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Leadership and Licensure for Drug Treatment and the Implementation of Co-Occurring Disorder Treatment in Community Mental Health Centers

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Abstract Using a random sample of 48 outpatient mental health programs in low-income and racial and ethnic minority communities, this study examined directorial leadership, drug treatment licensure, and implementation of evidence-based protocols and practices to address co-occurring mental health and substance abuse disorders (COD). Understanding of findings was enhanced with focus groups at six clinics. Most programs (81 %) offered COD treatment. Directorial leadership was positively associated with COD treatment ($\beta = 0.253$, $p = 0.047$, 95 % CI 0.003, 0.502) and COD supervision and training ($\beta = 0.358$, $p = 0.002$, 95 % CI 0.142, 0.575). Licensure was negatively associated with COD treatment ($\beta = -0.235$, $p = 0.041$, 95 % CI -0.460, -0.010) and COD supervision and training ($\beta = -0.195$, $p = 0.049$, 95 % CI -0.389, -0.001). Although lack of financial integration may limit the effect of licensing on COD treatment implementation, the response of leaders to regulation, funding, and human resources issues may encourage COD treatment practices. Implications for leadership interventions and policy are discussed in the context of health care reform.

Keywords Co-occurring disorders · Implementation · Leadership · Licensure · Mental health organizations

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Introduction

In 2012, 8.4 million adults in the United States (3.6 % of the adult population) had co-occurring substance use and mental health disorders [CODs; Substance and Mental Health Services Administration (SAMHSA 2013)], and between 20 and 50 % of clients receiving specialty mental health services have had a substance use disorder in their lifetime (SAMHSA 2007). Yet the multiple treatment components (e.g., appropriate program structure, program milieu, clinical processes, continuity-of-care procedures, staffing, and training) needed to provide quality care to individuals with CODs are unavailable in many mental health treatment settings across the nation (Chandler 2009; Gotham et al. 2010; McGovern et al. 2010; Padwa et al. 2013; Sacks et al. 2013). Only about 4 % of individuals with CODs receive integrated evidence-based interventions designed to address both mental health and substance use conditions (Drake and Bond 2010), and on the rare occasions that such services are delivered, it is usually with low fidelity (Chandler 2009). Administrative, financial, and human resources barriers to service integration are major impediments to the delivery of COD services in mental health settings (Burnam and Watkins 2006; Sterling and 2011; Young and Grella 1998).

Although rates of CODs are higher among White populations than among Latino, African American, and Asian populations (Mericle et al. 2012; SAMHSA 2013), African American and Latino clients may experience higher levels of unmet needs regarding COD treatment than Whites (Wells et al. 2001). The financial barriers related to COD treatment access are particularly burdensome for racial and ethnic minority populations, whose members comprise a disproportionate share of the uninsured population in the United States (Kaiser Commission on Medicaid and the Uninsured 2012). Moreover, urban mental health organizations—which predominantly serve minority populations—face significant challenges in delivering integrated mental health and substance abuse treatment services that meet the complex behavioral health needs of minority populations (Aarons et al. 2011; Alegría et al. 2006; Amaro et al. 2006; Andrulis et al. 2010). Research on this topic has become particularly pertinent, with the Mental Health Parity and Addiction Equity Act and Affordable Care Act promoting delivery of community-based integrated care for vulnerable populations (Andrulis et al. 2010; Barry and Huskamp 2011; Croft and Parish 2013) and promising to address the need–services gap regarding COD treatment (Andrulis et al. 2010; Guerrero 2013; Guerrero and Kao 2013).

Evidence has indicated that increasing minority populations' access to COD treatment can reduce health care costs and achieve positive health outcomes (Butler et al. 2008; Chalk et al. 2010; Grella et al. 2004; Weisner et al. 2001). Consequently, addressing unmet treatment needs among minority populations is critical, particularly in large, urban areas with racially and ethnically diverse client populations (Polinsky et al. 1998).

Researchers have highlighted that to improve COD service delivery, treatment organizations need to develop consensus on integrated care treatment protocols for clients with CODs (Minkoff 2001) and establish teams of well-trained and supervised clinicians with expertise in both mental health and substance use disorders (Drake et al. 2001). Studies have also underscored the importance of improvements in domains related to program structure, program milieu, assessment, treatment, and continuity of care (McGovern et al. 2010; Padwa et al. 2013) and delivering brief dual-disorder treatment via a continuing-care approach at the community level (Drake et al. 2004). Experts have also suggested that programs can improve their COD treatment capacity by restructuring treatment processes to give equal weight to both substance abuse and mental health issues (Drake et al. 2004; Grella and Stein 2006).

Yet to date, scholars have not explored the role that other key organizational attributes may play in promoting or inhibiting the delivery of COD services. In particular,

researchers have not yet examined whether leadership and program licensure influence the delivery of COD services in mental health organizations. A growing body of scholarship has indicated that both of these factors may play critical roles in facilitating the uptake and implementation of evidence-based practices and service innovations. Directorial leadership—i.e., the capacity of organizational directors to lead by example, invest in staff development, and provide incentives to improve performance—can either promote or inhibit implementation in behavioral health service organizations (Aarons 2006, 2011; Edwards et al. 2010; Guerrero and Kim 2013). Similarly, issues related to licensure often influence the implementation and sustainment of evidence-based practices and service innovations in public sector organizations that provide mental health services (Aarons et al. 2011; Damschroder et al. 2009; D'Aunno 2006; Guerrero et al. 2014; Roman et al. 2011).

This preliminary study examined the relationships between directorial leadership (internal driver of implementation) and program licensure (external driver of implementation) and the delivery of COD services in mental health treatment organizations. Using a random sample of urban mental health programs, this preliminary study relied on a highly used scale of COD treatment processes and qualitative data gathered in focus groups to examine the extent to which directorial leadership and program licensure for drug treatment in community-based mental health programs is associated with COD treatment in Los Angeles County, California. By examining the influence of directorial leadership and regulatory licensing on COD service capacity, the present study responded to the call from Sacks et al. (2008) for research to better examine the mechanisms that support the successful adoption and sustainment of treatment interventions in COD practice settings. The principal goal of this study was to examine the extent to which program licensure for drug treatment services in mental health programs and leadership capacity among directors are associated with implementation of COD treatment-related components.

Conceptual Framework

Recent studies have highlighted the central role of leadership in efforts to increase the uptake of evidence-based practices and improve the quality of care in behavioral health. Leadership among directors generally refers to their ability to assess program needs for change, motivate and prepare the staff for change, and supervise implementation of change across the program milieu (Aarons 2006; Claus et al. 2007; Edwards et al. 2010; Guerrero 2013; Guerrero and Kim 2013). Studies have also identified licensing as an external factor associated with provision of evidence-based practices (D'Aunno 2006; Guerrero et al. 2014; Roman

et al. 2011). The licensure process of evaluating programs' compliance with drug treatment service protocols prepares and reinforces program implementation of the different components required in addiction treatment, including client assessment, treatment planning and discharge, and staff supervision and training (Los Angeles County Department of Public Health 2014). Hence, accounting for other organizational factors associated with capacity to provide COD treatment in mental health programs, we posited that directorial leadership and program licensure for drug treatment services would play a significant role in facilitating the establishment of treatment components— particularly treatment processes, training, and supervision—that are needed to facilitate the delivery of COD services in mental health service settings. We tested the following hypotheses:

> Hypothesis 1. Licensure for drug treatment services will be positively associated with the COD treatment process and supervision and training.
> Hypothesis 2. Directorial leadership will be positively associated with the COD treatment process and supervision and training.

Methods

Sampling Frame and Data Collection

The sampling frame considered all 408 mental health treatment programs funded by the Department of Mental Health in Los Angeles County, California. A program was defined as a treatment unit if mental health treatment constituted at least 75 % of services. Informed by other studies conducted in minority communities (Grella et al. 2004; Grella and Stein 2006; Guerrero 2013; Guerrero et al. 2014), data collection involved a random selection of one-fourth of the outpatient programs (52 of 208) located in communities with a population of 40 % or more African Americans, Latinos, or both. Latino residents represent more than 56 % of the county's population (US Census Bureau 2009). Ninety-two percent of clinical supervisors responded to the online survey, which consisted of 45 items assessing demographics, leadership, COD services, and regulation. Consistent with nationally representative organizational studies in behavioral health, we relied on clinical supervisors as key informants regarding program structure and treatment processes (D'Aunno 2006; Roman et al. 2011). The analytic sample included 48 programs, mostly midsize nonprofit organizations (75 %). These programs employed an average of five full-time clinicians and reported annual budgets of less than $3 million.

To improve the validity of informant reports and add depth to our understanding of data analyzed using quantitative methods, we conducted six focus groups with clinicians (both clinical supervisors and line staff members) from six organizations. We relied on a purposive sampling approach to select six clinics that represented different program structures. We selected three public and three private nonprofit programs that were geographically dispersed throughout the Los Angeles County region.

During site visits, we cross-checked the consistency of supervisor reports on survey measures and findings (statistically and nonstatistically significant relationships). We relied on a checklist during site visits to verify whether the program was licensed to offer drug treatment and provided COD services. We verified administrative records, sources of funding, and programmatic material. Inconsistencies were resolved after gathering data during a follow-up visit.

Our research team conducted in vivo observations and gathered content provided by clinicians during focus groups. The first two authors facilitated the focus groups using a semistructured interview guide that asked participants about their experiences serving clients with CODs and factors that affected the delivery of coordinated and integrated care. Focus groups lasted approximately 1 h and were transcribed for analysis. We conducted content analysis (Graneheim and Lundman 2004) of the focus group transcripts using grounded theory strategies (Glaser and Strauss 1967) to identify major themes (Kidd and Parshall 2000). This approach is consistent with other mixed-method designs using qualitative data to offer more insight regarding findings from quantitative analysis (Palinkas et al. 2011). We also attempted to reduce response bias by completing validity checks during in vivo site visits by verifying survey responses using funding data, counselor interviews, and printed and online program materials.

Measures

Dependent Variables

Our main dependent variables were drawn from the Dual Diagnosis Capability in Mental Health Treatment instrument, which measures mental health programs' capacity to appropriately serve clients with CODs by evaluating program structure, program milieu, clinical processes (for both assessment and treatment), continuity of care, staffing, and training (Gotham et al. 2010; McGovern et al. 2010; McGovern et al. 2007; Sacks et al. 2013; SAMHSA 2012). Instrument items were modified to be delivered in a survey format, similar to other nationwide studies (SAMHSA 2012). See "Appendix" for the complete modified survey and items that represented each outcome measure. The instrument featured a 5-point Likert scale ranging from 1

(*low integration*, e.g., mental health only) to 5 (*full integration*, e.g., primary focus on CODs). Confirmatory factor analysis (CFA) revealed two main dimensions using the tool's 20 items: COD treatment process and COD treatment supervision and training. Table 1 shows the descriptive statistics of each item, the item-test correlation, and alpha values.

The COD treatment process measure included nine items with individual scores ranging from 1 to 5. Items were (a) inclusion of clinicians in the treatment process, (b) procedures for intoxicated clients, (c) program implementation stage, (d) policies and procedures, (e) interventions for addiction, (f) consideration of CODs in discharge plan, (g) program maintenance capacity, (h) focus on

ongoing recovery issues, and (i) documentation of compliance. Higher scores on the treatment scale reflected greater integration of CODs in treatment.

The COD treatment supervision and training scale featured five measures with individual scores ranging from 1 to 5. These five measures were (a) coordination with psychiatrist, (b) staff access to substance abuse treatment supervision, (c) case and staffing review, (d) staff training, and (e) cross-training of staff members in mental health. Six items related to peer support and family involvement were not included because they were not correlated with these two dimensions ($r < 0.20$). Higher scores indicated greater integration of CODs in supervision and training.

Table 1 Descriptive statistics of programs (N = 48)

Variables	M (SD) or %	Item-test correlation	α	Response format
Program characteristics				
COD treatment process	2.71 (0.78)		0.8430	Mean scale of nine measures of COD treatment
Clinicians included in the treatment	3.32 (1.24)	0.7781	0.8162	
Procedures for intoxicated clients	2.88 (0.85)	0.5515	0.8372	
Program implementation stage	2.27 (1.19)	0.7425	0.8148	
Policies and procedures	1.64 (0.96)	0.4521	0.8461	
Interventions for addiction	2.94 (1.11)	0.6566	0.8293	
Consideration of COD in discharge plan	3.02 (1.26)	0.8087	0.8051	
Program maintenance capacity	3.06 (1.16)	0.6408	0.8321	
Focus on ongoing recovery issues	3.29 (1.20)	0.7014	0.8231	
Documentation on compliance	2.17 (1.34)	0.6532	0.8312	
COD treatment supervision and training	2.55 (0.67)		0.8176	Mean scale of five measures of COD supervision and training
Program works with psychiatrist	2.80 (1.41)	0.7488	0.7913	
Substance abuse supervision	1.26 (0.49)	0.7550	0.7994	
Case review and staffing review	3.33 (1.08)	0.8443	0.7330	
Staff members have training	3.02 (0.92)	0.8644	0.7480	
Cross-trained staff in addictions	2.34 (1.26)	0.8897	0.7380	
License	35			Percent of programs licensed to provide drug treatment services
Leadership	2.97 (0.85)			Mean score on 9 leadership measures; scale from 1–5
Difficulty implementing change	2.48 (0.66)			Difficulty implementing change; 1 = not difficult, 4 = very difficult
Program offers COD	81			Percent of program offering COD treatment
Supervisor characteristics				
Age	43.85 (9.07)			Age in years
Latino	22			Percentage of supervisors who are Latino
Education level	6.16 (1.01)			Scale from 1–8; 1 = no high school, 6 = college degree, 8 = doctoral degree

COD co-occurring disorder

Using CFA results, we created composite scores for these two scales by averaging the scores of all related subscales. The composite scores had acceptable Cronbach's alphas—$\alpha = 0.84$ for the treatment process scale and $\alpha = 0.82$ for the supervision and training scale. In this study, these two measures represented program capacity to deliver COD services.

Explanatory Variables

Clinical supervisors of mental health agencies provided information regarding program-level explanatory variables. These included dichotomous variables representing whether or not the program was licensed by the Los Angeles County Department of Public Health to provide drug treatment services and offered COD treatment. We also used a 4-point Likert scale ($1 = $ *very difficult* to $4 = $ *very easy*) to assess implementation difficulty (i.e., How difficult is it to implement programmatic changes in your organization?). We included the provision of COD treatment in our analysis of implementation of COD practices to account for programs that did not provide COD treatment.

Leadership was assessed using a 9-item measure representing supervisors' perceptions of program director leadership, including two subscales: one that measured transformational leadership, which involves the promotion of staff growth and development (Aarons 2006), with seven items ($\alpha = 0.96$), and another that measured transactional leadership, which involves the use of incentives to meet goals (Aarons 2006), with two items ($\alpha = 0.79$) Directorial leadership was rated by clinical supervisors on a 5-point scale ($1 = $ *strongly disagree* to $5 = $ *strongly agree*) and scores for both types of leadership were totaled as suggested by the measure's authors (Edwards et al. 2010). Higher scores represented increased leadership capacity among directors as perceived by clinical supervisors. Cronbach's alpha for directorial leadership capacity was $\alpha = 0.94$.

Respondents' demographic characteristics were also included as control variables. These included age, whether or not the respondent was Latino (programs served a significant number of Latino clients), and highest educational degree attained. Supervisors' demographic characteristics have been associated with the implementation of evidence-based practices in programs located in racial and ethnic minority communities (Guerrero et al. 2014). The institutional review board of [blinded for review] approved this pilot study.

Data Analysis

The analysis of mixed-method data relied on two phases with two steps each. The first phase focused on quantitative survey data analysis. We summarized and reviewed descriptive statistics of each measure and conducted CFA to identify two dimensions of COD treatment components. The first, termed COD treatment process, included nine survey items, whereas the second dimension, COD training and supervision, was represented by five items. These measures were used in multiple linear regression models. Stata/SE Version 12 was used to conduct multivariate regression analysis with robust standard errors. The appropriateness and validity of all regression models were examined using F and R^2 statistics.

The second phase consisted of validating and extending the quantitative findings using qualitative data collected from focus groups. The data were analyzed by two coders to identify themes that extended the quantitative findings.

Results

Descriptive statistics indicated that most programs (81 %) offered COD treatment, the average age of supervisors was 44, 22 % of respondents were Latino, and 69 % of respondents reported having a graduate degree (Table 1). On average, supervisors reported experiencing moderate difficulty enacting changes in their organization.

Table 2 summarizes results of the linear regression model of program factors associated with integrating COD in treatment. Directorial leadership was positively associated with implementation of COD treatment processes ($\beta = 0.253$, $p = 0.047$, 95 % CI 0.003, 0.502). Moreover, as expected, supervisor-reported provision of COD treatment was positively associated with greater implementation of COD treatment processes ($\beta = 0.926$, $p < 0.001$, 95 % CI 0.445, 1.406). Licensed programs had a negative association with implementation of COD treatment ($\beta = -0.235$, $p = 0.041$, 95 % CI -0.460, -0.010). Together, leadership and licensure was associated with an $R^2 = 0.12$, whereas the variance explained in the full model was $F(6, 37) = 4.92$, $R^2 = 0.44$.

Table 3 shows the association between study variables and integration of COD supervision and training. Leadership was significantly positively associated with supervision and training ($\beta = 0.358$, $p = 0.002$, 95 % CI 0.142, 0.575). Consistent with Table 2, licensed programs were negatively associated with COD supervision and training ($\beta = -0.195$, $p = 0.049$, 95 % CI $= -0.389$, -0.001). In addition, supervisor's age was negatively associated with COD supervision and training ($\beta = -0.015$, $p = 0.009$, 95 % CI -0.032, 0.003). Together, leadership and licensure accounted for 12 % of the total variance of supervision and training, whereas the variance explained by the full model was $F(7, 36) = 4.91$, $R^2 = 0.49$.

Table 2 Linear Regression of Program and Counselor Characteristics on COD Treatment Processes

	β	SE	t	p	95 % CI
Program characteristics					
Leadership	0.253	0.123	2.050	0.047	0.003, 0.502
Licensure for addiction treatment	−0.235	0.111	−2.120	0.041	−0.460, −0.010
Provision of COD treatment	0.926	0.237	3.910	<.001	0.445, 1.406
Implementation difficulty	0.234	0.109	1.680	0.110	−0.072, 0.852
Supervisor characteristics					
Age	−0.016	0.010	−1.560	0.128	−0.037, 0.005
Latino	0.022	0.244	0.090	0.928	−0.473, 0.517
Education level	0.210	0.119	1.770	0.086	−0.031, 0.451
Constant	1.462	0.808	1.810	0.079	−0.175, 3.100

CI confidence interval; *COD* co-occurring disorder

Table 3 Linear regression of program and counselor characteristics on COD treatment supervision and training

	β	SE	t	p	95 % CI
Program characteristics					
Leadership	0.358	0.107	3.360	0.002	0.142, 0.575
Licensure for addiction treatment	−0.195	0.096	−2.040	0.049	−0.389, −0.001
Provision of COD treatment	0.240	0.131	1.830	0.76	−0.027, 0.506
Implementation difficulty	0.345	0.201	1.720	0.095	−0.063, 0.752
Supervisor characteristics					
Age	−0.015	0.009	−1.700	0.009	−0.032, 0.003
Latino	0.176	0.203	0.870	0.391	−0.235, 0.588
Education level	0.091	0.100	0.910	0.368	−0.112, 0.294
Constant	1.384	0.710	1.950	0.059	−0.056, 2.824

CI confidence interval; *COD* co-occurring disorder

Focus groups offered additional insights regarding the effect of leadership on various components of COD treatment, supervision, and training. Focus group discussions highlighted the central role that leaders have in either promoting or inhibiting the implementation of changes to enhance COD treatment capacity and service delivery. In some focus groups, it became clear that agency leaders were instrumental in facilitating the COD capacity of their mental health treatment organization, both internally as leaders and externally by positioning their organizations to provide integrated care. Focus group participants reported that their leaders internally facilitated improved COD treatment by emphasizing the importance of providing holistic, integrated, and comprehensive services that met all of their clients' needs, including those related to substance use. In agencies whose leaders regularly advised providers that, in the words of one focus group participant, "we should see persons as a whole and respond to both their addiction and mental health needs," providers reported that they were more likely to make the extra effort to tailor services to meet the specific needs of clients with CODs.

Focus group participants reported that leaders who encouraged staff members to openly discuss concerns and experiences with COD clients and to think creatively about how to work with COD clients increased staff enthusiasm for implementing changes necessary to provide integrated care. At one agency, focus group participants reported that directors who had an open-door policy regarding concerns about COD services made them feel more supported when working with clients with CODs. At other agencies, focus group participants described how leaders engaged staff members in questions related to the implementation of COD programming by having them participate in quality improvement teams that tackled issues related to the identification and treatment of clients with COD treatment needs.

Focus group participants stated that leaders also played a key role in facilitating the implementation of COD-related treatment protocols by effectively negotiating the external regulatory and funding environment to secure flexible sources of funding and develop a staff that is cross-trained in both mental health and substance use disorder treatment. "The genius of our executives," explained one focus group

participant, "has been that they have pushed us in this direction to diversify the services [we offer]" and are "pushing the envelope" by aggressively encouraging the county, state, and other funders to support the delivery of COD services that could not be financed through Medicaid or other sources of categorical mental health funding.

Enthusiastic engagement with outside funders was critical, participants reported, because it gave their agencies the resources needed to hire staff members capable of delivering COD services and develop programs better suited to clients with COD treatment needs. By "writing grants and being on watch for all these opportunities," one participant summarized, agency leaders set the stage "10 or 15 years ago" to provide more integrated care today. Moreover, participants reported that when their leaders are clearly devoted to securing resources for COD services, enthusiasm "trickle[s] down to us" and makes staff members more aware of and engaged in the process of delivering integrated care.

Conversely, focus group participants at other agencies said organizational leaders could hinder the implementation of changes to improve COD supervision, training, and service delivery. At several agencies, providers reported that leaders discouraged the clinical staff from pursuing training on substance use disorders or COD because they preferred to have licensed staff members engage in as many billable hours of mental health services instead of setting aside time or resources for training on how to work with clients with CODs. "We hear a lot about minutes and billing," one provider said, "but … not so much about trainings or professional growth." In a similar vein, providers at these clinics reported that agency leaders did not provide time for supervision or consultation regarding COD services or that they let efforts to improve the quality of COD service delivery diminish over time. Although focus group participants at these agencies reported that there was a great need to improve COD services, the focus of leaders on productivity, billing, and other priorities impeded their ability to develop the clinical skills needed to effectively serve clients with COD treatment needs.

Focus group participants were also asked about the effect of program licensure for drug treatment services on COD programming. No participants during any of the six focus groups had any opinions about the relationship between program licensure and COD treatment processes and COD supervision and training.

Discussion

This preliminary study offered a unique perspective on the implementation of COD treatment in mental health settings. First, this study drew its sample from community-based treatment programs located in underserved racial and ethnic minority communities, where COD treatment is less likely to be provided (Guerrero and Kao 2013). In particular, these programs were characterized by their location in low-resourced and densely populated communities. Second, this study examined two critical drivers of implementation, program licensure and directorial leadership, as they relate to program capacity to deliver COD services. Because these two factors are critical to the implementation of evidence-based care, this study provides novel findings. Social services supervisors have frequent access to and influence on both upper administrators and frontline workers (Packard 2009), and their thoughts on these matters provided insight into the relationship between leadership and licensing regulation in the implementation of COD treatment processes.

Factors such as supervisors' perspectives on directorial leadership were positively associated with the degree of implementation of COD treatment processes and COD treatment supervision and training. Leaders are generally considered champions of change and play a key role in procuring resources that are needed to implement evidence-based practices (Aarons 2006; Aarons et al. 2011; Guerrero 2013). Focus group members highlighted these points, showing how in some organizations leaders encouraged COD supervision, training, and service delivery with their actions as both internal managers and advocates who were responsible for securing resources needed to provide integrated care. Notably, focus group participants also emphasized that when leaders do not actively encourage staff members to develop their ability to treat COD clients or foster COD programming, they may impede the capacity and ability of their organization to deliver COD services. Overall, these results are consistent with previous findings that leadership can both positively and negatively influence the experiences of organizational members involved in the implementation of new practices (Aarons and Sommerfeld 2012; Holmberg et al. 2008; Michaelis et al. 2010).

Study findings also highlighted the role of licensing for drug treatment, which was negatively associated with implementation of COD treatment and supervision processes. Emerging research has suggested that licensing regulation may stifle implementation efforts if bureaucratic and financial practices are not consistent with community care practices (Aarons et al. 2011). Focus groups composed of frontline staff participants did not generate any opinions on the relationship between program licensure and the implementation of COD treatment, supervision, and service delivery processes. However, because frontline program staff members are unfamiliar with program licensure and its effect on daily operations, it is not surprising that they voiced no opinions. Discussions with leaders at the Los

Angeles County Department of Mental Health revealed that the types of programs that are licensed for substance abuse treatment tend to have fewer resources than regular mental health treatment programs and thus may not be able to provide advanced or integrated care. Hence, the negative relationships between program licensure and degree of implementation of COD treatment in this study may be explained by the type of low-resourced mental health programs that receive licenses for drug treatment.

Most importantly, this study highlights the impact of directorial leadership and program licensure to provide substance use disorder treatment on COD treatment capacity in public mental health organizations. Previous studies have highlighted the importance of training and supervision (Drake et al. 2001), program structure and program milieu (McGovern et al. 2010; Padwa et al. 2013), assessment and treatment protocols (Drake et al. 2004; McGovern et al. 2010; Minkoff 2001; Padwa et al. 2013), and continuity-of-care approaches (Drake et al. 2004; McGovern et al. 2010; Padwa et al. 2013) to mental health organizations' capacity to serve clients with COD. This study indicates that in addition to these factors, directorial leadership and program licensure to deliver COD services may be key factors associated with mental health programs' dual-diagnosis capability.

Limitations

This preliminary study relied on composite scores, and although there is precedent and support for the use of single-item indicators in some studies (Bergkvist and Rossiter 2007; Gill et al. 2012), this type of measurement is not optimal for implementation research. The current study could have benefited from the inclusion of other aspects of leadership (shared networks, etc.) and organizations (e.g., size, ownership, funding). However, given the limited knowledge about community-based service practices for addressing CODs, this study generated baseline knowledge about program factors associated with components of COD treatment, namely treatment process, supervision, and training.

In addition, the study sample was small and limited to urban and publicly funded mental health programs in one county, limiting generalizability. However, because the sample represented a service area that includes more than 7 million residents from urban and highly diverse backgrounds and results reflected issues consistent with the current literature, findings and implications from this study

may be applicable to large metropolitan areas with similar levels of population density and diversity.

Conclusions

Community mental health leaders play a critical role in responding to organizational change and implementing necessary practices to meet organizational goals (Aarons et al. 2011; Chandler 2009; D'Aunno 2006; Gotham et al. 2010; Sacks et al. 2013). In this preliminary study, directorial leadership was robustly associated with the implementation of processes associated with enhanced COD treatment. This finding has critical implications for mental health services, particularly as policy makers respond to pressure to deliver community-based integrated care for vulnerable populations (Andrulis et al. 2010; Barry and Huskamp 2011; Croft and Parish 2013) and address the COD treatment gap in the current era of health care reform (Andrulis et al. 2010; Guerrero 2013; Guerrero and Kao 2013). Findings highlight the importance of supporting leadership behaviors among program directors so they are able to strategically address program licensing changes, funding needs, and human resources challenges to respond to the increasing pressure to deliver integrated COD treatment in specialty settings.

Consistent with emerging research (Guerrero et al. 2014; LA Health Action 2012; Pating and Gould 2008), this study confirms current Medicaid payment and service regulations and restrictions may inhibit the delivery of COD treatment and the implementation of measures to enhance COD service delivery, particularly if they do not account for the clinical complexity of serving individuals with chronic co-occurring behavioral health conditions. Because health care reform seeks intervention points to generate greater buy-in and expertise among clinicians and greater fidelity in incorporating various components of high-quality integrated care (Andrulis et al. 2010; Butler et al. 2008; Chalk et al. 2010), it is critical to examine the role, attitudes, and behaviors of community mental health leaders and develop leadership training to help leaders respond to and reshape state and county regulations and prepare their organizations for a new era of health care.

Appendix

See Table 4.

Table 4 Survey questions adapted from the dual diagnosis in mental health treatment (DDMHT) tool

Focus of the program

What are your program's implementation processes related to certification and licensure for substance abuse (SA) and mental health (MH) treatment?

(1) Permits only mental health services	(2) There are significant barriers in certification or licensure of SA and MH treatment	(3) There are some barriers in certification or licensure of SA and MH treatment	(4) There are minimal barriers in certification or licensure of SA and MH treatment	(5) We are certified and/or licensed to provide both SA and MH

Does your program have adequate and organized coordination, collaboration, or integration with addiction services?

(1) Minimal coordination	(2) Vague, undocumented (consultation)	(3) Formalized and documented coordination (collaboration)	(4) Coordination and some components of integration	(5) Most services are integrated within the existing program

What financial incentives are available to you?

(1) Program only bills for mental health treatment	(2) Program bills for SA and MH, but partial reimbursement or glitches	(3) Program bills for either service type, but MH must be primary	(4) Program bills both SA and MH with glitches	(5) Program bills for both SA and MH integration

Program resources

Does your program routinely provide or welcome treatment for both disorders?

(1) Refer out persons with SA disorders	(2) Allow some persons with SA disorders	(3) Accept persons with SA disorders by routine and if stable	(4) Accept and treat both disorders, not well documented	(5) Accept and treat both disorders, well documented

Does your program display and distribute literature and client educational materials for both mental health and substance abuse?

(1) Mental health only	(2) Available for both disorders; not routinely offered	(3) Available for both disorders, but less for SA disorders	(4) Available for both disorders with equivalent distribution	(5) Available for both disorders and highly integrated literature

Screening and assessment of co-occurring disorders

What routine screening methods are used for substance abuse cases?

(1) Limited preadmission screening for SA disorders	(2) Available preadmission screening for SA disorders; history	(3) Routine preadmission screening; use of program biopsychosocial assessment	(4) Routine preadmission screening; use of standard interview questions from ASAMP-PPC	(5) Routine preadmission screening; use of standardized instruments for both SA and MH disorders with established psychometric properties

What is the routine assessment if client is screened positive for substance use?

(1) Ongoing monitoring for appropriateness or exclusion	(2) In-depth assessment of SA related issues, driven by clinician	(3) SA assessment, although not standardized or routine	(4) Formal SA assessment, typically occurs (in-house)	(5) Standardized or formal integrated assessment is routine in all cases

To what degree are psychiatric and substance abuse diagnoses made and documented?

(1) SA diagnoses are not documented	(2) SA diagnostic impressions made and recorded variably	(3) SA diagnosis variably recorded in chart	(4) SA diagnosis frequently recorded	(5) Standardized and routine SA diagnoses consistently recorded

To what degree are psychiatric and substance use history reflected in medical records?

(1) Collection of MH history only	(2) Collection of SA history inconsistently	(3) Collection of both MH and SA disorders history	(4) Collection of specific SA and MH history and chronology of course	(5) Collection of specific and comprehensive SA and MH history and chronology of course, and interactions between them

To what extent does your program accept clients based on substance use disorder symptom acuity?

(1) Does not admit persons with SA issues	(2) Admits persons with low SA disorder symptom acuity	(3) Admits persons with moderate disorder symptom acuity	(4) Admits persons with high SA disorder symptom acuity	(5) Admits persons with high and comorbid SA disorder symptoms

Table 4 continued

Treatment planning for co-occurring disorder treatment

What do clinicians include in treatment plans?[a]

(1) MH treatment goals only	(2) SA treatment goals are sometimes added	(3) MH treatment goals added as primary, and SA treatment goals added sometimes	(4) MH treatment goals added as primary, and SA treatment goals always added as secondary	(5) Both MH and SA treatment goals listed as primary consistently

What procedures are in place for intoxicated/high clients, relapse, withdrawal, or active users?[a]

(1) No guidelines conveyed in any manner	(2) Verbally conveyed in-house guidelines, but limited implementation	(3) Frequent referral to or collaboration with SA agency, detox, or emergency room	(4) Ongoing routine to stabilize client in the short-term in-house	(5) Ongoing routine to stabilize client in the medium- to long-term in-house

Does your program implement stagewise treatment?[a]

(1) Not assessed or explicit in treatment plan	(2) Stage or motivation documented variably in treatment plan	(3) Stage or motivation routinely incorporated in treatment plan	(4) Stage or motivation routinely incorporated into plan and adjusting treatments by stage limited to MH	(5) Stagewise treatments for both substance use and mental health issues

What policies and procedures are in place for evaluation, management, monitoring, and compliance for/of medications for substance use disorders?[a] This includes medications to treat intoxication states, decrease or eliminate withdrawal symptoms, decrease reinforcing effects of abused substances, promote abstinence, and prevent relapse[a]

(1) No capacities to monitor, guide, or provide medications related to SA	(2) Certain types of medications may be prescribed for SA with limited monitoring capacity	(3) Medications are routinely available for SA and monitoring is largely provided by the prescriber	(4) Present, coordinated policies regarding medications for SA; prescriber checks with staff to assist with monitoring	(5) Prescription of all types of medications for SA; access to a specialty provider link to a treatment team

How are specialized interventions with addiction content addressed?[a]

(1) Not addressed in program content	(2) Based on judgment by individual clinician; seldom used	(3) Routine clinician adaptation of an evidence-based mental health treatment (e.g., ACT, CBT)	(4) Some specialized interventions by specifically trained clinicians	(5) Systematic adaptation of SA content in evidence-based mental health treatment (e.g., ACT, CBT)

How often does your program provide education about substance use disorders and treatment, and interaction with mental health disorders and treatment?

(1) Never	(2) Seldom	(3) Sometimes	(4) Often	(5) Always

Regarding family education and support for both SA and MH issues, what is your program's focus?

(1) For mental health disorders only	(2) Variably or by individual clinical judgment	(3) SA issues regularly, but informally incorporated	(4) SA and MH issues variably offered; structured group with more routine accessibility	(5) Routine and systematic co-occurring disorder family group integrated into standard program format

How often does your program include peer support groups addressing SA and MH issues in planning or treatment plans?

(1) Never	(2) Seldom	(3) Sometimes	(4) Often	(5) Always

What is the availability of peer recovery support for patients with SA and MH issues?

(1) Not available (on-site)	(2) Seldom available (on-site)	(3) Sometimes available (on site)	(4) Often available (on-site)	(5) Always available (on-site)

Discharge planning for co-occurring disorder treatment

To what extent are co-occurring disorders addressed in the discharge planning process?[a]

(1) Not addressed	(2) Variably addressed by individual clinicians	(3) Addressed as secondary in planning process for off-site referral	(4) Addressed as secondary, but with on-site referral	(5) Both disorders seen as primary, and plans made and insured always

To what extent does your program have capacity to maintain treatment continuity of SA and MH issues?[a]

(1) No capacity to maintain treatment continuity	(2) Limited capacity	(3) Some capacity; variability based on clinician	(4) Adequate capacity; routine approach to continue SA and MH treatment	(5) Optimal capacity; standard procedure to offer continuity of care for SA and MH issues

Table 4 continued

How often does your program focus on ongoing recovery issues with both SA and MH disorders as primary?[a]

(1) Never	(2) Seldom	(3) Sometimes	(4) Often	(5) Always

How often does your program document and supply and compliance plans for SA-related medications?[a]

(1) Never	(2) Seldom	(3) Sometimes	(4) Often	(5) Always

Workforce resources for co-occurring disorder treatment

How often does your program work with a psychiatrist or other physician or prescriber of pharmacological therapies for addiction?[b]

(1) Never	(2) Seldom	(3) Sometimes	(4) Often	(5) Always

How often do case review, staffing, or utilization review procedures emphasize and support co-occurring disorder treatment?[b]

(1) Never	(2) Seldom	(3) Sometimes	(4) Often	(5) Always

To what degree do direct care staff members have basic training in prevalence, common signs and symptoms, screening, and assessment for substance use symptoms and disorders?[b]

(1) No training	(2) Variably trained	(3) Trained in basic skills per agency strategic training plan	(4) Trained in some advanced skills	(5) Trained in all advanced skills

How well cross-trained are direct care staff members in mental health and substance use disorders including pharmacotherapies, and have advanced specialized training in treatment of persons with co-occurring disorders?[b]

(1) Not trained	(2) At least 33 % are trained	(3) At least 50 % are trained	(4) At least 75 % are trained	(5) At least 90 % are trained

[a] Based on the results of a confirmatory factor analysis, these items were combined to create a measure of COD treatment process

[b] Based on the results of a confirmatory factor analysis, these items were combined to create a composite measure of COD training and supervision

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