Capacity of US Drug Treatment Facilities to Provide Evidence-Based Tobacco Treatment

Jamie J. Hunt, PhD, Byron J. Gajewski, PhD, Yu Jiang, PhD, A. Paula Cupertino, PhD, and Kimber P. Richter, PhD

Although people with drug problems consume a large proportion of cigarettes smoked in the United States, few drug treatment facilities offer tobacco treatment. Our analysis of 405 facilities showed that most had the skills but few had policies, leadership, or financial resources to provide evidencebased tobacco treatment. For-profits reported significantly fewer tobacco treatment resources than nonprofits. The Affordable Care and Mental Health Parity acts will improve treatment access for drug-dependent persons. To realize these acts' full promise, policymakers should ensure that clients have access to tobacco treatment. (Am J Public Health. 2013;103:1799-1801. doi:10.2105/ AJPH.2013.301427)

A key strategy in disease control is to target high-risk populations to quickly and efficiently drive down prevalence. People with mental illness, including drug abuse and dependence, consume 44% of the tobacco products sold in the United States.¹ Each year 1 million persons enroll in drug treatment.² Cigarette smoking rates in these facilities range from 77% to $90\%.^{3\text{--}7}$ Several reports have found to bacco to be a major cause of mortality in this population.^{8,9} We analyzed data from a national survey of drug treatment facilities 10 to examine their capacity to treat tobacco dependence within this high-prevalence population. We examined differences by facility ownership (for-profit vs nonprofit) and opioid maintenance versus chemical-free treatment

orientation because both of these variables have been associated with provision of tobacco treatment in previous studies. 11-13

METHODS

We recruited facilities and conducted surveys between November 2009 and November 2010. To obtain representative results, we derived our study sample from all adult outpatient facilities (n = 3800) in the Substance Abuse and Mental Health Services Administration's Inventory of Substance Abuse Treatment Services, a comprehensive database of US facilities. We estimated that data from 400 facilities would permit us to report capacity prevalence with a 5% margin of error and 95% confidence (for categorical variables that describe the overall prevalence of services).

We stratified all 3800 facilities by 3 characteristics that have consistently been associated with the likelihood of providing tobacco treatment services. 15 These 3 characteristics are ownership (profit or nonprofit), nicotine replacement therapy provision (yes or no), and whether facilities provide opioid treatment (yes or no). To achieve a final sample that mirrored the US population of facilities, we sent letters to all facilities that described the study, predetermined the number of facilities required to represent each strata within our sample, divided facilities into strata, randomly ordered the lists of facilities within each strata, and recruited via telephone and mail until all strata were filled. Our overall response rate was 11% (405 of 3800). We called all facilities in the original sample at least once. We are unable, however, to describe reasons for nonresponse because many facilities had wrong numbers, never answered their phones, did not have answering machines, or never returned calls in response to messages left on answering machines (where they were available). Our final sample was, however, very similar to all 3800 US outpatient, adult drug treatment facilities; details of survey development, methods, representativeness, and main findings are available elsewhere. 10

We developed a 15-item survey to assess resources and capacity for treating tobacco dependence. Items assessed policies and procedures, leadership and prescribing authority, training and skills, and reimbursement or funding for providing services. Response categories were in the form of a 5-point Likert scale ranging from "strongly agree" to "strongly disagree." We also asked participants to rate their global capacity to treat (1) drug dependence and (2) tobacco dependence by using a 5-point scale ranging from 1 = very poor to 5 = very good. We also assessed facility and respondent sociodemographic characteristics.

We computed frequencies, percentages, means, medians, standard deviations, and ranges for categorical and continuous variables accordingly. We described capacities for the overall sample and examined differences by ownership (for-profit vs nonprofit) and opioid maintenance versus chemical-free services. We treated the stratified sample as a self-weighting simple random sample in the calculation of percentage estimates and significance tests. Inferential statistics included χ^2 analysis, the t test, and the McNemar test.

RESULTS

The mean number of clients present in facilities at the time surveys were completed was 112. Facilities estimated that 75% of their clients smoked cigarettes. Almost half (43%) of the facilities were privately owned, 14% provided nicotine replacement therapy, and 22% offered opioid maintenance therapy.

Two thirds of survey respondents were female and approximately half (51%) were current or former smokers. Respondents held various leadership roles in the program including clinic director (59%), owner (12%), head counselor (8%), and other (21%).

Global and Overall Capacity for Delivering Evidence-Based Treatment

Ninety percent of clinic leaders reported that their global capacity to treat drug dependence was adequate to very good, whereas only 64% reported that their global capacity to treat tobacco dependence was adequate to very good (not shown). This difference was significant (P<.001).

Half (54.6%) agreed that their staff had the skills to treat clients' tobacco dependence (Table 1). For all other measures of capacity, agreement was much lower. One third of facilities had protocols, procedures, or curricula

TABLE 1—Capacity and Resources to Deliver Evidence-Based Tobacco Treatment in US Adult Outpatient Substance Abuse Treatment Facilities: November 2009-November 2010

	Total (n = 405), % ^a (No.)	Nonprofit (n = 233), % ^a (No.)	For Profit (n = 172) % ^a (No.)
Policies and procedures			
Our facility has a policy that requires staff to offer treatment	30.6 (124)	42.2 (98)	15.2 (26)
of clients' tobacco dependence.***			
Our facility has protocols, procedures, or curricula that guide	33.3 (135)	40.3 (94)	23.8 (41)
staff on how to treat clients' tobacco dependence.**			
eadership and prescribing authority			
Our facility has a designated leader for our tobacco treatment efforts.*	24.7 (100)	29.2 (68)	18.6 (32)
Our facility has staff that can prescribe quit-smoking medications	30.6 (124)	37.3 (87)	9.4 (37)
to treat clients' tobacco dependence.**			
Reimbursement and funding			
Our facility has financial resources for providing counseling for tobacco dependence.***	21.5 (87)	28.3 (66)	12.2 (21)
Our facility has financial resources to provide quit-smoking medications to help clients quit.**	12.1 (49)	17.2 (40)	5.2 (9)
Quit-smoking medications are available to our clients through state or local programs.*	48.4 (196)	54.1 (126)	40.9 (70)
Staff capacity and resources			
Our staff has dedicated time for treating clients' tobacco dependence.***	26.9 (109)	33.5 (78)	18.0 (31)
Our staff is familiar with the Public Health Service's treatment guideline that is	29.4 (119)	32.2 (75)	25.6 (44)
called Treating Tobacco Use and Dependence.			
Our staff has received training specifically for treating tobacco dependence.**	34.1 (138)	40.3 (94)	25.6 (44)
Our staff has the skills to treat clients' tobacco dependence.	54.6 (221)	57.1 (133)	51.2 (88)
Our staff has received training on how to use quit-smoking medications	23.5 (95)	25.6 (60)	20.5 (35)
to treat tobacco dependence.			
Our staff has the skills to use quit-smoking medications to treat	24.9 (101)	28.4 (66)	20.5 (35)
clients' tobacco dependence.			

^aPercentage that agree or strongly agree. $^*P \le .05$; $^{**}P \le .01$; $^{***}P \le .001$.

to guide staff in how to treat clients' tobacco dependence. Approximately one third of facilities had staff that had received training specifically for treating tobacco dependence. One in 5 facilities reported that they had the financial resources to provide counseling for tobacco dependence.

Comparisons by Facility Ownership and Opioid Treatment

Resources available to programs differed markedly by ownership (Table 1). Significantly fewer for-profit facility leaders agreed that they had policies or procedures, leadership or prescribing authority, or reimbursement or funding to support treating tobacco dependence. For-profit and nonprofit facilities did not differ on familiarity with treatment guidelines or training or skills to treat tobacco dependence. More respondents from opioid

maintenance facilities agreed they had staff that could prescribe quit-smoking medications (not shown). However, fewer opioid maintenance facilities agreed that quit-smoking medications were available through state or local programs (not shown).

Half (54.8%) of the facilities agreed that they possessed 3 or fewer capacities to provide tobacco treatment whereas only 9.1% agreed that they had most to all (10-13) capacities to treat tobacco dependence. This differed significantly by ownership (P=.013).

DISCUSSION

Drug treatment facilities and staff lack the policies, leadership, and financial resources to provide evidence-based tobacco treatment. Moreover, global impressions appear more optimistic than warranted-even though 64%

of clinic leaders reported that their global capacity to treat tobacco dependence was adequate to very good, more than half reported that their facilities possessed 3 or fewer capacities to provide tobacco treatment. Forprofit facilities reported significantly less capacity for treatment.

In the only other national survey of facilities that assessed resources, Walsh et al. assessed 2 resources for tobacco treatment in a survey of Australian drug and alcohol agencies.¹⁶ They found that 25% of managers and 23% of staff reported that their agency had a written policy concerning delivery of tobacco services, and that 45% of managers and 33% of staff had received training to treat tobacco dependence. This differs somewhat from our findings in which 33% of respondents indicated that their facility had written guidelines and 34% indicated that staff had received training.

RESEARCH AND PRACTICE

This survey is limited in that difficulties in contacting facilities resulted in a low response rate. Also, we did not define "skills for treating tobacco dependence" for respondents and there is no way to determine whether facility leaders had accurate perceptions of these skills in their staff. Future studies should validate survey items against objective measures of resources and capacities. Furthermore, comparing resources with rates of actual service provision should help determine which resources are necessary and sufficient for supporting actual service provision. Last, we do not have perfect records on method of survey completion (mail, e-mail, fax, phone) and are therefore unable to assess whether completion method affected reports of capacity.

Perhaps because facilities are in the business of treating addiction, many respondents felt that their staff had the requisite skills to provide tobacco treatment. This suggests that, to build capacity, efforts should not focus exclusively on traditional dissemination strategies such as knowledge and skills building. This would only benefit facilities with major skills deficits. To achieve improvements across all facilities, policymakers should also strengthen policies, leadership, and funding for tobacco treatment at the federal, state, and local level—and do so in a way that reduces resource and service disparities between for-profit and nonprofit facilities.

About the Authors

Jamie J. Hunt is with the University of Missouri School of Nursing and Health Studies, Kansas City. A. Paula Cupertino and Kimber P. Richter are with the Department of Preventive Medicine and Public Health, University of Kansas School of Medicine, Kansas City. Byron J. Gajewski and Yu Jiang are with the Department of Biostatistics, University of Kansas School of Medicine.

Correspondence should be sent to Kimber P. Richter, Department of Preventive Medicine and Public Health, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160 (e-mail: krichter@kumc.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

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Contributors

All authors reviewed and approved drafts of the article. J. J. Hunt helped design the study, oversaw data collection, analyzed findings, and created the first draft of the report. B. J. Gajewski contributed to survey design and supervised data analyses. Y. Jiang conducted data analyses and contributed to interpretation of the data. A. P. Cupertino contributed the survey design, data analyses, and interpretation. K. P. Richter led the study and survey

design, supervised J. J. Hunt in implementing the study, and contributed to analyses, interpretation, and drafts of the article.

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Human Participant Protection

All procedures were approved by the University of Kansas Medical Center Ethics Committee (institutional review board 10979).

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