

# Return to Smoking Following a Smoke-Free Psychiatric Hospitalization

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*This study examined the smoking behaviors and motivations of 100 patients hospitalized in a smoke-free psychiatry unit. The sample averaged nineteen cigarettes per day and had a history of repeated failed quit attempts, yet 65% expressed interest in quitting. During hospitalization, nicotine replacement was provided to 70% of smokers to manage nicotine withdrawal. Provider counseling for smoking cessation, however, was rare, and all patients returned to smoking within five weeks of hospital discharge. The inpatient setting provides a potential site for initiating tobacco dependence treatment; however to maintain abstinence following hospital discharge, greater support is needed. (Am J Addict 2006;15:15–22)*

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The mentally ill are one of the largest remaining groups of smokers, estimated to comprise 44–46% of the US tobacco market.<sup>1,2</sup> The smoking rate among individuals with mental illness is nearly double that of the general population, and even higher among the seriously mentally ill and those with comorbid substance abuse problems.<sup>1,3</sup> In California, the smoking rate for adults is among the lowest in the nation (17%),<sup>4</sup> yet recent studies in San Francisco estimate the smoking prevalence at 28% among psychiatric outpatients<sup>5</sup> and 45% among psychiatric inpatients.<sup>6</sup> Psychiatric patients tend to be heavy smokers<sup>7</sup> and are at elevated risk for smoking-related diseases, including cardiovascular disease, cancer, and stroke.<sup>8–10</sup> Prospective epidemiologic studies also have identified cigarette smoking to be a significant clinical predictor of future suicidal behavior even when potential confounding factors have been controlled for, such as income, race, history of

depression, substance abuse, and prior suicidal acts.<sup>11,12</sup> The association appears to be specific to current and not former smoking, and a dose–response relationship has been identified, with greater risk among heavier smokers. The meaning of these associations is not clear but may be related to the finding of reduced monoamine oxidase (MAO),<sup>13</sup> which is associated with violence and suicide, in the brains of current smokers, or the existence of some as-yet-unidentified confounding variable.

To address the complex needs of this vulnerable group, research is needed to inform treatments for smokers with comorbidities as well as the organization of healthcare systems for the delivery of appropriate interventions.<sup>14,15</sup> Given the complicated relationship between mental illness and smoking, the integration of cessation treatments within psychiatric care is recommended.<sup>16</sup>

The inpatient psychiatric setting provides an opportunity for intervening on tobacco dependence with a large number of smokers, many of whom may not otherwise seek smoking cessation treatment. In California, acute psychiatric care admissions numbered 203, 247 in 2003.<sup>17</sup> Smoking was banned in all US hospitals by the Joint Commission on Accreditation of Healthcare Organizations in 1992<sup>18</sup>; however, psychiatry inpatient units have varied in their implementation of smoke-free policies from complete smoking bans to allowance of off-unit smoking passes. In the San Francisco Bay Area, where the current study was conducted, twelve of fourteen inpatient psychiatric hospitals have complete smoking bans, and total smoking bans have been described for psychiatric units in California, Oregon, Minnesota, Texas, New Jersey, New York, and Kentucky.<sup>19</sup> For some patients, hospitalization may provide one of the few experiences with an extended period of not smoking. Studies of psychiatric hospitals adopting smoke-free policies have indicated that staff fears of increased rates of patient assaultive behavior, against-medical-advice discharges, and PRN prescriptions were unfounded.<sup>19</sup>

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The American Psychiatric Association's (APA) guidelines for the treatment of nicotine dependence specifically recommend the use of smoke-free psychiatric admissions to motivate cessation.<sup>16</sup> The guidelines state that patients who smoke should be advised to quit and, if interested, provided cessation services including written materials, brief counseling, and follow-up care. Additionally, nicotine replacement therapy (NRT) is recommended for managing nicotine withdrawal symptoms. The extent to which these recommendations are put into practice, however, is unclear.

A recent review of 105 inpatient records for smokers hospitalized on a smoke-free psychiatry unit found that the diagnosis of nicotine dependence or withdrawal was never made; smoking status was never included on the treatment plan; and while 56% of patients received nicotine replacement therapy (NRT) during their hospitalization to manage nicotine withdrawal, only 1% of smokers were encouraged to quit, referred for cessation treatment, or provided NRT on discharge.<sup>6</sup> The study did not assess patient interest in quitting smoking nor track patients' return to smoking following hospitalization. With general medicine patients, research has supported the efficacy of smoking cessation programs initiated in the hospital setting with patients who want to quit<sup>20</sup> and has demonstrated that when in-hospital cessation programs are not provided, the majority of patients return to smoking upon discharge.<sup>21-23</sup>

The current study sought to characterize the smoking behaviors and motivations of psychiatric patients and examine the impact of a smoke-free hospitalization on their future smoking behavior. Factors associated with patients' return to smoking following hospital discharge were explored. Findings may help inform the development of strategies for treating nicotine dependence in the inpatient psychiatry setting.

## **METHODS**

### **Sample and Recruitment**

Study subjects were 100 patients recruited from a university-based adult inpatient psychiatry unit in northern California that has had a complete smoking ban since 1988. Study inclusion criteria were an age of eighteen years or older, and current smoking status, which was defined as more than 100 lifetime cigarettes and one or more cigarettes in the past week. Exclusion criteria were non-English speaking, dementia or other brain injury precluding the ability to participate, plans to relocate out of the area in the next three months, and severe agitation or homicidal ideation.

Recruitment occurred on the unit. Clinicians introduced the study to patients meeting study criteria, and interested patients were contacted by research staff to confirm eligibility. After complete description of the study to the subjects, written informed consent was obtained.

The study received IRB approval and was designed in compliance with HIPAA regulations. Of the 463 patients admitted to the unit during the recruitment period, 161 (35%) were identified as current smokers. Of those, twenty patients did not meet study criteria, and 26 patients were discharged from the hospital before they could be recruited. Of the 115 patients who were approached to participate, 107 (93%) agreed to speak with research staff about the study, and 100 provided informed consent (87% participation rate).

### **Procedures**

Assessments were conducted during hospitalization and at one week, one month, and three months post-hospitalization. On-unit measures were administered within 48 hours of admission, provided patients were able and willing to complete the measures; exceptions were largely due to weekend admissions. The timing of on-unit measures was not found to be related to study findings. Follow-up assessments were conducted by phone. Subjects were paid \$10 for the on-unit assessment, \$5 for each follow-up assessment, and \$10 for travel for biochemical verification, as indicated. Subjects completing all assessments received a \$10 bonus. To assess the representativeness of the study sample, a chart review gathered basic demographic and smoking information on study refusers ( $n = 7$ ).

### **Assessments**

#### *On-Unit Measures*

The Smoking History Questionnaire assessed the years of smoking, daily smoking experience, and previous quit attempts. The Fagerstrom Test for Nicotine Dependence (FTND) assessed the level of nicotine dependence.<sup>24</sup> The Thoughts about Abstinence Questionnaire (four items) assessed desire, expectancy of success, anticipated difficulty, and abstinence goals related to quitting smoking.<sup>25</sup> The first three items were rated on a ten point Likert scale. Stages of Change Scale assessed readiness to quit smoking, classifying respondents into one of five stages of change found to predict abstinence and quit attempts: precontemplation (not intending to quit in the next six months), contemplation (intending to quit within the next six months), preparation (planning to quit within the next thirty days with a 24-hour quit attempt in the past year), action (quit smoking but for less than six months), and maintenance (quit smoking for six months or more).<sup>26</sup> The Nicotine Withdrawal (NW) Checklist (nine items) used a five-point scale to assess nicotine withdrawal symptoms, craving, and urge to smoke.<sup>27</sup> Questions on urge and craving were averaged to form a reliable craving index (Cronbach  $\alpha = .91$  in the current sample). All other items were averaged to form a reliable withdrawal index (Cronbach  $\alpha = .81$ ). The Secondhand Tobacco Smoke Exposure Survey (six items) assessed secondhand tobacco smoke exposure in living, work, and social situations. NRT Attitudes was a measure created for the current

study that participants completed at discharge. The two-item measure assessed reasons for using or not using NRT during the hospitalization. The Computerized Diagnostic Interview Schedule-IV (CDIS) assessed demographic information and DSM-IV diagnostic criteria for generalized anxiety, post-traumatic stress disorder, major depressive disorder, dysthymia, bipolar affective disorder, schizophrenia, schizophreniform, nicotine dependence and withdrawal, alcohol dependence, and drug dependence.<sup>28</sup> An interviewer directly entered patients' responses onto a laptop computer. The Addiction Severity Index (ASI) items on alcohol and drug use assessed lifetime and past month substance use.<sup>29</sup> Chart Review was used to document admission status, length of stay, medication use, and clinical attention to patients' tobacco dependence. NRT was quantified as dose per day. Chart data were anticipated to be fairly complete, as medical records staff were known to audit about 93% of the inpatient charts. A data dictionary and systematic coding form were used. An independent review of a random subset of charts (n = 10) indicated overall agreement of 96%.

#### Follow-Up Measures

The Self-Report of Smoking assessed the timing of the first cigarette following hospital discharge and the number of cigarettes smoked in the past week. Patients reporting "no smoking, not even a puff" in the past seven days were scheduled for biochemical verification. Biochemical Verification involved an expired air carbon monoxide (CO) sample using a Bedfont Smokerlyzer with CO ≤ 10 ppm verifying nonsmoking status.<sup>30</sup> Quit attempts were defined as abstinence for at least 24 hours with the intention of quitting (that is, not due to re-hospitalization). Mental Health Services Use was assessed as the number of visits to mental health practitioners, including emergency services and inpatient psychiatric care since the last assessment call. Alcohol and drug use were re-assessed at follow-up assessments.

#### Analyses

Analyses were conducted in SPSS version 11.0.1 and were primarily descriptive, examining the sample's smoking characteristics, level of nicotine dependence, and readiness to quit. The frequency of clinical attention to patients' tobacco dependence was evaluated, along with rates of return to smoking following hospital discharge. Correlations examined demographic, psychiatric, substance use, and environmental variables associated with patients' return to smoking following hospital discharge and future quit attempts.

## RESULTS

### Demographic and Psychiatric Characteristics

The sample was diverse in terms of demographic characteristics (see Table 1), and 20% received a pension for a

psychiatric disability. Patients identified their living situation prior to hospitalization as own residence (65%), living with a relative (15%), halfway house or therapeutic community (5%), hotel room (4%), homeless (8%), or other (3%). Active psychiatric diagnoses on the CDIS-IV were 55% major depressive disorder, 37% bipolar affective disorder, 37% post-traumatic stress disorder, 35% generalized anxiety disorder, 8% schizophrenia, 4% schizophreniform disorder, 34% alcohol dependence (8% in partial remission), 30% drug dependence, 83% nicotine dependence, and 62% nicotine withdrawal. An additional 23% were in recovery for alcohol dependence and 19% were in recovery for drug dependence. Half the sample reported illicit drug use in the thirty days prior to hospitalization. Not counting the nicotine disorders,

**TABLE 1.** Sample characteristics

Characteristic	N = 100
Age: M (SD)	38.7 (11.9)
Gender	
Male	60
Female	39
Transgender	1
Ethnicity	
Caucasian	68
Hispanic	9
Asian-American	7
African-American	4
Other	12
Marital status	
Never married	49
Married or cohabiting	28
Divorced, separated, or widowed	23
Education	
<High school degree	10
Completed high school or GED	20
Some college	38
College degree	17
Graduate studies	15
Employment status	
Unemployed	49
Employed	42
Student, retired, or homemaker	9
Income	
<\$10,000	27
\$10,000 to \$20,000	23
\$21,000 to \$40,000	23
>\$40,000	26
Missing	1
Insurance status	
Privately insured	71
Medicare or MediCal	29

Note: N = 100, so values correspond to sample percentage.

50% met criteria for more than one active Axis I disorders. Admission status was 13% voluntary, 76% for danger-to-self, 9% for danger-to-others, and 11% for grave disability. Length of hospitalization averaged 6.4 days (SD = 5.5, range: 1–37 days); 72% reported a prior psychiatric hospitalization.

Compared to the sample, study refusers were more likely to be female [67% vs. 39%, Odds Ratio (OR) = 3.1,  $p = .043$ ] but did not differ by age, marital status, ethnicity, employment, insurance status, admission status, or level of smoking as recorded in the medical record.

### Smoking Characteristics

Patients averaged nineteen cigarettes per day on admission (SD = 10.8; range: 1–60). Most (88%) purchased their own cigarettes and estimated spending a mean of \$112 per month on tobacco (SD = 67, range: \$5–320). Seventy-five patients (75%) reported smoking most or all of their cigarettes when alone. Scores on the FTND averaged 4.6 (SD = 2.6); 68% of patients smoked within thirty minutes of waking. The stage of change for smoking cessation was 35% precontemplation, 41% contemplation, and 24% preparation. On a scale from 1 to 10, patients rated their desire for abstinence at  $M = 5.7$  (SD = 2.9), their expectation for success at  $M = 4.6$  (SD = 2.9), and their expectation for how difficult it would be to keep from returning to smoking at  $M = 7.2$  (SD = 2.6). Identified smoking goals were 26%, no goal; 26%, quitting for good; and 48%, an intermediary goal (eg, smoking in a controlled manner, short term abstinence).

On average, patients first tried tobacco at fourteen years of age (SD = 4.7) and started smoking regularly at eighteen years of age (SD = 7.4), with an average of nineteen years of smoking (SD = 11.4, range: two months–47 years). Most patients (83%) reported a previous 24-hour quit attempt in their lifetime, with 49% attempting to quit in the past year. Fifty-four patients (54%) reported being encouraged to quit by a general healthcare provider in the past year, and 31% reported encouragement to quit from a mental healthcare provider. Table 2 summarizes the strategies used by patients in previous quit attempts, with the most common strategy being “cold turkey.”

Nearly half the sample (45%) described their living situation as smoke-free; 37% lived with a smoker. Patients' exposure to others' tobacco smoke averaged 3.7 hours per day (SD = 4.7). Patients who lived in a halfway house or residential community ( $M = 8.6$  hrs, SD = 3.9) or were homeless ( $M = 6.1$  hrs, SD = 3.9) had the highest levels of secondhand smoke exposure; patients living in their own residence had the lowest ( $M = 2.9$  hrs, SD = 4.3),  $F(5,98) = 2.79$ ,  $p = .022$ .

### Attention to Tobacco Use during Hospitalization

Seventy patients (70%) used NRT during the hospitalization: 42, NRT patch only; 15, gum only; and 13, both patch

**TABLE 2.** Cessation strategies used by patients in prior quit attempts

Cessation strategy	N
Never tried to quit	14
Cold turkey	73
Nicotine replacement therapy*	48
Gradually cut down	40
Bupropion*	18
Cessation class or program*	14
Provider counseling*	10
Acupuncture	7
Telephone hotline*	4
Hypnosis*	3
Other (eg, food and chewing gum, exercise, meditation)	7

Note: N = 100, so values correspond to sample percentage.

\*Indicates a recommended cessation strategy in clinical guidelines for the treatment of nicotine dependence.<sup>12,14</sup>

and gum. Patients with higher FTND scores ( $r = .31$ ,  $p = .002$ ) and greater urges and cravings to smoke ( $r = .30$ ,  $p = .003$ ) were more likely to use NRT during their hospitalization. Daily dose of NRT averaged 12.6 mg (SD = 7.2) and was higher for patients receiving patch only ( $M = 15.6$  mg, SD = 5.1) or patch plus gum ( $M = 14.4$  mg, SD = 7.1) compared to those receiving gum only ( $M = 3.0$  mg, SD = 2.3),  $F(2,69) = 33.94$ ,  $p < .001$ . Using the estimate that 1 mg of nicotine equates to 1 cigarette, the median NRT replacement level was 70%, highest among patients receiving nicotine patch only (Md = 83%) and lowest among those receiving nicotine gum only (Md = 18%). Among the seventy patients who used NRT, 45 (64%) identified the benefit of decreased craving and nicotine withdrawal symptoms, eleven (18%) indicated that it provided a substitute for when unable to smoke, two (3%) stated it helped for quitting smoking, twelve (17%) reported no benefit, and six (9%) identified other benefits. Of the thirty patients who did not use NRT, thirteen (43%) reported it was not needed, six (20%) stated it was not offered, six (20%) reported concerns with side effects or that NRT might maintain dependence, and five (17%) reported other concerns. Five patients were prescribed bupropion, and three patients were prescribed nortriptyline during their stay; in no case was the indication for smoking cessation.

In three cases (3%), the hospital discharge was related to patients wanting to leave to smoke cigarettes, with one patient discharged against medical advice. These patients were found to be heavier smokers ( $M = 35$  vs. 19 cigarettes per day) with higher FTND scores ( $M = 8.0$  vs. 4.5) relative to the full sample (both  $p$ 's < .05). These patients used NRT during their hospitalization, with the estimated proportion of nicotine replacement ranging from 2–53%.

The extent to which patients were diagnosed with nicotine dependence or had tobacco use included in the treatment plan was examined along with cessation support

provided at discharge. Chart review indicated one patient (1%) had tobacco use included as a target on the master treatment plan, two patients (2%) were advised to quit smoking while hospitalized, three patients (3%) received a diagnosis of nicotine dependence in their discharge summary, and four patients (4%) were provided NRT on discharge.

### Return to Smoking Following Hospital Discharge

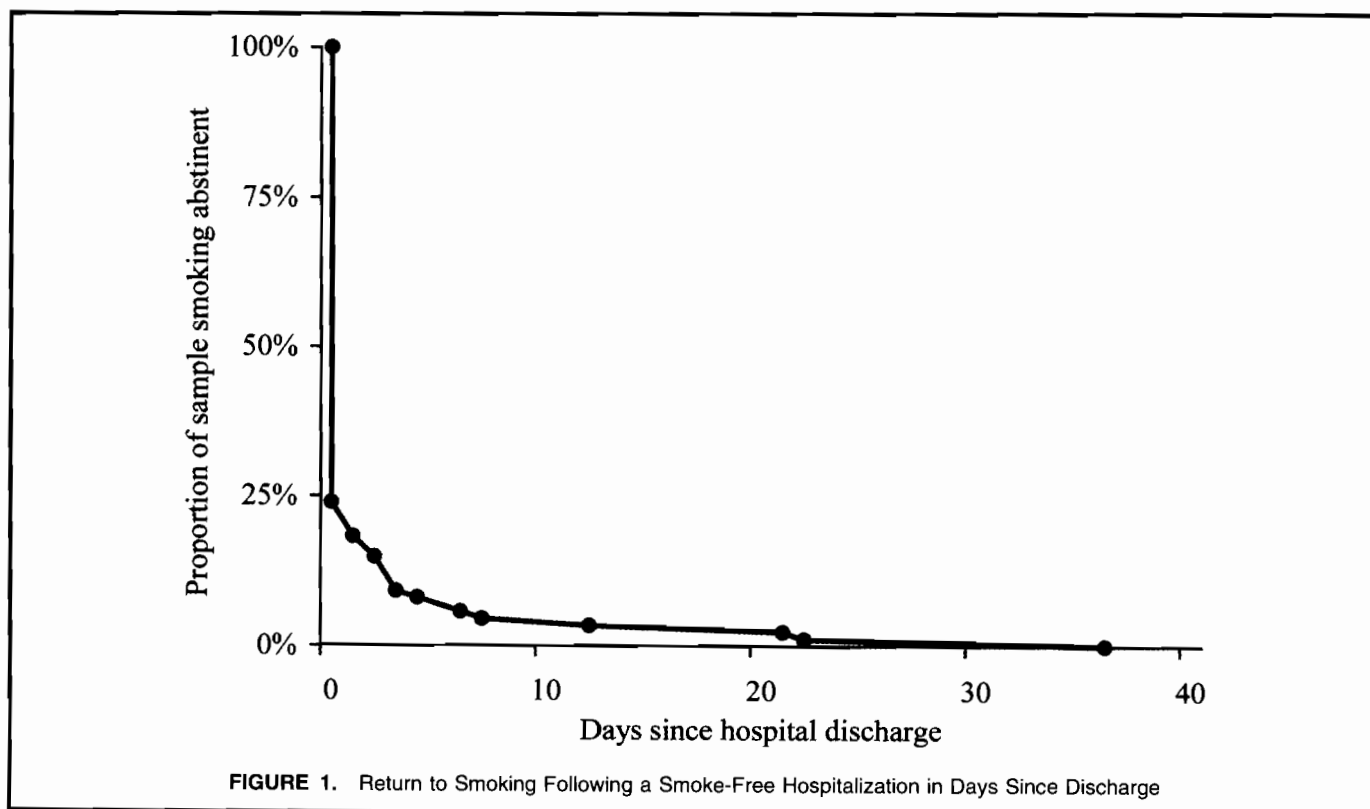
Follow-up data were collected on ninety of the 100 patients. Patients lost to follow-up were more likely to be male (90% vs. 57%, OR = 4.2,  $p = .045$ ) and receive Medicare/MediCal (70% vs. 24%, OR = 7.2,  $p = .003$ ) as compared to the full sample. Time to first cigarette following hospital discharge ranged from seconds to 36 days, with all patients returning to smoking within the three-month follow-up period; 76% reported smoking the same day they were discharged from the hospital, with a median time to first cigarette of five minutes (see Fig. 1).

Factors associated with patients' return to smoking were examined. Due to the high proportion who smoked on the day of discharge, return to smoking was dichotomized as day of discharge versus later. Associations were tested with Kendall's Tau correlations, a nonparametric test of association. Patients who were heavier smokers at intake ( $r = .18$ ,  $p = .047$ ) and had higher FTND scores ( $r = .19$ ,  $p = .043$ ), greater craving and urges to smoke during hospitalization ( $r = .23$ ,  $p = .014$ ), fewer lifetime ( $r = -.19$ ,  $p = .034$ ), and past year ( $r = -.26$ ,  $p = .008$ ) quit attempts, less desire

for abstinence ( $r = -.29$ ,  $p = .002$ ), and lower expectation for success with quitting ( $r = -.32$ ,  $p = .001$ ) were significantly more likely to return to smoking on the day of discharge. Chi-square statistics examined the association between the return to smoking and the categorical variables of stage of change, abstinence goal, and psychiatric diagnoses. Patients in precontemplation (86%) and contemplation (89%) were more likely to return to smoking on the day of discharge compared to those in the preparation stage (41%),  $\chi^2 = 20.12$ ,  $df = 2$ ,  $p < .001$ . Similarly, patients with non-abstinence related goals (83%) were more likely to return to smoking on the day of discharge compared to those who endorsed the goal of complete abstinence (58%), OR = .29,  $p = .016$ . Additionally, patients with a current major depressive disorder were more likely to smoke the day of discharge (82%) compared to patients without depression (58%), OR = 3.3,  $p = .030$ . Variables unrelated to return to smoking were demographic variables; secondhand smoke exposure; NRT use during hospitalization, examined either as a dichotomous variable (use, nonuse) or in terms of percent of nicotine replacement; length of hospitalization; nicotine withdrawal symptoms; and alcohol or illicit drug use prior to or following hospitalization.

### Changes in Smoking over Time

While all patients returned to smoking following hospital discharge, nearly half (48%) reported a later 24-hour quit attempt and four (4%) were confirmed abstinent at



the three-month follow-up. Patients who initiated a later quit attempt had lower FTND scores ( $r = -.22$ ,  $p = .019$ ), more quit attempts in the past year ( $r = .24$ ,  $p = .018$ ), greater desire for abstinence ( $r = .26$ ,  $p = .005$ ), greater expectation for success ( $r = .21$ ,  $p = .025$ ), and lower anticipated difficulty with staying quit ( $r = -.24$ ,  $p = .013$ ). Additionally, making a quit attempt during the follow-up period was more likely for patients in the preparation stage of change (OR = 5.7,  $p = .002$ ), who identified the goal of complete abstinence (OR = 5.4,  $p = .003$ ) and used NRT following hospital discharge (OR = 6.9,  $p < .001$ ). Not smoking on the day of hospital discharge also was associated with a greater likelihood of future quit attempts (OR = 6.7,  $p = .001$ ).

Most patients (81%) had a mental health contact during the three-month follow-up period, with one third re-hospitalized for psychiatric problems. Having a mental health contact or being re-hospitalized was unrelated to future quit attempts. A single variable was found to differentiate the four patients confirmed abstinent at the three-month follow up relative to the full sample: at intake, they anticipated less difficulty with maintaining abstinence following a quit attempt ( $M = 4.6$  vs.  $7.3$ ,  $F(1,97) = 4.16$ ,  $p = .044$ ).

## DISCUSSION

In the current study, psychiatric inpatients were found to be highly dependent, heavy smokers, with a history of multiple failed quit attempts. Smoking often occurred in isolation, and patients spent an average of \$112 per month on cigarettes, which for patients on fixed incomes may be a significant hardship. A previous study of smokers with schizophrenia indicated that 27% of their monthly incomes was spent on cigarettes.<sup>31</sup> Secondhand smoke exposure levels were high, especially among the homeless and patients living in halfway houses or residential communities.

Patients reported trying a variety of cessation strategies, many of which lacked strong empirical support (eg, cold turkey, nicotine fading). Advice to quit from a healthcare provider was reported by just over half the sample; provider assistance with quitting was reported by only 10% of the sample.

Tobacco dependence is a costly chronic condition that warrants clinical attention until long-term abstinence is achieved,<sup>14</sup> and evidence-based treatment needs to be delivered to address the disproportionate rate of smoking among the mentally ill. The APA has identified the inpatient stay as an opportune time for initiating treatment of nicotine dependence,<sup>16</sup> and the current findings indicate hospitalized psychiatric patients who smoke are as ready to quit as smokers in the general population.<sup>32</sup> Integrating smoking cessation programs within psychiatric care would be ideal for managing psychiatric symptoms and stressors during quit attempts.

Most patients used NRT during their hospitalization. Identified benefits of NRT centered more on reduction of nicotine withdrawal symptoms as opposed to supporting cessation. Clinical practice guidelines recommend NRT for hospitalized smokers, where appropriate, to reduce discomfort, maximize compliance with a hospital no-smoking policy, and minimize some of the undesirable adrenergic effects associated with nicotine withdrawal.<sup>16,33</sup> Three patients requested hospital discharge in order to smoke cigarettes, with one of the discharges made against medical advice. The patients were highly dependent, heavy smokers, and combination nicotine replacement strategies, better matched to patients' smoking levels, are recommended to avoid the potential for compromised care.

Most patients had been hospitalized previously, and many had follow-up contact with mental health services, yet provider counseling for smoking cessation was rare. All patients started to smoke again within the three-month follow up period, with 76% smoking the day of hospital discharge and many smoking within five minutes of leaving. Opportunities for intervention are being missed, and the findings indicate that a smoking ban with temporary NRT is unlikely to result in sustained abstinence. When smoking was allowed openly on psychiatric units, the nursing staff spent an average of 15 min per shift managing patients' cigarette use.<sup>34</sup> For units that continue to allow smoking breaks, staff may spend upwards of four hours a day managing patients' off-unit smoking behavior.<sup>35</sup> Ideally, a portion of the time saved with a complete smoking ban could be shifted to the delivery of cessation counseling services. If smoking cessation services are not offered, patients may misperceive the smoking ban as punitive, their smoking habit as a non-medical issue, and themselves as unworthy of receiving intervention on this deadly addiction.

Patient factors associated with a return to tobacco use on the day of hospital discharge included level of nicotine dependence (FTND, cigarettes per day, craving, and urges to smoke), motivation (stage of change, commitment to abstinence), and diagnosis of current major depressive disorder. Similar variables were associated with patients' later attempts at cessation, as was the use of NRT following hospital discharge. Four patients were confirmed abstinent at the three-month follow-up. During hospitalization, these patients anticipated less difficulty with maintaining abstinence following a quit attempt. The variables identified as predictive of smoking behavior in this inpatient psychiatric sample are similar to those found to be predictive of cessation outcomes in the general population of smokers.<sup>36</sup>

Identification of effective intervention strategies for treating nicotine dependence in the inpatient psychiatric setting is greatly needed. Potential interventions may include higher-dose nicotine replacement protocols matched to patients' reported smoking levels, counseling

strategies tailored to patients' readiness to quit smoking, and support with quitting smoking that extends beyond hospitalization. Funded by the National Institute on Drug Abuse, the authors will be evaluating an intervention in a randomized controlled trial, with components targeted at the main variables found to be associated with return to smoking in the current study, (ie nicotine replacement to address level of dependence combined with a stage-tailored motivational intervention and mood management strategies).

While the current study sample was largely representative of the patient population, the study is limited by the restriction to one clinical site. One might expect an academic hospital in a state with strong tobacco control policies to be in the forefront of treating nicotine dependence. Study strengths included the diverse patient population, use of biochemical verification of nonsmoking status, prospective design, and 90% follow-up rate. Some may be skeptical that psychiatric patients would be able or willing to quit, and in practice this assumption has likely restricted the availability of cessation services to this high-risk population. The 87% participation rate, however, suggests that patients with mental illness who smoke are receptive to studies about their smoking behavior. They are interested in and have attempted to quit smoking, but are rarely advised to do so by their mental healthcare providers. Psychiatry is well positioned to intervene on tobacco dependence and in the inpatient setting, must go beyond providing only temporary NRT without more intensive counseling and follow-up support.

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