



Full length article

Systemic barriers in substance use disorder treatment: A prospective qualitative study of professionals in the field

Robert D. Ashford^{a,*}, Austin M. Brown^b, Brenda Curtis^a^a Psychiatry—Addictions, University of Pennsylvania, 3535 Market Street, Suite 500, Philadelphia, PA, 19104, USA^b Center for Young Adult Addiction and Recovery, Kennesaw State University, 1085 Canton Place NW Building 6000, MD 6002, Kennesaw, GA, 30144, USA

ARTICLE INFO

Keywords:

Addiction
Addiction treatment
Substance use disorder
Workforce development
Barriers to treatment
Systemic barriers

ABSTRACT

Background: The US is in the midst of one of the largest public health crises in recent history with over 63,000 drug poisoning deaths in 2016 and a projected annual economic cost of over \$420 billion. With the rise of deaths and economic burden related to substance use, it is paramount that systemic barriers within the treatment industry be identified and resolved.

Methods: Data were collected from US substance use treatment professionals (N = 182) in the fall of 2016. Thematic analysis with axial coding was used on anonymized responses to an online open-ended survey. Additional ad hoc testing for variance (education, generation, regional location, and employment) was completed using Monte Carlo chi-square analyses.

Results: 7 major themes emerged: 1) additional training, education, and use of evidence-based practices, 2) expansion of treatment services, 3) increased resources, 4) stigma reduction, 5) increased collaboration and leadership, 6) reductions in regulations, requirements, and incentives, and 7) expansion of recovery support services. Participant response yielded a significant relationship between employment type ($p = 0.002$) and regional location ($p = 0.046$).

Conclusions: Systemic barriers in the treatment field are prevalent from the perspective of professionals engaged in the field. While previously identified barriers are still present, newly reported barriers include: 1) lack of treatment services (e.g., capacity), 2) lack of technological resources (e.g., technological support tools), 3) lack of recovery support services (e.g., recovery housing), 4) lack of collaboration and leadership (e.g., communication and partnership), and 5) increasing unethical practices in the field (e.g., incentive-based patient brokering).

1. Introduction

The United States (US) is currently in the midst of one of the largest public health crises in recent history. In 2016, the US experienced over 63,000 drug poisoning (i.e., overdose) deaths; an increase of 21% from the year before and a 350% increase from 1999 rates (Centers for Disease Control and Prevention, 2017). Loss of life is not the only concern regarding the current crisis, however. The 2016 U.S. Surgeon General's Report on Alcohol and Other Drug Use projected that behavioral health disorders cost the United States over \$420 billion dollars annually (US Department of Health and Human Services, 2016). In addition, it is estimated that over 21.0 million individuals aged 12 and older have a diagnosable substance use disorder, yet fewer than 20% (3.8 million) receive treatment (Center for Behavioral Health Statistics and Quality, 2017). Among individuals who do receive treatment, nearly two-thirds experience a recurrence of substance use within

months of entering treatment (McLellan et al., 2000; Paliwal et al., 2008; Brecht and Herbeck, 2014).

Though substance use treatment programs provide services to over 3.8 million Americans aged 12 or older each year (Center for Behavioral Health Statistics and Quality, 2017), these programs continue to face barriers related to funding, workforce development, administrative burden, and adoption of evidence-based practices (EBP) (McLellan et al., 2003; McLellan and Meyers, 2004). With the rise of drug poisoning deaths and economic burden in the United States, it is paramount that systemic barriers within the SUD treatment industry be identified and resolved quickly. All levels of professionals— administration, clinical, and peer staff— have a unique understanding of the treatment setting as well as the problems associated with successful operation of this setting. Seeking direct feedback from treatment professionals is thus an important place to start in identifying current barriers and any solutions to counteract them.

* Correspondence: Department of Psychiatry—Addictions, University of Pennsylvania, 2111 Melvin St., Philadelphia, PA, 19131, USA.
E-mail address: roberdav@upenn.edu (R.D. Ashford).

Research incorporating direct, open-ended feedback from treatment professionals is needed to expand on the field's current understanding of common barriers within the treatment setting. Similar to recent initiatives to incorporate direct stakeholder feedback in medical care via patient-reported outcome measures and research agendas (Tunis, 2005; Dawson, 2009), as well as the inclusion of individuals in recovery to help design recovery measurement tools (Neale et al., 2016), it follows that those stakeholders with both administrative and direct-service provision could provide valuable feedback on the SUD treatment setting.

Previous research has identified key areas from participant semi-structured interviews, organizational evaluations, and systematic reviews (Carise et al., 2009; Dackis and O'Brien, 2005; Hunt et al., 2017; McLellan et al., 2003; McLellan and Meyers, 2004; McGovern et al., 2006; McLellan, 2002; Marinelli-Casey et al., 2002). These barriers include: 1) the substance use disorder research to treatment gap (i.e., translating research to EBP), 2) a lack of workforce development opportunity (i.e., staff training and professional development), 3) the administrative burden (i.e., paperwork requirements), and 4) the availability of resources to reinvest back into the organization (i.e., budget constraints). However, the identification of these barriers excluded both the participant perception of barriers and how participants would fix the barriers that do exist.

One of the previously conducted studies (McLellan et al., 2003) incorporated semi-structured interviews and follow-up interviews with treatment program directors, administrative support staff, and clinical staff. In these interviews, McLellan et al. (2003) found staff turnover, a lack of infrastructure, and administrative requirements (i.e., data collection for governmental agencies or managed care organizations) to be major barriers from the informants' perspectives. The majority of previous studies, however, collected participant responses to closed-ended questions (i.e., current barrier/not a current barrier) related to a prescriptive list of barriers such as funding and professional development and processes like evidence-based practice adoption. For example, McGovern et al. (2006) utilized a Likert scale measure in which participants ranked potential barriers and resources between 1 (lacking) and 5 (great); while all of the participants ($N = 453$) were professional treatment staff, the use of prescriptive barriers and resources limited the amount of robust feedback that could be captured. Previous research has also not sought to incorporate potential solutions to reported barriers offered by respondents. As such, reported results from previous work are not likely to include both a large proportion of participant perception of barriers or how participants would address these barriers given the opportunity.

In an effort to better understand the barriers and concerns facing the SUD treatment industry, the current study collected open-ended feedback directly from professionals within the field from a diverse set of treatment agencies and organizations. Additionally, in an effort to solicit potential solutions to present barriers, responses were requested in a solutions-focused framework. Digital surveys were used to gather responses to incorporate feedback from professionals across the United States.

2. Methods

2.1. Data collection

Participants were recruited, following IRB approval, via C4 Recovery Solutions' electronic listserv. C4 Recovery Solutions is a non-profit, global, collaborative enterprise of affiliated networks of treatment professionals, mental health professionals, policy actors, insurers, and various other stakeholders who are focused on accountability, quality, and access to addiction treatment services, education, and advocacy. All individuals who worked in the substance use field contained on this listserv, curated by C4 through their annual educational conferences in the substance use field, were invited twice via a direct e-

mail invitation.

Following recruitment via e-mail, participants had until the survey cut-off date (10-days from open) to respond to the survey. Participants were provided an overview of the study in the form of an informed consent once they clicked the study link in the invitation e-mail. Participants that consented to the study then completed a brief demographics questionnaire and provided open-ended responses related to personal assessment of what they would change in the substance use disorder treatment field. This personal assessment was completed via responses to the question: "If possible, what would be the one thing you would change in the substance use disorder field?"

Participants were notified at the beginning of the survey that they could stop participating at any point in time, that their responses would be confidential, and that the sole identifying factor (IP address/GeoTags) would not be collected via the secure survey portal, thus ensuring anonymity. Participant responses were stored electronically and then exported for analysis to be completed within SPSS v22.0 for quantitative data and thematic coding for qualitative data via Nvivo v10.00.

2.2. Data analysis

Descriptive statistics analysis was completed on the demographics questionnaire to give overall participant demographics. Qualitative data were approached from a qualitative description design (Sandelowski, 2000) and thematically coded using first an open-coding process followed by an axial-coding process (Glaser and Strauss, 1967; Strauss and Corbin, 1990). This was done first individually by each researcher (RA, AB) and then collectively as a research team (all authors). Throughout, researchers noted similarities and disagreements in individual analyses of each participant to capture nuances and the varied perspectives of each researcher (Walsh and Koelsch, 2012). Themes that were identified as having higher disagreement amongst the researchers (5% of coded answers during the first review) were re-evaluated and either moved to a different theme or moved to a miscellaneous category; thus, interrater agreement of 100% was achieved during the final review. Data saturation was considered a priori by using multiple triangulation techniques (Denzin, 2009, 2012). This involved prioritizing the collection of data from multiple professionals within different employment types of the substance use disorder profession, the use of multiple coders to interpret and analyze data, and the recruitment of a large sample size.

Following initial data analysis, it was determined that additional ad hoc testing related to any potential interactions among participant responses via codified themes and certain demographic characteristics (generation, education, employment, and geographic location) would be beneficial. Initially, Pearson chi-square tests were proposed. However, when analyzing cross tabulations, it was determined that all proposed tables had greater than 20% of cells with less than the expected 5-count. As such, it was determined that exact Monte Carlo testing (Siegmund, 1976; Mehta and Patel, 2012) would be utilized. Monte Carlo tests were performed for all tables (Region = 4×8 table; Education = 3×8 table; Generation = 3×8 table; Employment = 4×8 table) using 1,000,000 samples and a 99% confidence level. Results from each Monte Carlo test are reported using the chi-square likelihood ratio statistic, degrees of freedom, simulated exact p -value, and the 99% confidence interval (X^2 (DF, N) = L.R statistic value, p -value, (99% CI LL, 99% CI UL).

3. Results

3.1. Participants

Participants in the study ($N = 182$) were mostly male (61.0%), white (95.6%), had a mean age of 53.78 years ($SD = 14.40$), and belonged to the "Baby Boomer" generation. The majority of participants

Table 1
Thematically coded participant responses – all.

	Responses	
	N	(%)
Training/Education/EBPs	47	(25.8)
Treatment Services	42	(23.1)
Resources	27	(14.8)
Stigma Reduction	23	(12.6)
Collaboration/Leadership	18	(9.9)
Reduction Service/Requirements/Incentives	9	(4.9)
Recovery Support Services	7	(3.8)
Nothing	9	(4.9)

held a master's degree or higher (53.9%). The largest portion of participants worked at private, for-profit organizations (34.6%), 33% worked at private, not-for-profit organizations, 22.0% were employed, and 10.4% worked at governmental agencies (federal, state, and local). Participants represented every census region of the United States with 49.5% residing in the South, 29.1% in the Northeast, 15.9% in the West, and 5.5% in the Midwest.

Generational variables were created from participant-reported age by using age cut-offs and three prominent categories: Millennial (18–35 years), Generation X (36–51 years), and Baby Boomer (52+ years). Respondent-provided age was recoded into the corresponding generational category.

Each participant provided a response, resulting in 182 qualitative responses. On average, responses were 23 words in length. 8 major themes emerged from participants responses to what the one thing they would fix about the substance use disorder treatment field would be (Table 1). Themes have been categorized in relation to a solution-focused paradigm (e.g., if a lack of training was the problem, the solution was additional training). These themes were: 1) additional training, education, and evidence-based practices, 2) expansion of treatment services, 3) increased resources, 4) reduction of stigma, 5) increased collaboration and leadership, 6) reductions in regulations, requirements, and incentives, 7) expansion of recovery support services, and 8) nothing should change. Individual responses are available in tables.

3.2. Additional training, education, and evidence-based practices

Additional training, education, and evidence-based practices all align thematically. Continuing education and training is valued in the human services field and is often required as a condition of licensures and certifications. However, participants clearly designated a significant need for additional training and the use of evidence-based practices moving above and beyond the current status quo for licensure and certification retention.

“Help the whole field, including those in recovery, trained professionals, insurers etc. recognize the difference between self-help activities and those with training in recovery. There is a lot of confusion in the field at the governmental level who are no aware of the existing EBT credentials for those in recovery.” (67-year-old (y.o.) male, for-profit, Participant #424495)

“More complete experiential training regarding shame and trauma of therapists who are assisting clients in their recovery process.” (76 y.o. male, self-employed, Participant #42108)

Evidence-based practices (EBP) serve several functions; the primary function is that of uniform service delivery that has shown generalizable results in experimental studies. Though the call for increased use for EBPs has been present for many years within the field, it would appear that the adoption, or perhaps the availability, of evidence-based practices remains a barrier to the field. Also present among participant responses was the notion that additional education is needed not in relation to practice but rather in relation to the understanding and use

of reporting and interpretation of guidelines that inform treatment delivery.

“Training the clinicians at the facilities I work with on how to document for the Reviewer is essential. I have found that over the years, “painting a word picture” for Reviewers assists in achieving the goals. What I often find missing are the crucial physical symptoms (if applicable) required for 24-hr medical monitoring along with not “cutting and pasting.” (62 y.o. female, for-profit, Participant #4274)

“Expand training required for professionals in a variety of fields (e.g., medicine, counseling, Social Work, housing, social services, etc.) to focus on the needs of support for older adults in recovery.” (65 y.o. male, for-profit, Participant #42138)

“Interpretation of what constitutes medical necessity guidelines for substance abuse treatment with managed care organizations. Standardized guidelines, instead guidelines that correlate with the type of medical coverage an individual has. PPO vs. HMO vs exchange.” (48 y.o. female, for-profit, Participant #42102)

3.3. Treatment services

Responses related to treatment services most often involved either a call for additional treatment services or a higher degree of integration between primary health care, mental health disorder services, and substance use disorder services.

“Serving employees and family members who live in Mass, or Ct. it's very hard or impossible to get long term treatment without going out of state. I would advocate for reforming these states treatment policies.” (56 y.o. male, for-profit, Participant #42172)

“No more separate treatment of mental health from treatment of substance use disorders. Integrate services” (24 y.o. male, for-profit, Participant #424491)

The integration of treatment services in the United States has increased but remains a barrier, given participant responses. Additionally, the increased use of medication-assisted treatment/recovery was mentioned only once in all responses coded to this theme.

“There needs to be a greater use of medications to support long-term recovery” (64 y.o. male, for-profit, Participant #42142)

3.4. Resources

Increasing the available fiscal resources to support treatment services is often stated as a barrier to the treatment field. However, while fiscal resources are most called for by participants, additional resources related to technological infrastructure were also present.

“Government funding would help tremendously. We can get calls from individuals seeking recovery and not have a detox or treatment bed to place them in for weeks, by then the desire has subsided.” (33 y.o. female, not-for-profit, Participant #424346)

“Build a website that is available to provider and clients. This system would be full of housing, employment, education, and pro social resources. It would be easy to navigate for those that use it. And it would be easy to manage as far as the providers that use it as a communication tool. Perhaps an app for the phone.” (37 y.o. male, for-profit, Participant #423242)

3.5. Stigma reduction

Stigma reduction, as represented by the substance use disorder professionals' responses, is primarily concerned with expanded education to reduce discriminatory beliefs held by the public, professionals, and the recovery community. This education is called for both within

the context of community education (i.e., public messaging) and within the professional field and larger recovery community.

“Greater visibility for people in recovery on medication-assisted treatment.” (77 y.o. male, Government, Participant #424312)

“Continuing to raise addiction awareness to de-stigmatize mental and addiction healthcare - ergo making treatment available and accessible.” (63 y.o. female, self-employed, Participant #42426)

Stigma reduction did not include responses related to language use within the treatment setting, though recent research has tied linguistics to implicit bias and discriminatory beliefs among the general public and professionals in the field (Kelly and Westerhoff, 2010; McGinty et al., 2015).

3.6. Collaboration and leadership

The collaboration and leadership theme involves a reduction in the perceived fighting between various elements of the care continuum as well as between various recovery ideologies (i.e., medication-assisted recovery versus abstinence-based recovery). Additionally, participants called for leadership to increase communication frequency and style, increase the collaboration with outside organizations, and to raise the bar in relation to ethical standards.

“Better professional collaboration and accountability. A reduction in and regulation of the fiscal gain within the professional community or a more cohesive and visible collaboration amongst interest groups.” (41 y.o. male, self-employed, Participant #42191)

“Direct conversation with co-workers and facilities as opposed to electronic communication.” (65 y.o. male, for-profit, Participant #42214)

3.7. Reductions in regulations, requirements, and incentives

Perhaps the most vitriolic of themes, reductions in regulations, requirements, and incentives involves a desire for reduced administrative tasks (i.e., paperwork requirements), reduced clinical supports along with social supports, and the removal of incentive-based motivation from the treatment field. Participant responses related to the removal of incentive-based motivation (i.e., cash incentives for referrals and profiteering of programs) resulted in responses representative of both the significance of this barrier and the anger it elicited from professionals within the field.

“Knock off the disease/clinical model of addiction. Insurance should pay for educational treatment that is not clinical in nature.” (38 y.o. male, self-employed, Participant #42218)

“The biggest problem we have in our industry is the huge introduction of unethical people and unethical organizations that Obama Care has spawned. There will be a huge price to pay by all of us. Good and bad!” (53 y.o. male, for-profit,

Participant #42224)

3.8. Recovery support services

The theme of recovery support services involves supports for families and post-treatment recovery support services. Recovery support services may include direct support through post-treatment services, such as follow-up counseling, peer recovery support specialist sessions (i.e., recovery coaching), recovery check-ups, and other supportive services. They may also include ancillary supports for education such as through collegiate recovery programs or recovery housing and transitional living.

“Be able to better communicate with families to serve the person in active addiction and support in recovery.” (66 y.o. male, not-for-

profit, Participant #42178)

“I would get treatment providers to integrate recovery housing into their protocol and encourage most of their clients to spend whatever length of time necessary in a recovery residence to become comfortable enough in new behavior to avoid relapse.” (78 y.o. male, not-for-profit, Participant #42183)

3.9. Nothing

A small portion of respondents (4.9%) believed that the treatment field does not need to be fixed and as such responded that they would fix nothing in the field at this time.

3.10. Regional, educational, and generational variance

Regional location of each participant was found by recoding the self-reported state location into a United States Census region variable. The US Census regions represent all states and are classified as the West, North East, Midwest, and South regions (U.S. Census Bureau, 2018). Results from the Monte Carlo (i.e., simulated chi-square) tests found that the relationship between regional location of the participant and thematically coded responses was significant (X^2 (21, $N = 182$) = 35.230, $p = 0.046$, 99% CI [0.045, 0.046]). Overall, the West region was least likely to suggest additional training/education/evidenced-based practices, the South was least likely to suggest additional treatment services and reductions in services/requirements/incentives, the Midwest least likely to suggest additional resources and collaboration and leadership, and the Northeast was least likely to suggest stigma reduction and recovery support services. Additionally, the West was most likely to suggest that nothing needed to be changed in the field. Results from chi-square tests found that the relationship between educational status of the participant and thematically coded responses was not significant (X^2 (14, $N = 182$) = 21.958, $p = 0.123$, 99% CI [0.123, 0.124]).

Results from Monte Carlo tests found that the relationship between generation of the participant and thematically coded responses approached significance (X^2 (14, $N = 182$) = 23.067, $p = 0.096$, 99% CI [0.095, 0.097]). Overall, Millennials were most likely to suggest additional resources, stigma reduction, and that nothing should be fixed compared to Generation X and Baby Boomers. Generation X was most likely to suggest additional collaboration and leadership and additional training/education/evidence-based practices compared to Millennials and Baby Boomers. Baby Boomers were most likely to suggest treatment services, reductions in service/requirements/incentives, and recovery support services compared to Millennials and Generation X.

Results from Monte Carlo tests found that the relationship between employment type of the participant and thematically coded responses was significant (X^2 (21, $N = 182$) = 47.986, $p = 0.002$, 99% CI [0.002, 0.002]). Overall, those that were self-employed were most likely to suggest additional training/education/evidence-based practices, collaboration and leadership, and that nothing needing to be changed compared to those employed in private (for profit), private (not for profit), and governmental settings. Those that were employed in private (not for profit) settings were most likely to suggest reductions in service/requirements/incentives and recovery support services compared to those employed in private (for profit), self-employed, and governmental settings. Those that were employed in governmental settings were most likely to suggest treatment services, additional resources, and stigma reduction compared to those employed in private (for profit), private (not for profit), and self-employed settings. Full results by region, education, generational, and employment variances are presented in Table 2.

Table 2
Thematically coded participant response by region, educational status, generation, and employment type.

	Training/ Education/ EBPs		Treatment Services		Resources		Stigma Reduction		Collaboration/ Leadership		Reduction Service/ Requirements/ Incentives		Recovery Support Services		Nothing	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
Region																
Northeast (N = 53)	13	(24.5)	18	(34.0)	7	(13.2)	5	(9.4)	4	(7.5)	2	(3.8)	0	(0.0)	4	(7.5)
Midwest (N = 10)	2	(20.0)	3	(30.0)	0	(0.0)	1	(10.0)	0	(0.0)	2	(20.0)	1	(10.0)	1	(10.0)
South (N = 90)	30	(33.0)	15	(16.7)	14	(15.6)	13	(14.4)	9	(10.0)	3	(3.3)	5	(5.6)	1	(1.1)
West (N = 29)	2	(6.9)	6	(20.7)	6	(20.7)	4	(13.8)	5	(17.2)	2	(6.9)	1	(3.4)	3	(10.3)
Educational Status																
Associates (or less) (N = 51)	10	(19.6)	8	(15.7)	9	(17.6)	7	(13.7)	6	(11.8)	3	(5.9)	2	(3.9)	6	(11.8)
Bachelors (N = 33)	6	(18.2)	9	(27.3)	8	(24.2)	6	(18.2)	1	(3.0)	0	(0.0)	2	(6.1)	1	(3.0)
Masters (or more) (N = 98)	31	(31.6)	25	(25.5)	10	(10.2)	10	(10.2)	11	(11.2)	6	(6.1)	3	(3.1)	2	(2.0)
Generation																
Millennial (N = 24)	5	(20.8)	4	(16.7)	7	(29.2)	4	(16.7)	1	(4.2)	0	(0.0)	0	(0.0)	3	(12.5)
Generation X (N = 46)	17	(37.0)	7	(15.2)	9	(19.6)	3	(6.5)	6	(13.0)	2	(4.3)	1	(2.2)	1	(2.2)
Baby Boomer (N = 112)	25	(22.3)	31	(27.7)	11	(9.8)	16	(14.3)	11	(9.8)	7	(6.3)	6	(5.4)	5	(4.5)
Employment Type																
For Profit (N = 63)	21	(33.3)	17	(27.0)	5	(7.9)	7	(11.1)	6	(9.5)	3	(4.8)	0	(0.0)	4	(6.3)
Not for Profit (N = 60)	12	(20.0)	11	(18.3)	13	(21.7)	8	(13.3)	6	(10.0)	4	(6.7)	6	(10.0)	0	(0.0)
Self-employed (N = 40)	14	(35.0)	8	(20.0)	3	(7.5)	3	(7.5)	5	(12.5)	2	(5.0)	1	(2.5)	4	(10.0)
Governmental (N = 19)	0	(0.0)	6	(31.6)	6	(31.6)	5	(26.3)	1	(5.3)	0	(0.0)	0	(0.0)	1	(5.3)

4. Discussion

Barriers within the substance use disorder (SUD) treatment field have most often been presented by previous research in the form of quantitative multi-response results (Carise et al., 2009; Dackis and O'Brien, 2005; Hunt et al., 2017; McLellan et al., 2003; McLellan and Meyers, 2004; McGovern et al., 2006; McLellan, 2002; Marinelli-Casey et al., 2002). The results from the current study provide an important context to frame these barriers with direct professional feedback on the largest barriers to the SUD treatment field and, perhaps most importantly, through a solutions-focused lens. While similar barriers were found among our results as in the previous research, such as administrative burden, lack of fiscal resources, a lack of workforce development support, and a lack of evidence-based practice adoption, other important barriers were also found that had yet to be articulated in existing literature. These include lack of treatment services, lack of technological resources, lack of recovery support services, lack of collaboration and leadership, and the increasing unethical practices in the field. Additionally, the barriers present within the SUD treatment field have often been viewed from a national perspective and are thus missing important considerations in regard to physical location, generational status, educational status, and employment type. Our findings show that employment type and regional location have a significant relationship to the barriers faced and the solutions desired, while generation of participant approached significance and should be considered.

Not surprisingly, the greatest call for more resources and additional treatment services came from participants working in governmental agencies. SUD-related issues and government dispensation of resources have historically been areas of unfunded mandates and funding cuts in times of scarcity. Additionally, only an estimated 1.0% of federal and 1.6% of state addiction-related funding is allocated to treatment services (The National Center on Addiction and Substance Abuse, 2009). Respondents working in governmental agencies also suggested the importance of stigma reduction most often. This may be aligned with the view that government should serve a non-partisan and morality-free

role as a social safety mechanism to help those who are in need of care, to which stigma would be antithetical. Additionally, those reliant on governmental health assistance are more likely to be from underserved populations and have indigent care needs. By serving an already highly stigmatized population, those working within the governmental agencies are likely to see both institutional stigma and social stigma as significant barriers to quality care for SUD related issues.

Self-employed participants suggested a need for additional training/education/evidence-based practices and collaboration and leadership most often, suggesting that the resources available to those professionals operating in private-practice settings lack the infrastructure and opportunities available to those in private and governmental settings. Thus, it should be a priority in the future to support self-employed practitioners to receive additional support in these areas, as these professionals play a critical role within the SUD treatment field.

Professionals within the private (not for profit) setting most often suggested a need for a reduction in services/requirements/incentives, and multiple participants suggested that administrative burden should be reduced. This is in line with previous research findings, but that it manifested at such high rates within the private (not for profit) setting may suggest that the lack of workforce, resources, and infrastructure disproportionately impacts this setting as compared to other employment types (namely, private (for profit), self-employed, and governmental agencies).

The SUD treatment field is one of the few that employs three generations of professionals at concurrent times (Ashford and Brown, 2017). As such, it is critical to review any results post-hoc through a generational context. Results viewed through this generational context provide important implications for the SUD treatment field. Those that came to the field when there was a lack of evidence-based modalities and few outcomes studies, namely professionals over 52 years of age (Baby Boomers) and between 36 and 51 years of age (Generation X), had the highest percentage of responses supporting increased education, training, and evidence-based practices. Of these two generations, Generation X, having experienced the evolution of the field at a time of enormous growth and expanding service models, had the greatest

percentage of calls for increased training, education, and evidence-based practice. This is supported by findings from Ashford and Brown (2017) that suggest Generation X lacked the education and training but saw the value in evidenced-based practices, as compared to Baby Boomers.

Positionally, Generation X was trained in the field and through a modicum of education most likely delivered by the Boomer Generation. They have also been well-entrenched in their careers as professionals between the ages of 18 and 35 (Millennials), and many have entered the field with a higher degree of formal education but less practical experience. It is not clear from the responses whether “training” includes informal or on-the-job training. However, for many of the Generation X professionals, this was likely where the majority of their skills were honed. It is likely that Generation X respondents see both the practicality of informal learning combined with more intensive education and recognize the future of the field as being one that is centered around evidence-based practices. Millennials, on the other hand, have likely been highly exposed to the theory of evidence-based practice within their formal education, reflective of their lower percentage of calls for more education, training, and evidence-based practice.

Baby Boomers most often suggested additional treatment services as a priority for fixing the SUD treatment field. Though Generation X and Millennial respondents had comparable response rates, there exists some disparity between Boomers and the younger generations regarding the expansion of treatment services. It is plausible that Boomers have had longer careers in the treatment field compared to younger counterparts in Generation X and the Millennial generation, though it is possible that Boomer participants could have also had a career change resulting in less lengthy careers in treatment specifically. While length of career was not captured among participants, generally longer careers may have resulted in experiencing vast amounts of change in the way treatment is administered. It is telling that after such potential long careers in a rapidly changing field the chief concern of the Baby Boomer generation is the need for treatment services expansion. Considering that specialized treatment in the U.S. for SUD only reaches roughly 10% of those who may need care (Park-Lee et al., 2017), the experience of this generation cannot be overlooked. The call for expanded treatment may be wise to heed. Furthermore, the concerns of the Boomers are a time sensitive matter, as this generation increasingly exits the field, and the younger generations see less need for expanding treatment services. However, it should be noted that it is possible that the younger generations believe that additional use of evidence-based practices and efficacious training/education can result in higher quality of care, therefore reducing the need for overall capacity, as more people who receive care will need less treatment episodes overall. It may be useful for future research to examine these attitudes.

Millennials accounted for the highest percent of responses calling for additional fiscal and technical resources. Speculatively, this may be related to those respondents who work in the most direct care capacities rather than those older-generation respondents who are likely to be closer to management and budget realities. Additionally, the willingness and desire to adopt technological solutions or tools to support their work is often increased among young professionals (Hershatter and Epstein, 2010), which would support the generational differences between millennials, Generation X, and baby boomers.

Physical location of participants, specifically their regional location in the United States, also reveals intriguing findings. Common assumptions would suggest that the progressive political policies would translate into the field across different regions. However, this does not line up in all areas, most notably within the South, where respondents saw a high need for change within the field and demonstrated the lowest percentage support for the status quo, surmised from the low percentage of “Nothing” needing to be changed and the low percentage calling for a reduction in services and incentives. Also in the South, a high percentage were calling for expansion of treatment service, evidence-based practices, education and training, and stigma reduction—

all indicative of a more progressive professional orientation, which is not congruent with the common southern region ideology assumptions. Comparatively, the Northeast region, typically considered more politically progressive, showed a 7-fold increase of participants stating “Nothing” needs to be changed.

Ideological assumptions aside, the regional variance results are suggestive of a desired overall increase in treatment services, resources, additional training/education/evidenced-based practices, and stigma reduction in all regions. The variances among respondents are likely more attributable to the impact of the current opioid crisis— due to constraints on system capacity and death rates, for example— and state/local government funding levels rather than manifesting professional ideologies. This point should not be understated, as regional variances of support for the treatment industry through governmental policies, economic funding, and general social beliefs of the public can all influence the ability of professionals to care for individuals struggling with substance-related issues. The beliefs and concerns of professionals are not necessarily incorporated into the system-wide capacity for support for professionals; this highlights a significant tension between what professionals need to do their jobs and what support they receive from the public (political) and private (economic) spheres. As a country facing a large-scale substance-use problem with high mortality and economic/social costs, incorporating the professional opinions of those working in the field will be essential to efficient and responsive delivery of services in dealing with this public health issue.

4.1. Limitations

The results from the current study should be viewed in light of several limitations. First and foremost, though the sample size for a qualitative study is quite large, it was completed digitally and did not allow for in-person interviews and follow-up interviews. As such, the lack of any member check in the design is likely to have an impact on the richness, robustness, and internal validity of the data presented. Additionally, the recruitment methodology was convenience sampling, and it is unlikely that the results are generalizable to the entire field. While representations from multiple generations, employment agency types, and regions of the United States were present in the current study, the number of participants from the Southern region was larger than all other regions. This oversampling of the Southern region may have resulted in biased results overall. It is also important to note that the type of profession each participant represented was not collected. While employment agency is an important characteristic, it would be helpful to place the responses into context of what type of professional role each participant holds to ascertain if barriers were more representative of a specific profession or a type of employment agency.

The lack of data collected from diverse respondents also presents a significant limitation. However, this generally speaks to a large disparity of diversity within not only the current sample but also the larger SUD treatment field. In 2003, a national sample of treatment professionals found the workforce to be comprised of mostly non-Hispanic white professionals (Mulvey et al., 2003), similar to the demographics of the current study. It is critical to resolve this disparity at the professional level but also in future research so that any suggested solutions and analysis of barriers are representative of multiple points of view and are informed by racial, ethnic, and cultural identities and experiences.

Finally, the size of the average response, 23 words, is smaller than is typical for a qualitative study. This size is likely to have an effect on the overall depth of the analysis. While the sample size of the study allowed for similar themes to be represented more frequently across a large portion of respondents, in-person interviews and follow-up questioning to gather additional data would have allowed for a more in-depth analysis to be completed.

4.2. Future directions

The results from the current study provide an important framework for identifying key barriers to the future success of the SUD treatment field and the individuals it serves. The newly identified barriers of a lack of treatment services, lack of technological resources, lack of recovery support services, lack of collaboration and leadership, and the increasing unethical practices in the field should be studied in-depth moving forward. This should not occur in isolation, however, and should include ongoing exploration of previously articulated barriers such as administrative burden, lack of fiscal resources, a lack of workforce development support, and a lack of evidence-based practice adoption.

The tangible impact of these newly identified barriers should be explored in relation to incurred costs, the benefits of resolution, and their relation to legislative policy or organizational policy. Additionally, the solutions-focused perspective of the results presented here should be used as a starting point for putting forth recommendations to resolve the identified barriers. International agencies and policy makers should also consider these results within the context of their own substance use disorder treatment system, as it is plausible that similar barriers are likely faced in developed countries across the world. Further exploration with professionals in these countries should be undertaken to discover any differences or similarities between the United States and the respective country.

Future study on barriers in the treatment field should also include additional stakeholder groups. It is critically important that qualitative feedback is collected from the individuals served by the treatment field, whether they are previous service recipients, active drug users that have faced barriers to engaging in treatment, or family members of individuals who have been served and need services. Similar to those that work within the field, collecting data from these stakeholders is likely to provide a more robust framework of barriers to treatment and allow for a more rigorous response to overcoming identified barriers.

From our perspective, one thematic result from the current study also warrants singular focus. With the recent surge in exposure of the unethical practice of “patient brokering”, the act of receiving material incentive (i.e., money) to guide patients to enroll in a particular treatment program or organization, it is not surprising that many of the responses in the reduction of services, requirements, and incentives related to this issue. This finding is critical to the future of the field. While the unethical practice itself may not be new, the findings relating it to a significant barrier to substance use disorder treatment are. While it can be speculated that the separation of substance use disorder treatment from the more mainstream health care system is a causal factor in allowing the practice to occur, it can be stated with certainty that addressing the barrier should be a top priority for policy makers and organizational leaders across all treatment providers. Additional ethical concerns involving marketing must be examined as well. Marketing within the for-profit sector, often aimed at vulnerable populations, frightened parents, and drastically sick individuals, coupled with the exorbitant cost of private specialized treatment, raise concerns as a predatory practice (Enos, 2014; Miller, 2000).

Finally, future research into any barriers and corresponding solutions in the SUD treatment field should strive to include perspectives and anecdotal feedback from professionals. Any study that relies purely on quantitative means, without including qualitative data points, is woefully incomplete and may result in a lack of adoption of any proposed solutions. A more comprehensive, efficient, effective, and accessible field is required in the U.S., and such goals may not be reasonably achieved without the qualitative input of those working within the field.

Role of funding source

No funding reported/nothing declared.

Contributors

All authors contributed equally to the conception, design, implementation, analysis, and writing of this manuscript and study. All authors have reviewed the final manuscript and approve its submission.

Conflict of interest

The authors declare no conflicts of interest.

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