

Smoking

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Smoking The use of cigarette smoking is a major aspect of our society. Smoking is used in socializing, relaxing, and even entertaining. Smoking tobacco is sold in a variety of options, the most popular being the cigarette. This report examines the irreversible effects of cigarette smoking on various organ systems and challenges the notion that a few years of exposure to smoking will have no lasting adverse consequences. This is to discourage young people from taking up this deadly habit by appealing to their common sense and better judgment, thereby allowing them to choose for themselves not to smoke. The knowledge of irreversible effects of smoking on various organ systems, can save your life. I will not recite the familiar litany of smoking-related health problems such as emphysema, mouth and throat cancer, and genito-urinary tract infections. Rather, I will show that smoking cigarettes for as few as five years can have a permanent effect on the lungs, heart and circulatory system, and reproductive system. Despite smoking having irreversible effects; it would be foolish for a smoker to conclude that after years of smoking, quitting would do him no good. Many studies prove that tobacco-related health effects decline substantially as time away from smoking increases; some of the benefits begin within months after quitting. After years of exposure to the damaging effects of tobacco, smokers that decide to quit, must realize that they have to be realistic in their expectations of recouping their health. Cigarettes damage the body gradually and insidiously in a number of different ways. One popular argument the scientific community often makes encourage smokers to quit stems from the conjecture that all of the health effects of smoking are reversible shortly after cessation, Readiness to Quit Smoking and Quit

Attempts Among Australian Mental Health Inpatients Abstract Introduction: Mental health inpatients smoke at higher rates than general population smokers. However, provision of nicotine-dependence treatment in inpatient settings is low, with barriers to the provision of such care including staff views that patients do not want to quit. This paper reports the findings of a survey of mental health inpatients at a psychiatric hospital in New South Wales, Australia, assessing smoking and quitting motivations and behaviors. Methods: Smokers (n = 97) were surveyed within the inpatient setting using a structured survey tool, incorporating the Fagerstr m Test for Nicotine Dependence, Reasons for Quitting Scale, Readiness and Motivation to Quit Smoking Questionnaire, and other measures of smoking and quitting behavior. Results: Approximately 47% of smokers reported having made at least one quit attempt within the past 12 months, despite nearly three quarters (71. 2%) being classified as in a “ precontemplative” stage of change. Multinomial logistic regressions revealed that self-reporting “ not enjoying being a smoker” and having made a quit attempt in the last 12 months predicted having advanced beyond a precontemplative stage of change. A high self-reported desire to quit predicted a quit attempt having been made in the last 12 months. Conclusions: The majority of smokers had made several quit attempts, with a large percentage occurring recently, suggesting that the actual quitting behavior should be considered as an important indication of the “ desire to quit. ” This paper provides further data supporting the assertion that multimodal smoking cessation interventions combining psychosocial and pharmacological support should be provided to psychiatric inpatients who smoke. Introduction Smoking rates among

persons with a mental illness are 2–3 times higher than in the general population. Smokers with mental illness are also more dependent on nicotine, less likely to quit smoking, and more likely to suffer smoking-related illnesses and increased medical morbidity than other smokers. The highest rates of smoking and nicotine dependence have been found among mental health inpatients with smoking prevalence reported to be as high as 42%–78%. Despite this burden of illness, little else is known about the smoking characteristics of this vulnerable subgroup of smokers, including their quitting motivations and behaviors. Although the advent of smoke-free policies and smoking bans in health care facilities in developed Western nations may have increased the attention toward tobacco use in general health care settings, there seems to have been a slower adoption of change in mental health care settings and lower levels of attention toward addressing tobacco use for mental health patients. This is evidenced by smoke-free policy exemptions and low levels of policy compliance and nicotine-dependence treatment in mental health hospitals. Australian and international data suggest that a perception commonly held by mental health staff that mental health patients are not motivated or willing to quit may contribute to the poor provision of nicotine-dependence treatment in both inpatient and community psychiatric settings. “Motivation to quit” is an important construct in the smoking cessation process; although the literature reflects some lack of consensus on how such “motivation” is defined and measured. In the general population, “high” motivation levels as measured by self-reported determination to quit have been associated with seeking out and using evidence-based cessation support. Further, a range of

motivational factors including explicit self-reported “ wanting to quit, ” financial and health concerns and expectancies, and attitudes to smoking, have been found to predict making a quit attempt, among general population smokers. In contrast to the views commonly reported by mental health clinicians, the limited research that has investigated the “ motivation to quit” among smokers with a mental illness suggests that substantial proportions of such smokers do want to quit. Utilizing the Transtheoretical Model (TTM) of behavior change, the prevalence of future “ readiness to quit” among community samples of persons with schizophrenia and related psychotic disorders, and those with depression, has ranged between 21% and 49%; similar to that indicated for general population smokers (26%—41%). Research has also found between 19% and 38% of smokers with a mental illness to be contemplating quitting within the next month . Further, research has demonstrated that such motivation can be translated into successful quitting; with quit rates of up to 22% being achieved among such persons when combined psychosocial and pharmacological interventions are utilized. Studies such as those cited above, however, investigating interest in quitting among persons with a mental illness, have for the most part been restricted to considering specific diagnostic subgroups in community settings, particularly patients with schizophrenia and depression. A broader understanding of quit intentions among persons with a mental illness is required, and may be particularly important for inpatient clinical staff, given their role in implementing systematic provision of nicotine-dependence treatment for diagnostically heterogeneous patient populations. The few studies that have examined motivation to quit among mental health

inpatient samples have been somewhat limited in their assessment—using a variety of stage of change measures, with comparisons between the studies being difficult. To the authors' knowledge, no studies have examined the predictors of readiness to quit or quit attempts among mental health inpatients. However, among psychiatric outpatients, who may in essence be the same patient population though in a different stage of wellness and treatment, research has suggested a positive linear relationship between the number of previous quit attempts and levels of intrinsic motivation and stage of change for quitting among those with schizophrenia. Further, a greater endorsement of the “cons” of smoking has been associated with contemplating quitting, and a greater desire for abstinence among outpatients with depression. Understanding the patient interest in quitting, quitting behaviors, reasons for quitting, and associated factors may assist the clinical staff in addressing tobacco use in inpatient settings, and aid the development and delivery of more effective nicotine-dependence treatment for persons with a mental illness. Given the limitations of previous research, and particularly the paucity of research undertaken within inpatient psychiatric settings, a study was undertaken to (a) examine the readiness to quit, quitting behaviors, and reasons for quitting among a diagnostically heterogeneous sample of smoking patients in a large public inpatient psychiatric hospital in New South Wales, Australia, and (b) explore whether a range of sociodemographic, clinical, and smoking-related factors predict readiness to quit and a quit attempt in the last 12 months. Methods Design and Setting A cross-sectional survey was administered to inpatients at a large public acute adult inpatient psychiatric hospital with a total smoke-free

policy in New South Wales, Australia. The smoke-free policy included a total smoking ban in all hospital buildings and grounds. Voluntary patients or those able to access leave were able to leave the hospital grounds to smoke. Area health guidelines required the staff to provide nicotine-dependence treatment (including nicotine replacement therapy) to all smokers; however, previous research in this setting has suggested such treatment to be inconsistent. The hospital had six psychiatric units, of which three were sampled for this study: one comorbid acute mental health and substance use unit, and two acute mental health units. Three units were excluded: two psychiatric emergency care units and one geriatric unit. Ethics approval for the study was obtained from the Hunter New England Human Research Ethics Committee (reference no: 08/04/16/5. 10) and the University of Newcastle Human Research Ethics Committee (reference no: H-2008-0191).

Procedure The survey was undertaken across a 12-month period (May 2009—May 2010) at a rate determined by the availability of interview staff—who undertook interviews on average 1 day per week. All inpatients present on the day when the interview was being conducted in that unit were eligible to participate in the study if the clinical opinion of the nursing staff indicated they were well enough to do so. Trained interviewers systematically approached such patients by utilizing a ward list, and asked them to participate in a survey about their smoking status and views of the hospital's smoke-free policy. The surveys were conducted in a quiet area of the unit separated from other patients and took up to 20min to complete. Smokers were defined as those participants who self-reported being regular or occasional smokers on admission to hospital. The aim was to continue

recruitment until a total of 100 smokers had been surveyed across the 3 units, drawing approximately one-third of this number from each. Measures The survey included items regarding tobacco use, as measured by cigarettes per day, quit attempts (lifetime and in the last 12 months), and nicotine dependence (Fagerstr m Test for Nicotine Dependence [FTND]; readiness to quit as measured by a modified version of Prochaska and DiClemente’s TTM the Readiness and Motivation to Quit Smoking Questionnaire (RMQ), self-report desire to quit (1–10 scale), and the Reasons for Quitting Scale (RFQ). The survey tool also included several items developed by researchers specifically for this project, including a perceived level of addiction to cigarettes scale (1 = “ not at all strong” to 10 = “ extremely”), and several “ smoking-identity” items based on the PRIME theory of addiction, including the perceived identity as a smoker, the enjoyment of smoking, and the ability to imagine life as a nonsmoker. For all patients admitted to the three study units throughout the course of the survey, aggregated data were available regarding sociodemographic and clinical characteristics including age, gender, marital status, mental health diagnosis, cultural identification, and admission length from medical record information. For survey participants, this information was linked with survey responses and used in analyses investigating predictors of readiness to quit and quitting behavior. Analyses IBM SPSS Statistics release version 19. 0. 0 was used to analyze the data. Descriptive statistics were used to describe the sample with respect to demographic characteristics, smoking status, nicotine dependence (FTND), readiness to quit, reasons for quitting, and previous quit attempts. Percentages, means, standard errors, and ranges are reported where

appropriate. Chi-square analyses were used to explore the sociodemographic and clinical differences between respondents and nonrespondents, and to examine associations between sociodemographic characteristics, smoking-related variables, the readiness to quit, and quit attempts among the surveyed participants. Categorical variables associated at $p < .10$ were entered into multinomial backwards likelihood ratio (LR) logistic regressions to determine predictors of readiness to quit and quit attempts in the last 12 months. To facilitate the conduct of chi-square and subsequent multinomial logistic regression analyses, the following demographic, smoking, and motivational variables were condensed into two categories: marital status, cultural identification, diagnosis, previous admission, nicotine dependence, enjoy being a smoker, imagine life as a nonsmoker, and the stage of change for quitting. The remaining variables were reduced to three categories: age, admission length, and smoking duration; self-reported level of addiction; and the self-reported desire to quit.

Results Participants A total of 757 patients were admitted to the three study units during the survey period, of whom 214 (28.3%) were approached for participation and 543 were not. The majority of those not approached ($n = 494, 91.0\%$) were not present in a unit and/or eligible for inclusion on any day when the interviewing occurred, including nearly a quarter of whom had short admissions of 3 days or less ($n = 109$). A small percentage of patients were excluded on the basis of being mentally or physically unable to complete the interview ($n = 46, 16.1\%$) or being less than 18 years of age ($n = 3, 0.4\%$). Of those patients who were approached, 199 (93.0%) consented to participate, with full interviews able to be completed for 181 patients. Survey participants were mostly males (56.

9%), aged 31 years or older (70.7%; $M = 37.2$, $SE = 1.2$), single (55.8%), and not of Aboriginal or Torres Strait Islander descent (96.1%). The most common diagnoses were mood disorders (42.0%) and schizophrenia and related psychosis (38.1%). The majority of participants had previously been admitted to the facility (53.6%), with 40.9% admitted for between 8 and 31 days, with an average length of stay of 30.9 days ($SE = 5.9$). Chi-square analyses indicated no differences in sociodemographic or clinical characteristics between respondents and nonrespondents (i. e., those who were not approached or who declined participation).

Smoking Status and Smoking-Related Characteristics

Just over one-half of survey participants identified themselves to be smokers, 53.6% ($n = 97$). In accordance with the study's sampling frame, approximately one-third of the smokers were drawn from each of the three study units ($n = 35, 32$, and 30). Smoking rates however differed significantly by unit, with a higher reported rate of smoking in the comorbid acute mental health and substance use unit (83.3%; 35/42 survey participants) than the two acute mental health units where the smoking rates were 44.4% (32/72) and 44.8% (30/67) ($\chi^2(4) = 15.7$, $p = .002$). The quit ratio (calculated as the proportion of ex-smokers to ever smokers for the sample) was 26.0%. Chi-square analyses revealed a significantly lower quit ratio for participants of the comorbid acute mental health and substance use unit (12.5%), than the two acute mental health units (28.9% and 34.8%; $\chi^2(2) = 6.6$, $p = .04$). Participants began smoking regularly at a mean age of 16.8 years ($SE = 0.5$), had smoked for an average 20.4 years ($SE = 1.3$), and 40.6% smoked 11–20 cigarettes per day. The majority (54.6%) were classified as nicotine dependent (FTND \hat{a}

6). The single item level of addiction scale (1–10) indicated the majority of smokers (62.1%) and reported addiction levels ranging from 8 to 10. Almost 30% of the participants indicated that they did not “enjoy being a smoker,” and when asked to imagine life as a nonsmoker, 50% of the participants reported it to be hard (Table 1). Aside from smoking rate and quit ratio, no other differences in smoking-related characteristics were identified between units or diagnostic groupings. Readiness to Quit Previous Quit Attempts Reasons for Quitting Smokers scored a total score of 2.7 (SE = 0.1) on the RFQ scale with an intrinsic–extrinsic score of 0.4 (SE = 0.1). Scores were highest for intrinsic health concerns (M = 3.1, SE = 0.1), followed by immediate reinforcement (M = 2.8, SE = 0.1), self-control (M = 2.7, SE = 0.1), and social influence factors (M = 2.2, SE = 0.1). Discussion This study adds substantively to our knowledge of smoking and quitting behaviors and motivations among mental health inpatients. The results demonstrate that while a majority of smokers were classified at the time of the survey as “precontemplative” with respect to the readiness to quit, a desire to quit smoking was evident in that the great majority had made quit attempts in the past (82%) and 47% had done so within the last year. Consistent with previous studies, the quit ratio for the current sample was lower than general population rates and similar to previously reported quit ratios for persons with a mental illness. Despite a low quit ratio, reflecting a low likelihood of quit attempts translating into successfully maintained smoking cessation, a large proportion of those making a quit attempt in the last 12 months indicated a period of abstinence of more than a month. Importantly, there is a need to inform clinical staff about the significant

proportion of their clients who are making attempts to quit smoking, and to emphasize that the evident low success rate of such attempts should only serve to further highlight the need for clinical staff to provide appropriate nicotine-dependence treatment in the inpatient setting and to facilitate postdischarge smoking cessation support. Further, while the rate of smoking was higher among patients in the comorbid mental health and substance use unit, as previously observed in this population, no differences were evident by unit or diagnostic grouping, or other demographic or clinical descriptors considered, with respect to the readiness or the desire to quit, or the number of previous quit attempts. Given that previous research has indicated the mental health staff to provide nicotine-dependence treatment selectively based on their perceptions of patient receptivity to care, and the desire to quit), our findings reinforce the need to provide smoking cessation care routinely and systematically rather than selectively to a particular type of patient). Additionally, the proportion of participants making a quit attempt in our sample was similar to the rates reported in psychiatric outpatient samples). This finding is encouraging and suggests pervasive attempts to quit despite the presence of acute psychiatric symptoms. Clinicians should be made aware of their patients' ongoing attempts to quit, particularly given the clinical opportunity provided by the inpatient stay; where patients may be in a restricted smoking environment for an extended period, with access to clinical and pharmacological support. In examining the factors associated with currently being in a contemplative (as opposed to precontemplative) stage of change, only two factors were identified as predictors: a quit attempt within the last 12 months and an indication of not enjoying being a

smoker. In examining the factors associated with a quit attempt in the last 12 months, only a high self-reported desire to quit (8–10, on a 10-point scale) was identified as a predictor. These findings are consistent with research among psychiatric outpatient samples indicating that making a recent quit attempt) and endorsing negative aspects of smoking) are associated with a greater desire to quit. Further, evidence from general population smokers suggests that motivational factors predict quit attempts), and the number of previous quit attempts is positively correlated with the intention to quit). Together, these results suggest that actual quitting behavior may be an important indicator of the “ desire to quit” in the inpatient psychiatric setting. The finding that not enjoying being a smoker predicted readiness to quit is supported by similar previous research indicating that patients who endorse the “ cons” of smoking are more likely to be contemplating quitting, and show greater desire for abstinence). In a recent systematic review examining the predictors of quitting smoking in the general adult population, studies revealed that having a negative opinion of smoking was also predictive of making a quit attempt, and that greater enjoyment of smoking was negatively associated with making a quit attempt). Our findings also suggest that participants were almost equally divided in their ability to imagine their life as a nonsmoker (hard vs. easy). While there has been limited research on the topic of smoking identity, some researchers suggest that developing a “ nonsmoker” identity predicts the motivation to quit, and quit attempts (), and may prevent relapse after making a quit attempt Relapse prevention may be a particularly pertinent intervention strategy for this population, given that a substantial proportion

of smokers in our sample indicated a recent quit attempt of more than a month; however, the quit ratio of the total sample was low. Clinicians may routinely identify smokers who report high levels of enjoyment from smoking, and place an emphasis on the negative attributes of smoking (e. g., health, cost, smell, social stigma), and assist in the development of a nonsmoker identity (e. g., removing smoking paraphernalia from home and car, saying “ I am a nonsmoker” to proffered cigarettes, etc.). Future research into “ smoker identity” and its use as a practice approach in clinical settings may potentially improve cessation rates among this group. Smokers reported slightly higher levels of intrinsic versus extrinsic motivation on the RFQ); however, the little difference between intrinsic and extrinsic scores suggests that participants were equally influenced by both types of motivation. Overall, scores on the RFQ were similar to those in outpatient psychiatric samples , and higher than those in the general population samples). As previously found among smokers with a mental illness (), and in the general population (), participants cited health concerns as the most important reason for quitting; however, scores on immediate reinforcement were almost equally as high. Having intrinsic concerns about the effect of smoking on health has been found to be associated with more advanced readiness to quit) and has been shown to predict making a quit attempt among general population smokers (. Interventions among this population could focus on enhancing intrinsic motivation types (such as self-control) and harnessing immediate reinforcement type motivations. Contingency management, for instance, has shown some promise in reducing smoking behaviors among smokers with schizophrenia and opioid-maintained patients

(This study was conducted across four units located at one site, and as such the generalizability of the findings may be limited. However, given that similar smoke-free policies are now compulsory in many hospitals internationally (, these findings are likely to be of relevance in other inpatient psychiatric facilities. Further, the possibility of bias, particularly the influence of social desirability through the use of self-report data in this study, cannot be discounted. However, as the interviewers were independent of clinical care, and participants were not enrolled in a smoking cessation trial, the risk of such bias may have been reduced. In conclusion, these results suggest that actual quitting behavior should be considered as an important indication of the “ intent to quit. ” The high proportion of respondents reporting a quit attempt, paired with the low quit ratio of this sample, suggest that targeted, comprehensive smoking cessation interventions are required. These findings will enable mental health staff to be better informed and hence assist in removing barriers to the provision of nicotine-dependence care for this significant population of smokers, and facilitate the provision of nicotine-dependence treatment. Integrated, combined, and evidence-based psychosocial and pharmacological interventions are required within mental health and addiction treatment settings to improve quit success. References (2001) Depression and stages of change for smoking in psychiatric outpatients . *Addictive Behaviors* 26(5)621—631doi: 10. 1016/S0306-4603(01)00178-2 (1997) Readiness to stop smoking in schizophrenia *Canadian Journal of Psychiatry* 42(1)49—52. American Psychiatric Association (1996) Practice guideline for the treatment of patients with nicotine dependence *American Journal of Psychiatry* 153(Suppl. 10)1—31

(2010) Mental health workers' views on addressing tobacco use. *Australian and New Zealand Journal of Psychiatry* 44(9)846—851doi: 10. 3109/00048674. 2010. 488637 Association of American Medical Colleges. Physician behavior and practice patterns related to smoking cessation: Summary report. Washington, DC: Association of American Medical Colleges; (2007). Australian Institute of Health and Welfare (2007) National drug strategy household survey: detailed findings Canberra, Australia: AIHW. Retrieved from www.aihw.gov.au (2007) Characteristics of smokers with a psychotic disorder and implications for smoking interventions *Psychiatry Research* 150(2)141—152doi: 10. 1016/j. psychres. 2006. 05. 021 (2010) Smoking cessation in severe mental illness: What works? *Addiction*, 105(7)1176—1189doi: 10. 1111/j. 1360-0443. 2010. 02946. x (2010) Motivational factors predict quit attempts but not maintenance of smoking cessation: Findings from the International Tobacco Control Four country project *Nicotine & Tobacco Research* 12(1)4—11doi: 10. 1093/ntr/ntq050