with their own support systems and environment, which were not always cohesive to their recovery goals.

Individuals' motivation to remain in recovery varied as they experienced many changes to their recovery support systems. Due to the significant stressors experienced during the pandemic, a number of participants felt more compelled to use substances (P31, P32, P47, P49, P79, P104, P124, P127, P164). P104 shared, "During the height of the pandemic, I wanted to use more than I have in 14 years," recognizing that individuals were struggling with sobriety regardless of how long they had been in recovery. For the participants in the current study, experiencing cravings and urges did not directly equate to relapse. "I wanted to drink because I was bored at home but with my daughter at home with me ... I wanted to drink less" (P31). P31 faced greater cravings due to the isolation at home, but knew she had to remain present for her daughter, depicting the conflict between wanting to use substances in reaction to the pandemic while recognizing the importance of maintaining responsibilities in caring for others.

The isolation within their homes created a more difficult environment for participants to begin or maintain their sobriety in, as it decreased social obligations in favor of safety measures. 16 participants expressed that sobriety was more difficult to maintain for these reasons, "I see friends and family less often during COVID which makes staying sober more difficult" (P86). Without the necessary support system, sobriety felt less achievable and more of a challenge for participants. "More idle time makes keeping your mind off using hard" (P117). This isolation combined with greater free time during the pandemic gave participants less access to coping strategies that they had previously used to prevent substance use. 20 participants reported that they were less motivated to be sober during the pandemic, most of whom attributed this to their separation from recovery support and the accountability it had provided:

Motivation is more difficult to maintain. I don't have the same support system anymore, or the same group. People who stayed within those groups do not follow health recommendations and I don't see them as being as helpful, anymore. It's harder to stay focused and motivated with a lot less support. (P42)

Along with decreased motivation, P42 also shared the implications that maintaining safety during the pandemic had for their motivation, as they were forced to make a choice between putting themselves at a greater health risk to supplement their motivation, or maintain their safety and feel more isolated in their recovery.

A significant number of participants (n=52) expressed that their substance use increased during the pandemic as a result of the various challenges they encountered during this time. P158 shared "I had other circumstances that contributed, but I started using opiates again during the pandemic and seemingly couldn't stop with my use increasing gradually. I recently got sober again" (P158). Many individuals felt as though their hardships compounded during the pandemic, which exhausted their ability to maintain sobriety and led some to use substances again.

COVID-19 safety measures often separated people from recovery support, friends, and family that motivated them in recovery (P42, P68), and persisting feelings of boredom and hopelessness made sobriety feel more difficult to maintain (P104, P117). Between the loss of

loved ones, isolation within their homes, and exacerbated mental health symptoms, people with SUD experienced greater hardships that challenged their recovery during the pandemic.

Grow Through What You Go Through

Many individuals with SUD felt challenged in their recovery during the pandemic, even those who had been in recovery for longer periods of time. However, a number of participants also expressed that the increased free time for self-reflection that came with the pandemic helped them improve their substance use recovery habits. These participants (n=39) experienced increased motivation, which some attributed to greater free time to devote to their recovery (P92, P131, P166). P166 shared "It has increased my free time that I have to work on myself which has led to less use." Others experienced health crises due to COVID-19 (P13) or their substance use (P130, P133), which signified a need to decrease their substance use to maintain their well-being. P133 shared "I got very ill due to my drug use, not covid, in June 2020…I had to get clean or die. The things happening in the world, like COVID, have motivated me to stay clean and live my best life." Though P133 was forced to make a choice between substance use or his health, he emerged with a newfound motivation and appreciation for his life. Other participants also expressed a greater appreciation for life in the face of all of the pain and loss the world was experiencing, which motivated them in their recovery (P61, P93, P121). P121 shared,

My motivation has increased to get sober as I've rediscovered love for my wife and saw so many family members in need. I realized how good I had it and began to help others. That started with helping myself. I had to focus. (P121)

22 participants reported that sobriety was less difficult to maintain during the pandemic, as social distancing mandates both extended time to focus on themselves and limited their ability to obtain and use substances. P139 shared "It's less difficult mainly because I stick to myself and surround myself with hobbies. Having things slightly shut down or limited helps in that regard." Others found that increased family time was a major factor that assisted in their recovery. "Having my family around me at all times, while difficult, allowed me to have my "why" always present. Accountability" (P132). While many participants felt detached from communities that held them accountable in their recovery, individuals such as P132 felt the continual reminder of the reasons why recovery was important in their lives.

Although the pandemic was very difficult, as 18 participants explicitly expressed, several participants (P37, P68, P92, P101, P123, P164) also viewed it as a challenge that they could still overcome. P68 shared "It's been a challenge but I've continued to pull through." P92 also shared that recovery was possible despite the struggles they encountered. "It was hard and kind of lonely, but it wasn't impossible. I stuck with it and with the help of my family, I'm still sober." These participants exhibited a realistic view of the challenges the pandemic posed for people with SUD while still recognizing the value of resilience and perseverance.

Some participants (P66, P71, P168) expressed that their recovery during the pandemic was generally a positive experience even with its challenges, recognizing the strength that it takes to make the best out of a difficult situation. For example, P71 wrote "I am very happy and so glad to have been able to make lemonade during a time of lemons (COVID)," recognizing that though the pandemic created barriers for individuals with SUD, it was also a period of growth and resilience. Additionally, some participants (P57, P60, P131, P133, P154, P168) shared that they had adopted a more positive outlook in their recovery that carried forward with them after restrictions were lifted. P168 shared "it did make my mindset shift to a more positive, outward focus," helping them view their recovery differently and increasing attentiveness to others' needs as well.

Other participants (n=47) shared a positive outlook in relation to their recovery activities, expressing that they had improved since the pandemic began. Most of these participants found they had greater recovery support systems than they did pre-pandemic, whether in online group meetings (P6, P28, P48, P73, P101, P158), peer support (P46, P81, P102, P124, P157, P162), or social media (P28, P61, P92). P46 shared, "Since we weren't able to do many things during that time, going outdoors and exercising was the perfect thing for me to do to support my recovery. Also, keeping in touch with family through phone or text." Along with sustaining relationships with family and friends using virtual strategies, P46 utilized their free time to foster activities conducive to their recovery.

The pandemic provided an opportunity for people with SUD to establish hobbies and other personal activities that are not specific to SUD services, including self-care, leisure activities, and spending time with loved ones. When asked which personal activities they found most helpful in their recovery during COVID-19, individuals shared they engaged in hobbies (n=25), practiced mindfulness (n=16), exercised (n=14), and spent time in nature (n=12). By participating in these activities, individuals were able to keep themselves productive and on track in their recovery, despite the challenges of the pandemic. Many participants expressed that they engaged in several activities at a time: P39 utilized "Physical activity, CBT and mindfulness practices, proper nutrition, psychiatric medication, regular therapy, and peer support." P133 described "For me the most important thing about maintaining my recovery is my medication and staying positive and productive." By filling their time with meaningful activities and connecting with others, individuals could compensate for both the boredom and isolation that the pandemic created.

Despite the stressful implications of the pandemic for people with SUD, many participants expressed that it was a period of introspection and growth for them. The extended free time and decreased social obligations provided greater opportunities to focus on themselves and engage in meaningful recovery activities. Many individuals were able to establish or maintain healthy routines for their recovery and experience a greater appreciation for their well-being.

Discussion

The participants in the current study confirmed previous research identifying the importance of connectedness and community involvement in recovery (Davidson et al., 2010; Mahar et al., 2013; Zemore et al., 2018), which became more apparent to them in the absence of in-person meetings. Similarly to Horigian and colleagues' (2021) findings of elevated loneliness during the pandemic, many participants expressed a sense of disconnection from their recovery support systems due to social distancing policies. Online recovery support provided a much needed substitution for in-person meetings, but it did not provide the equivalent recovery support, accountability, and relationships. Participants in the current study shared struggles with engagement in virtual support services because they did not offer the same support as in-person meetings, with many also expressing a dislike of zoom meetings. Though most participants shared that they had access to the necessary technology for virtual services, many struggled to find and use online platforms. Others expressed barriers such as inconsistent internet access, and a number of participants did not have access to SUD services at all during the pandemic, reflecting service disparities documented in previous literature (Jemberie et al., 2020).

Many participants in the current study experienced greater challenges in their recovery during COVID-19, especially in relation to their mental health and motivation to remain sober.

The majority of participants in the current study (n=113) identified as having a co-occurring mental health diagnosis, which intensified in social isolation and general fear surrounding COVID-19 and aligned with previous literature that found elevated levels of depression and anxiety during this time (Carlyle et al., 2021). Participants reported that their hardships during the pandemic, especially concerning their mental health, increased challenges to maintaining motivation for sustained recovery. Many shared that their exacerbated mental health issues triggered greater cravings, which felt more unmanageable in isolation (Shircliff et al., 2022). Even those who had maintained longer periods of sobriety throughout the pandemic expressed difficulty in maintaining abstinence, which is consistent with Hurley and colleagues' (2021) findings that individuals experienced challenges with sobriety regardless of their time in recovery. Similarly to participants in Hurley and colleagues' (2021) study, individuals in the present study expressed that experiences of loss, mental health challenges, and boredom during the pandemic increased their desire to use substances.

Despite the challenges that many faced in recovery during COVID-19, some participants felt that the option of virtual recovery services decreased personal barriers they had previously experienced in accessing in-person recovery support, which was unique to the current study. Individuals who did not have access to transportation, had a family to care for, experienced social anxiety, or encountered other personal factors that had interfered with attending in-person meetings found virtual meetings more accessible and compatible with their needs. Others felt that virtual recovery services were more convenient and allowed for greater anonymity, which also helped them feel more comfortable in accessing recovery services. The decreased barriers to recovery services that these participants experienced indicate the usefulness of virtual services in reaching more individuals in need of recovery support, especially those who found in-person meetings incompatible with their daily lives.

A number of participants in the current study shared that their experiences during COVID-19 helped them grow in their recovery in ways that they had not expected. This is consistent with findings from Shircliff and colleagues (2022), who found that participants rediscovered the value of meaningful recovery activities in the absence of societal and family responsibilities. Individuals in the present study also found that they could devote more time and attention to self care, leisure activities, and spending time with loved ones during the pandemic. Consistent with previous research, a number of participants in the present study expressed that sobriety was less difficult for them to maintain due to this increased time for their hobbies (Shircliff et al., 2022) along with sharing that COVID-19 limited their ability to obtain and use substances. As a result, individuals were able to establish healthy recovery activities to decrease the likelihood of using substances and provide a semblance of the routine in-person recovery support had given them.

In contrast to previous literature where the vast majority of participants reported adverse experiences related to COVID-19, a number of participants in the current study expressed that they felt more motivated during the pandemic and were able to grow from the challenges they faced. Several participants encountered health crises due to their substance use during the pandemic, which signified that they needed to stop using substances if they wanted to preserve their health and remain present for their loved ones. Others felt more gratitude for the privileges they did have during the pandemic, such as their families, which led to a greater sense of purpose and motivation in their recovery. Some participants experienced a greater appreciation for what they did have during the pandemic and how they were able to persevere through its challenges, which contributed to a positive mindset that helped them focus on others as well as themselves. These results reflect the important role that self-awareness, gratitude, and resilience has for many in recovery.

Limitations

One limitation of this study is the lack of diversity in the participant pool. The majority of participants identified as white and had obtained a high school education or greater, leaving other demographics less represented. Another limitation was that the study was conducted online using SurveyMonkey, which required participants to use technology in order to complete the survey and created the possibility that individuals who faced challenges in accessing online services may not have been able to complete the survey, leading to an underrepresentation of these barriers in the results. Lastly, participant experiences were self-reported, which allows the potential for bias as individuals are aware of how their answers may be perceived. Providing socially acceptable answers to the survey, rather than their honest ones, may have influenced participant answers.

Future Directions

Future studies should explore the continued use of virtual recovery support services in order to understand its role in the field separate of COVID-19 limitations. Considering the barriers that virtual services decreased for individuals in the current study, it is important to investigate if and how telehealth may continue to offer convenient, accessible SUD services beyond the pandemic. Future research should follow up on populations with SUD as they emerge from the pandemic to monitor their overall health and experiences with recovery support, including transitions back to in-person services to compare these experiences. As in-person services resume, identifying ways to increase experiences of connection in non-traditional

services such as virtual recovery support may help to increase treatment engagement in a population that historically underutilized treatment services. Whether the pandemic had a lasting effect on individuals' well-being and outlook in recovery is also important to consider given the exacerbated hardships that people with SUD faced.

Conclusion

The present study aimed to explore the experiences of individuals with SUD and their recovery journeys during the COVID-19 pandemic. Participants expressed a loss of connection upon the cancellation of in-person support services and some had difficulties engaging with virtual SUD services. For many, the pandemic prompted a series of hardships in relation to their recovery, including loss of relationships, mental health challenges, and decreased motivation towards sobriety. However, a number of participants experienced COVID-19 differently, and felt motivated to adopt a more positive outlook and establish meaningful recovery activities to persevere their hardships. Though many participants expressed that the pandemic was a difficult experience, they also viewed it as an opportunity to improve in their recovery.

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Appendix A

Survey Questions on Substance Use and COVID-19

Q16. Which substances have you used in the past? (Select all that apply and include any use even

if in the past)

Q17. Do you abuse more than one drug at a time?

Q18. If Yes, please explain

Q19. How long have you been sober?

Q20. How much are you currently using (please include which substances and quantity used for

example marijuana 3x day/week or 1 oz per day etc)?

Q21. What is your longest period of sobriety? When was it?

Q22. What was your substance use the week leading up to March 16th, before the state's Stay at Home order was issued?

fione ofder was issued?

Q23. How many days per week were you using?

Q24. On days you were using, how much per day did you use?

Q25. Did your substance use change during the COVID-19 pandemic (March 2020-present)

Q26. How has your substance use changed?

Q27. Has the Coronavirus/COVID-19 pandemic impacted your motivations for becoming sober or maintaining your sobriety?

Q28. Please describe how your motivation has increased or decreased

Q29. Has the Coronavirus/COVID-19 pandemic crisis in your area impacted your ability to

obtain and/or maintain sobriety?

Q30. In what ways is it more/less difficult?

Q31. In the past 30 days, how much were you bothered by cravings or urges to drink alcohol or use drugs?

Q32. How confident are you in your ability to be completely abstinent (clean) from alcohol and drugs in the next 30 days?

Q33. Has the Coronavirus/COVID-19 pandemic affected your social support for recovery

Q34. In what ways has your social support been affected?

Q35. In the past 30 days, how many days were you in contact or spent time with any family members or friends who are supportive of your recovery?

Q36. In the past 30 days, how many days were you in any situations or with any people that might put you at an increased risk for using alcohol or drugs (i.e., around risky "people, places or things")?

Q37. Of the people you live with or interact with on a daily basis, how many of them are current users?

Q38. Are you currently receiving substance use services (for example, attending counseling,

AA/NA, peer support, other types of recovery support?)

Q39. Please describe the substance use services you are receiving/engaging in

Q40. If you are receiving substance use, how long have you been receiving these services?

Q41. Before COVID-19 pandemic, how long did you access these services?

Q42. In the past 30 days, how many days did you attend self help meetings like AA or NA or other recovery activities?

Q43. Which of these were you using before the Coronavirus/COVID-19 pandemic in your area?

Q44. Have you ever received a mental health diagnosis?

Q45. Please describe your mental health diagnosis/concerns

Q46. Did any of your recovery activities, formal services/treatment, or supports change as a

result of the COVID-19 pandemic (yes/no)?

Q47. What caused the change in recovery activities:

Q48. What challenges, if any, you had accessing these services during the pandemic?

Q49. Did you have experience with virtual or online recovery services and/or supports before

COVID-19 pandemic (for example, did you participate in telehealth appointments, participate in

online discussion boards, forums, support groups, etc.?

Q50. Please describe.

Q51. What services do you typically engage in?

Q52. Did you use recovery support apps on a cell phone, tablet, or computer?

Q53. Please describe what you used.

Q54. If you or your household tested positive for COVID-19 pandemic, were you offered services while in quarantine/isolation?

Q55. Did you or a household member have the necessary technology to access services during/after the COVID-19 pandemic?

Q56. Please describe what technology you needed/would have needed.

Q57. What activities do you find to be most important in supporting your recovery?

Q58. Did you feel the same level of connectedness to recovery supports as you had before COVID-19 pandemic?

Q59. Please explain how you experienced your connectedness to recovery supports during COVID-19

Q60. Did you experience any recovery support/activities that you found to be better than before COVID-19 pandemic? Please provide specific examples.

RECOVERY EXPERIENCES DURING COVID-19

Q61. How did you learn about services available during COVID-19 pandemic?

Q62. How satisfied are you with your progress toward achieving your recovery goals?

Q63. Is there anything else about your experience with recovery during COVID-19 pandemic

that you would like to share with us?