Smoking Cessation Care Provision and Support Procedures in Australian Community Mental Health Centers

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Objective: The study assessed the association of supportive clinical systems and procedures with smoking cessation care at community mental health centers. Methods: Managers (N=84) of community mental health centers in New South Wales, Australia, were asked to complete a survey during 2009 about smoking cessation care. Results: Of the 79 managers who responded, 56% reported that the centers assessed smoking for over 60% of clients, and 34% reported that more than 60% of clients received minimum acceptable smoking cessation care. They reported the use of guidelines and protocols (34%), the use of forms to record smoking status (65%), and the practice of always enforcing smoking bans (52%). Minimum acceptable smoking cessation care was associated with encouraging nicotine replacement therapy for staff who smoke (odds ratio [OR]=9.42), using forms for recording smoking status (OR=5.80), and always enforcing smoking bans (OR=3.82). Conclusions: Smoking cessation care was suboptimal, and additional supportive systems and procedures are required to increase its delivery. (Psychiatric Services 64:707-710, 2013; doi: 10.1176/appi. ps.201200213)

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m eople}$ with mental illness have markedly higher rates of smoking than the general population (1) and suffer more from smoking-related disease (2). It is recommended that health care services provide opportunities to address the smoking cessation needs of all clients (3). Smokers who receive smoking cessation care from health care providers are more likely to stop smoking (3,4), and smoking bans in health care settings protect people from environmental tobacco smoke and facilitate both smoking cessation among clients (5,6) and the provision of smoking cessation care (6).

Despite clinical guidelines supporting the delivery of smoking cessation

care by health care providers (3,6–8), evidence suggests that the provision of such care is infrequent and inconsistent (9,10). Characteristics of the clinical environment can support the provision of smoking cessation care by health care providers. These characteristics include the presence of supportive clinical guidelines or protocols and clinical tools, smoke-free policies, clinician training in smoking cessation care, and clinicians who are nonsmokers (3,6,10). The prevalence of such supportive procedures and systems in health care facilities generally has been reported to be limited (9).

Community mental health centers offer considerable potential to provide smoking cessation care to people with mental illness. In Australia, community mental health centers provide care for an estimated 330,000 clients annually through over six million service contacts (11). Sixty-two percent of clients are smokers, it has been estimated, and 77% report an interest in cutting back or quitting (12). Nevertheless, little research has reported the extent to which community mental health centers provide smoking cessation care. One Canadian study has reported that only 31% of clients received an assessment of their smoking status, 16% had a discussion regarding smoking, 20% were provided smoking-related counseling, and 21%

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were asked about their interest in quitting or cutting back (13). An Australian survey of 324 mental health staff drawn from 45 diverse centers—both inpatient and community based—reported that only one-quarter often raised the issue of tobacco use with their patients. These discussions were most likely to take place in response to a specific health concern or if initiated by a patient (14).

No previous study has reported the prevalence of clinical systems and procedures in community mental health centers to support the provision of smoking cessation care or examined the association of such supports and the provision of smoking cessation care. To address this evidence gap, we undertook a study of Australian community mental health centers to determine the prevalence of smoking cessation care, the prevalence of systems and procedures that support the provision of such care, and the association between the provision of smoking cessation care and the existence of such supportive systems and procedures.

Methods

A cross-sectional survey was undertaken of all community mental health centers in the state of New South Wales, Australia. Residential facilities and centers that provided services solely to children, adolescents, or persons 65 years or older were ineligible.

A printed questionnaire was mailed to the manager (N=84) of each center. Managers were asked to report the proportion of clients whose smoking status had been recorded and the proportion of smokers who were provided different forms of smoking cessation care. Managers were also asked whether such care was provided to clients systematically or at the discretion of clients.

In terms of the presence of supportive systems and procedures, managers were asked if the service had guidelines or protocols that support the provision of smoking cessation care, used forms to record client smoking status, monitored or audited the provision of smoking cessation care, had provided smoking cessation care training to staff in the past 12 months, encouraged staff who were smokers to quit, and had smoking bans that were enforced.

Managers were asked to indicate their profession, age, smoking status, length of employment in their current role, and receipt of training in smoking-related care. They were also asked about the frequency of client visits and average length of client consultations.

Responses related to the estimated proportion of clients receiving each form of care were collapsed into two categories: ≤60% or >60%. Minimum acceptable smoking cessation care, a dichotomous variable, was defined as recording client smoking status and offering smoking cessation brief advice, referral, or both to more than 60% of clients (14). Pearson's chi square and bivariate logistic regression analyses were used to determine univariate associations between the existence of supportive systems and procedures and the provision of minimum acceptable smoking cessation care. All variables with p<.25 were entered into a multivariate logistic regression model by using a forward stepwise approach, and variables that were significant at the p<.05 level were retained. All findings were reported by using valid percentages, given that not all participants answered each item.

Results

Ninety-four percent (N=79) of service managers completed the survey. A majority were age 40 or older $(N=63,\ 83\%)$, were nonsmokers or former smokers $(N=59,\ 81\%)$, were nurses $(N=48,\ 62\%)$, and had been in their current role for a median of five years.

Eighty-seven percent (N=67) of managers reported that clients were seen for an average of at least 30 minutes for each consultation. They estimated that more than half of the centers' clients (53%) visited the centers fortnightly or at least monthly and that 32% visited on a daily or weekly basis.

Slightly more than half (56%, N=44) of managers reported that smoking status was recorded for more than 60% of their clients. They also reported that more than 60% of clients were

provided with either brief advice, referral to smoking cessation care, or both (N=52%, N=41) and minimum acceptable smoking cessation care (N=27, 34%). Thirteen managers (19%) reported smoking cessation care was frequently or always initiated as a systematic clinical procedure for all clients. Factors that triggered initiating the provision of smoking cessation care are shown in Table 1.

The following forms of smoking cessation care were offered to more than 60% of clients: brief advice, reported by 47% (N=37) of managers; education about risks (N=28, 37%); recommended use of nicotine replacement therapy (NRT) (N=20, 26%); monitoring of medication needs affected by changes in smoking (N=17, 22%); referral elsewhere excluding quitlines (N=9, 15%); referral to a quitline (N=11, 14%); monitoring quit attempts (N=9, 12%); written materials on quitting (N=8, 11%); monitoring the effects of NRT (N=8, 11%); monitoring withdrawal symptoms (N=8, 11%); extended advice (N=6, 8%); and NRT (N=3, 4%). None of the centers offered to negotiate a quit date with more than 60% of clients.

Thirty-four percent of managers reported that the centers had specific smoking cessation care guidelines or protocols, 65% reported the use of forms to record client smoking status, and 4% reported that smoking cessation care was monitored or audited (Table 1). Fifty-nine percent (N=43) of managers reported never having received formal training in providing smoking cessation care, 44% reported that staff had received such training within the past 12 months, and 79% (N=62) reported that staff were provided with at least one form of quit support.

All managers reported total smoking bans for indoor areas, and most reported smoking bans for verandas and balconies (N=64, 96%), courtyards (N=53, 93%), and all grounds (N=63, 85%). Forty-eight percent (N=38) of managers reported that the smoking bans were not always enforced.

In the final regression model, centers that always used forms to assess and record smoking status were almost six times more likely to provide minimum acceptable smoking cessation care. Centers that encouraged staff to quit smoking by using NRT were more than nine times more likely to provide minimum acceptable smoking cessation care, and centers where smoking bans were always enforced were almost four times more likely to do so (Table 1).

Discussion

The findings suggest that community mental health clinicians do not meet the smoking cessation care needs of clients, as recommended by clinical guidelines. Only 56% of managers reported that smoking status was recorded for more than 60% of clients. Far fewer (14%) reported that centers provided more than 60% of clients with a referral to a quitline, the form of care most likely to result in quitting. Only 34% of managers reported that centers provided minimum acceptable smoking cessation care to more than 60% of clients, and only 19% reported that smoking cessation care was systematically offered to clients. No more than 34% of managers reported the use of smoking cessation care guidelines, and only 4% reported that the care was monitored. Nonetheless, the findings suggest that smoking cessation care is more likely to occur with the use of smoking status assessment forms, enforcement of smoking bans, and active support of staff efforts to use NRT to quit smoking.

The low (34%) reported prevalence of providing minimal smoking cessation care to more than 60% of clients is consistent with previous studies of smoking cessation care in community mental health centers (13,14) and in general medical and psychiatric hospital settings (9,10). Most often, smoking cessation care was provided in response to client factors rather than systematically offered, a finding that was also consistent with previous studies conducted in mental health settings (10,14). Such findings suggest that the provision of smoking cessation care does not accord with recommendations that smoking be viewed as a chronic disease and treated as such through the opportunistic and systematic delivery of care to all smokers, regardless of the

Table 1Characteristics of community mental health centers and association with minimum acceptable smoking cessation care

	Managers (N=79) ^a					
Characteristic	N responding	N	%	p^{b}	OR^c	95% CI
Support for staff to quit smoking						
(reference: not offered)						
Encouragement of nicotine	- 0					
replacement therapy (NRT)	79 7 9	55	70			2.18–40.68
Incentives	79 7 9	6	-8	.17†	ns	
Free NRT	79 7 9	40	51	.16†	ns	
Subsidized NRT	79 70	19	24	.42	_	
Support groups	79	13	17	.76	_	
Smoking behavior						
Staff smoke with clients at least	74	10	26	1.00		
occasionally (reference: never)	14	19	20	1.00	_	
Smoking ban always enforced						
(reference: never,	79	41	۳o	104	2 00	100 1100
occasionally, or frequently)	19	41	52	.10†	J.02	1.22–11.98
Triggers of minimum acceptable						
smoking cessation care						
(reference: never a trigger) Staff discretion	72	55	76	.39		
	70	22		1.00	_	
Complaints about smoking Client interest	72	65		1.00	_	
Client illness	72	66		1.00		
Formal training	12	00	14	1.00		
Staff training in past 12						
months (reference: none						
in past 12 months)	78	34	44	.34	_	
Manager training in past	.0	01		.01		
5 years (reference: none						
in past 5 years)	73	22	30	.80	_	
Protocols and support systems						
(reference: none)						
Forms to assess or record						
smoking status	79	51	65	.01†	5.80	1.59-21.11
Monitoring or auditing of care	79	3	4	0.41		
Smoking-related care guidelines	79	27	34	.21†		
Measures to assess nicotine						
dependence	79	7	9	.69	_	
Monitoring or auditing of						
recording of smoking status	79	13	17	.76	_	
Protocols or support systems						
for care $(M \pm SD)$	78	1.27 ± 1.06		.02†	ns	

^a Characteristics were reported by managers of community mental health centers.

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presenting condition or of client request (7,8).

The prevalence of use of smoking cessation care guidelines was low (34%), consistent with reports from other health service contexts (9,10). Further, the centers' observed lack of concordance with clinical guidelines may be explained in part by limited supportive systems and procedures. Despite evidence that training staff in smoking cessation care is associated with the

provision of such care (3), only 44% of centers reported that staff received such training in the past 12 months, a finding that was consistent with rates at mental health inpatient facilities (10).

Despite a statewide policy suggesting that staff interested in quitting smoking should be provided with at least four weeks of free NRT (15), only about half of the centers provided such support to staff. In contrast, the findings indicated that

^b Pearson's chi square or univariate logistic regression (df=1).

^c Variables with p values <.25 in the univariate logistic regression or Pearson's chi square were entered into the multivariate logistic regression model by using a forward stepwise approach.

in accordance with state policy, most centers provided a predominantly smoke-free environment. Such bans, however, appeared to not always be enforced, with almost half of the managers reporting that clients smoked in their facilities. Similar findings have been reported for mental health inpatient settings (10).

Three supportive systems and procedures were found to be independently and positively associated with the provision of smoking cessation care—using forms to record the smoking status of clients, encouraging staff to use NRT to stop smoking, and enforcing smoking bans. These strategies were associated with nearly four times greater or higher odds of providing smoking cessation care. Such findings confirm previous reports (10,14) and reinforce recommendations that systems-based approaches are required to support clinician delivery of smoking cessation care (3). The frequency and length of consultations reported to characterize community mental health centers appear ideally suited to enable the adoption of such an approach (11).

The findings of this study need to be considered in the context of a number of its design characteristics. First, the study was the first to assess smoking cessation care provision, care delivery supports, and their association in community mental health centers. Second, the study relied on managers' self-report of care provision, a method associated with a social desirability response bias, most likely resulting in an overestimate of care delivery. If this was the case, the actual levels of smoking cessation care were likely to be less than those reported, thereby suggesting that the need for change in clinical practice is even greater. Third, despite a very high participation rate (94%), the small sample size (N=79) may have provided inadequate statistical power to detect some significant associations. Fourth, given that the sample was drawn from one Australian statealbeit the largest, with 32% of the national population—the extent to which the findings generalize to other jurisdictions is unknown. However, given that studies conducted in community mental health centers in other Australian and international jurisdictions have reported similar suboptimal care provision (13,14), such findings are unlikely to be restricted to this specific study context. The possibility exists, however, that differences in jurisdictional policies and guidelines may be more likely to influence the prevalence of supportive systems and procedures.

Conclusions

In conclusion, the study has shown that the need for smoking cessation care among clients of community mental health centers remains largely unmet. The findings suggest that greater adoption of supportive clinical procedures will enhance the provision of such care.

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The authors report no competing interests.

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