NOVA

University of Newcastle Research Online

nova.newcastle.edu.au

Wye, P.; Bowman, J.; Wiggers, J.; Baker, A.; Carr, V.; Terry, M.; Knight, J.; Clancy, R.
“Providing nicotine dependence treatment to psychiatric inpatients: the views of
Australian nurse managers”, Published in Journal of Psychiatric and Mental Health Nursing
Vol. 17, p. 319-327 (2010)

Available from: <http://dx.doi.org/10.1111/j.1365-2850.2009.01524.x>

This is the peer reviewed version of the following article:

Wye, P.; Bowman, J.; Wiggers, J.; Baker, A.; Carr, V.; Terry, M.; Knight, J.; Clancy, R.
“Providing nicotine dependence treatment to psychiatric inpatients: the views of Australian
nurse managers”, Journal of Psychiatric and Mental Health Nursing Vol. 17, p. 319-327
(2010), which has been published in final form at
<http://dx.doi.org/10.1111/j.1365-2850.2009.01524.x>

This article may be used for non-commercial purposes in accordance with Wiley Terms and
Conditions for Self-Archiving.

Accessed from: <http://hdl.handle.net/1959.13/921767>

PROVIDING NICOTINE DEPENDENCE TREATMENT TO PSYCHIATRIC INPATIENTS: THE VIEWS OF AUSTRALIAN NURSE MANAGERS

Objectives: The prevalence of smoking in psychiatric settings remains high. This study aims to describe the views of nurse managers in psychiatric inpatient settings regarding the provision of nicotine dependence treatment, and whether there were associations between such views and the provision of nicotine dependence treatment.

Methods: A cross-sectional survey was mailed to all public psychiatric inpatient units in New South Wales, Australia, for completion by nurse managers.

Results: Of the identified 131 service units, 123 completed questionnaires were returned (94%). Patient-related factors were considered to have a high level of influence on the provision of nicotine dependence treatment: patients requesting assistance to quit (58%), patients being receptive to interventions (52%), and patient health improving with quitting (45%). Units where the respondent reported that nicotine dependence treatment was as important as other roles were more likely to provide nicotine dependence treatment compared to units whose respondents did not hold this view ($OR=0.257, df=1, p<0.01$).

Conclusions: While the results indicate strong support for the provision of nicotine dependence treatment, this support appears qualified by perceived patient readiness to quit, suggesting care is provided selectively rather than systematically. A shift in attitude to a curative approach may lead to a health service conducive to the routine provision of nicotine dependence treatment.

Keywords: Nicotine Dependence Treatment, Inpatients Managers Nurse Psychiatric

---

PROVIDING NICOTINE DEPENDENCE TREATMENT TO PSYCHIATRIC INPATIENTS: THE VIEWS OF AUSTRALIAN NURSE MANAGERS

Smoking remains the world's leading preventable cause of death and morbidity (Begg et al., 2007; Mokdad et al., 2004). Although smoking rates have reduced in the Australian general population (Population Health Division, 2006), the prevalence of smoking in psychiatric settings remains high in Australia and elsewhere (Fowler et al., 1998; Reichler et al., 2001; American Psychiatric Association (APA), 2004). While guidelines exist for general hospital settings (New South Wales Department of Health, 2002) and elsewhere for psychiatric settings (APA, 1996), no guidelines for the provision of smoking cessation care for psychiatric patients have been recommended in Australia. Australian and international evidence suggests a continuing low prevalence of nicotine dependence treatment provision within psychiatric settings (McNeill, 2004; Commonwealth of Australia, 2007), with smoking continuing to be condoned at an organisational level (Wye et al., 2009).

It has been established that a significant proportion of psychiatric patients who smoke want to quit. Among 174 smokers in an Australian community-based rehabilitation service, 59% indicated they wanted to quit smoking (Moeller-Saxone, 2008).

Similarly, of 72 smokers in a New York veterans' psychiatric facility, 40% stated that they intended to quit within six months (Carosella et al., 1999); and of 34 smokers in a UK psychiatric facility, 97% had considered quitting, and 88% reported at least one quit attempt (Dickens et al., 2005). Substantial quit rates can be achieved among psychiatric patients, with one Canadian study indicating a 19% quit rate maintained at

---

12 months follow-up with no negative effects on psychiatric symptoms or general functioning (Currie et al., 2008).

Failure within health care systems to implement guidelines and evidence-based practices with respect to nicotine dependence treatment provision is a widely acknowledged problem (National Institute of Clinical Studies, 2008; Freund et al., 2005; Campion et al., 2008). The literature suggests that factors related to both the organisational system and to individual care providers are major determinants of effectively introducing change within health care systems (Wensing et al., 2005). We have previously reported on the provision of nicotine dependence treatment and its associations with aspects of the organisational system (Wye et al., 2009).

Theories of health behaviour and clinical practice change consistently identify staff knowledge, skills and views as important barriers to implementing change generally (Green & Kreuter, 1991; Grol, 1997; Prochaska et al., 1997; Rogers, 2003; Michie et al., 2005; Ploeg et al., 2007), and such staff ‘predispositions’ have been strongly implicated in the success or failure of nicotine dependence treatment provision in psychiatric care settings specifically (Campion et al., 2008; Dickens et al., 2004; Bloor et al., 2006; McNally et al., 2006). Research has suggested that psychiatric staff condone the use of cigarettes to alleviate patient symptoms and to improve the safety of their work environment (Lawn & Pols, 2005). Beliefs that staff should be allowed to smoke with patients, and that patients’ psychiatric status will deteriorate without access to cigarettes, are commonly held (Lawn & Pols, 2003; Dickens et al., 2004). In a UK study comparing the views of general hospital and psychiatric hospital staff,

---

psychiatric staff were more resistant to smoking bans and less likely to favour the provision of nicotine dependence treatment (McNally et al., 2006).

However, no previous research has identified the factors that are considered by staff to be determinants of nicotine dependence treatment provision, nor whether staff attitudes are predictive of nicotine dependence treatment provision. Such research is important for informing the development and targeting of interventions. In addition, previous research regarding the attitudes of staff has not focused on the attitudes of those in leadership positions. The importance of leader involvement and commitment to achieving practice change is emphasised within a variety of theoretical perspectives (Green & Kreuter, 1991; Rogers, 2003), and been shown to affect practice outcomes (Lawn & Campion, 2008). In the context of both general hospital settings (Hajek et al., 2002; Nagle et al., 2005; Freund et al., 2008) and psychiatric inpatient units (Campion et al., 2008), it has been demonstrated that strong and consistent leadership is required if change is to be adopted routinely. In this context, understanding the views of staff in leadership positions is considered to be particularly important in implementing nicotine dependence treatment within psychiatric settings. The current study was undertaken with three aims: (i) to describe the views of nurse managers regarding the provision of nicotine dependence treatment; (ii) to describe the factors that nurse managers perceive to be determinants of nicotine dependence treatment provision; and (iii) to investigate whether there were associations between such nurse manager views and the provision of nicotine dependence treatment.

Methods

Design and Setting

A cross-sectional survey was undertaken of all publicly funded psychiatric inpatient units in New South Wales (NSW), Australia (Wye et al., 2009).

Participants

A list of public psychiatric inpatient units in NSW (N=131) was obtained from the NSW Health Department, across all eight Area Health Services (AHS) in the state, four metropolitan and four non-metropolitan. The nurse manager of each unit was requested to complete the survey.

Procedure

A questionnaire was developed based on those previously used to assess provision of nicotine dependence treatment in Australian drug treatment agencies (Walsh, Bowman, Tzelepis, et al., 2005 and NSW guidelines for the management of nicotine dependent inpatients, (New South Wales Department of Health, 2002). The questionnaire was mailed to the nurse manager of each psychiatric inpatient unit by the NSW Chief Health Officer, requesting that the nurse manager complete the survey on behalf of their unit. Completed questionnaires were returned to the NSW Health Department and units not responding within one month were followed-up by the Department.

Measures

Unit and nurse manager characteristics

Respondents were required to classify their unit as being metropolitan or regional in location, acute or non-acute, locked versus otherwise, to describe the unit size in terms of number of beds, and to estimate the percentage of nursing staff who smoked (0%, 1-25%, 26-50%, 51-75%, 76-99%, 100%). Respondents indicated their job title, length of time in that position, smoking status (never, former, current), whether they were responsible for enforcing smoking policies (yes, no), whether they had received training in providing nicotine dependence treatment (yes, no), and whether they were interested in receiving training (yes, no, unsure) (Table 1).

Views on provision of nicotine dependence treatment

Eight items related to the respondents' views on provision of nicotine dependence treatment using a 5 point Likert scale (strongly agree, agree, unsure, disagree, strongly disagree) (Table 2).

Perceived determinants of nicotine dependence treatment provision

Twelve items pertained to the respondents' perceptions of factors that influenced the provision of nicotine dependence treatment (high impact, medium impact, slight impact, no impact). Four of these were patient factors (eg, patients request assistance to quit), and eight related to service factors (eg, staff training) (Table 3).

Provision of nicotine dependence treatment

One question measured the proportion of smokers whose smoking status was assessed (0%, 1-25%, 26-50%, 51-75%, 76-99%, 100%). Ten questions measured the proportion of smokers who received care relating to nicotine dependence treatment (0%, 1%–25%, 26%–50%, 51%–75%, 76%–99%, and 100%). Nicotine dependence

---

could be determined from information about smoking obtained during patient assessment or by use of a formal assessment tool. Respondents were asked to indicate the frequency with which such care was provided (always, frequently, sometimes, or never). These results are reported elsewhere (Wye et al., 2009).

Analyses

All analyses were undertaken using SAS Version 8 (SAS Institute Inc, 2000). To describe the views of nurse managers regarding the provision of nicotine dependence treatment, descriptive statistics (frequencies and proportions) were used to report the characteristics of participating units and respondents, the views of respondents with respect to the provision of nicotine dependence treatment and the factors they perceived to be determinants of such care.

To describe the factors that nurse managers perceive to be determinants of nicotine dependence treatment provision, possible associations between unit and respondent characteristics and views regarding the provision of nicotine dependence treatment, and perceived determinants of care provision were investigated using Chi square analyses. To conduct these analyses, response categories relating to the respondents' views on provision of nicotine dependence treatment were collapsed from five to two: (i) strongly agree or agree, and (ii) unsure, disagree or strongly disagree. Perceptions of the factors influencing provision of nicotine dependence treatment were collapsed from four to two: (i) high/medium impact, and (ii) slight/no impact. A significance level of $p < 0.01$ was adopted, given the multiple statistical tests undertaken (Howell, 2002).

To investigate whether there were associations between such nurse manager views and the provision of nicotine dependence treatment, a composite score describing the extent to which comprehensive nicotine dependence treatment was provided in each unit was developed based on: the reported percentage of patients who had their smoking status assessed, the frequency of provision of nine types of counselling and advice, and the frequency of provision of nicotine replacement therapy (NRT) (Wye et al., 2009). For these analyses, a composite variable score describing the provision of nicotine dependence treatment was constructed for each unit (Wye et al., 2009).

The composite variable score (maximum score of 6) was calculated by summing three subcomponents: the percentage of patients who had their smoking status assessed (a score of 2 was given if 100% of patients had their smoking status assessed, 1 if the proportion was 51%–99%, and 0 if the proportion was 50% or less). In calculating the score for the second subcomponent —any type of counseling or advice— nine items were included. A score of 2 was given when any of the nine counseling or advice items were reported as always being provided, 1 if any were frequently provided, and 0 if sometimes or never provided. In calculating the score for the third subcomponent – frequency of provision of NRT to patients – a score of 2 was given if NRT was always provided, 1 if frequently provided, and 0 if sometimes or never provided. The calculated score for each unit (maximum was 6) was dichotomised: a score of 5 or more represented the provision of comprehensive nicotine dependence treatment, and a score of 4 or less represented a lack of comprehensive nicotine dependence treatment. Possible associations between respondent views on provision of nicotine dependence treatment, factors they perceived to be determinants of care provision, and the units' comprehensive nicotine dependence treatment score were first

---

investigated using Chi square analysis and subsequently by logistic regression that included variables shown by Chi square to be associated with care provision at $p < 0.25$ (Bursac et al., 2008).

Results

Sample

Of the identified 131 service units, 123 completed questionnaires were returned (94%) from all eight Area Health Services. The average number of service units per Area Health Service was 16, ranging from 5 to 26. The response rates of units within Area Health Services ranged from 83% to 100%. Of the 123 completed questionnaires, 117 of the respondents identified themselves as the nurse manager (95%). A further 4% were identified as clinical nurse consultants or specialists, alternative clinical leadership roles (NSW Department of Health, 2007).

Unit and respondent characteristics

Twenty-one percent of respondents identified themselves as current smokers, 41% as former smokers, and 38% as never having smoked (Table 1). Sixteen per cent reported that they had received formal training regarding the provision of nicotine dependence treatment. Almost two thirds (61%) of the sample overall stated that they were interested in receiving nicotine dependence treatment training, with 21% not interested and 17% unsure. Of all those not interested or unsure, respondents with previous training represented 15%.

<Place Table 1 here>

Views on the provision of nicotine dependence treatment

Table 2 reports respondents' views on the provision of nicotine dependence treatment. Chi square analyses identified several significant associations at $p < .01$ between unit or respondent characteristics and respondent views regarding the provision of nicotine dependence treatment (Table 3).

<Place Tables 2 & 3 here>

Perceived determinants of nicotine dependence treatment provision

Table 4 reports the factors perceived to influence the provision of nicotine dependence treatment. Several patient-related factors were considered by approximately half of the respondents to have a high level of influence on the provision of nicotine dependence treatment: patients requesting assistance to quit (58%), patients being receptive to interventions (52%), and patient health improving with quitting (45%). Two service-related factors were also considered by nearly half of the respondents to have a high level of influence on provision of nicotine dependence treatment: if interventions were effective (44%) and availability of NRT on the unit (40%).

<Place Table 4 here>

No significant associations were found with previous receipt of training. However, interest in receiving nicotine dependence treatment training was positively associated ($p < .01$) with all 12 of the factors assessed as possible determinants of nicotine dependence treatment provision (Table 4).

Associations between respondent views and perceived determinants of nicotine dependence treatment provision, and the provision of such care

Details relating to the provision of the ten items of nicotine dependence treatment are reported elsewhere (Wye et al., 2009). Twenty-eight per cent of respondents provided responses that indicated that their units provided comprehensive nicotine dependence treatment.

Chi square analyses identified only one respondent view or perceived determinant of nicotine dependence treatment provision to be significantly associated with nicotine dependence treatment provision: respondents who agreed that smoking cessation advice was as important as other roles in the unit were more likely to provide comprehensive nicotine dependence treatment (80% as compared to 20%, $\chi^2 = 6.8719$, $df = 1$, $p = .0088$). A further two respondent views regarding the provision of nicotine dependence treatment were associated with the provision of comprehensive nicotine dependence treatment at $p < 0.25$, and entered into the logistic regression analysis: smoking patients should receive nicotine dependence treatment if they are ready to quit; and increased smoking bans and nicotine dependence treatment would have very little impact on patients in the unit. The respondent being responsible for enforcing smoking policy and practice in the unit was also associated with the provision of comprehensive nicotine dependence treatment at $p < 0.25$. In addition, six perceived determinants of care provision were found to be associated with providing comprehensive nicotine dependence treatment at $p < 0.25$ and were also entered into the logistic regression analysis: improved staff understanding of the impact of smoking on patients' mental and physical health; a more coordinated approach to providing interventions; staff training about smoking interventions; patients were

---

receptive to interventions; availability of NRT on the unit; and patients were not quitting only for the duration of their inpatient stay.

Logistic regression analysis indicated that only one variable was significantly associated with the provision of comprehensive nicotine dependence treatment: units where the respondent reported that nicotine dependence treatment was as important as other roles were more likely to provide nicotine dependence treatment compared to units whose respondents did not hold this view ($OR = 0.257$, $df = 1$, $p < 0.01$).

Discussion

The findings of this study provide an indication of nurse manager views regarding the provision of nicotine dependence treatment to psychiatric inpatients, and the association between nurse manager characteristics, their views and the provision of such care. While the results indicate strong apparent support for the provision of nicotine dependence treatment, such support appears qualified by the perception that its provision is dependent on patient acceptance and readiness to quit. Such a finding suggests that nicotine dependence treatment is being provided selectively, thereby limiting the clinical and public health benefits of its recommended provision to all smokers (NSW Department of Health, 2002; APA, 1996).

Despite nearly three quarters of nurse managers reporting that nicotine dependence treatment should be an integral function of their unit, over half viewed patient request or receptivity as the important determinant of providing such care and 69% perceived that most smokers are not interested in giving up smoking. This latter misperception of patient disinterest in quitting has previously been identified as influencing the failure of drug and alcohol services and general hospitals to provide nicotine dependence treatment (Bowman & Walsh, 2003; Nagle et al., 1999). One approach that may assist practitioners' to think differently about their role and responsibility to provide nicotine dependence treatment to all smokers, might be to portray nicotine dependence as a 'disease', so that it can be seen within a more 'curative' framework that is familiar to and accepted by practitioners (Frochlich, 2008). Such a representation of the issue may lessen practitioners' reliance on patient interest in

---

quitting as a trigger for care provision, and lead to better acceptance of nicotine dependence treatment provision as an integral element of an accepted responsibility to detect and treat disease.(Frochlich, 2008).

Despite the majority of nurse managers reporting a role for psychiatric staff in providing nicotine dependence treatment, almost one-third reported that it was sometimes useful for staff to smoke with a patient to build rapport or trust. Such a finding is similar to the proportion of UK psychiatric health professionals who were recently reported to express such a view (32%) (McNally et al., 2006). The use of smoking as a therapeutic tool should have no place in modern evidence-based psychiatric healthcare as, in the context of proven alternative approaches to facilitating therapeutic rapport (Horvath & Greenberg, 1994), it represents an outmoded and indolent practice of convenience.

Less than one fifth of respondents reported receipt of nicotine dependence treatment training despite the majority expressing an interest in doing so. Although the provision of nicotine dependence treatment training to all healthcare professionals is highly recommended (World Health Organisation, 2001) and has been strongly associated with the provision of nicotine dependence treatment in general healthcare settings (Freund et al., 2008), such training has been infrequently and inconsistently provided (Mitchell et al., 2008). In NSW, this gap has been recognised by the inclusion of nicotine dependence treatment training in the NSW Tobacco Action Plan 2005-2009 (NSW Department of Health, 2005). While training alone may not ensure that nurse managers fulfil their potential as drivers of change in the provision of nicotine

---

dependence treatment (Freund et al., 2005; Silagy et al., 1994), addressing the knowledge and views of nurse managers through training (Borrelli & Novak, 2008) may contribute to the removal of the barriers to care provision identified in this study. Training health professionals to provide nicotine dependence treatment does increase professional performance (Silagy et al., 1994).

Nurse managers who were smokers differed from non-smokers with respect to only one item; being more likely to agree that increased smoking bans and interventions would have little impact on patients in their unit. The absence of a stronger association between smoking status and views regarding nicotine dependence treatment is consistent with another recent finding (Steiner et al., 2009), that suggests smoking status may not be a predictor of nicotine dependence treatment provision. However, in contrast, some earlier studies have found that mental health staff who smoke are less likely than non-smokers to report that patients should be encouraged to stop smoking (Dickens et al., 2004; McNally et al., 2006).

Nurse managers' estimates of the prevalence of smoking among staff were positively associated with a number of factors being perceived to impact on nicotine dependence treatment provision. When more than 25% of staff were estimated to be smokers, nurse managers were more likely to indicate that the provision of nicotine dependence treatment was influenced by its perceived impact on unit routine, and the perceived effectiveness of nicotine dependence treatment interventions. This suggests that in the context where a high proportion of staff are smokers, nurse managers may perceive a

---

greater likelihood of resistance to the provision of nicotine dependence treatment.

These results suggest that managers may need additional training and management support to assist in the implementation of nicotine dependence treatment into routine clinical practice. In addition, these findings suggest that nicotine dependence treatment interventions need to demonstrate their ability to not only be efficacious, but also be incorporated into clinical processes with limited disruption to those processes.

Only one nurse manager view was identified by logistic regression to positively predict the provision of comprehensive nicotine dependence treatment: the view that smoking cessation advice was as important as other roles in their unit. The importance of nicotine dependence treatment has long been recognised by researchers (Council on Scientific Affairs, 1980; Fiore et al., 1995; World Health Organisation, 2001; McNeill, 2004), and is in keeping with the need for more holistic care and health promotion generally for people with mental illness (Hutchinson et al 2006; Compton et al 2008).

Although training may represent an efficacious and necessary intervention element to modify nurse manager views, research also demonstrates that a number of additional organisational and system factors are important determinants of attitudes and practices with respect to nicotine dependence treatment provision in health care settings. For example, we have previously reported that a lack of consistency in the application of smoking ban policies and procedures, and staff co-smoking behaviours contribute to erosion of nicotine dependence treatment efforts (Wye et al., 2009). Inpatient units

---

with clear and overt smoking restrictions that staff adhere to are more likely to provide comprehensive nicotine dependence treatment (Wye et al., 2009). In general health settings, adding nicotine dependence treatment to existing computerized systems increases hospital provision of evidence-based tobacco treatment (Freund et al., 2008; Koplan et al., 2008). The addition of systems to monitor the provision of nicotine dependence treatment, and provide feedback to staff regarding their performance has also been suggested to improve adoption of clinical guidelines (Freund et al., 2008) and represent important avenues for further research to explore within the context of psychiatric care provision.

The findings of this study need to be considered in the context of a number of its design characteristics. First, the study relied on self-reported responses and hence is susceptible to respondent bias. However, the high survey response rate of 94% suggests that the findings are representative of nurse managers in psychiatric inpatient facilities across the state of NSW. Further, the relevance of assessing the views of this group is supported by the confirmation provided by 93% of respondents that they were the person responsible for smoke free workplace policy within their unit setting.

There is now evidence of a growing clinical awareness of the importance of nicotine dependence treatment provision in mental health inpatient settings. Nicotine dependence treatment may be increased in these settings through encouraging practitioners to view nicotine dependence treatment as ‘in keeping’ with the curative approach to care they are familiar with; an approach that would see nicotine

---

dependence as a disease, requiring detection and treatment. Together with the support of organisational and system changes, this approach may lead to a health service conducive to the routine provision of nicotine dependence treatment.

- American Psychiatric Association. (1996). *Clinical Guidelines and Procedures for the Management of Nicotine Dependent Inpatients*, American Psychiatric Association.
- American Psychiatric Association. (2004). *Practice guideline for the treatment of patients with schizophrenia*. Retrieved March, 2009, from <http://www.psychiatryonline.com/pracGuide/pracGuideHome.aspx>
- Begg, S., Vos, T., Barker, B., Stevenson, C., Stanley, L., & Lopez, A. (2007). *The Burden of Disease and Injury in Australia*. AIHW Cat. No. PHE 82. Canberra: AIHW.
- Bloor, R.N., Meeson, L., & Crome, I.B. (2006). The effects of a non-smoking policy on nursing staff smoking behaviour and attitudes in a psychiatric hospital. *Journal of Psychiatric and Mental Health Nursing*; 13: 188-196.
- Borrelli, B.L., & Novak, S. (2008). Is provider training effective? Changes in attitudes towards smoking cessation counselling and counselling behaviours of home health care nurses. *Preventive Medicine*; 46: 358-363.
- Bowman, J.A., & Walsh, R.A. (2003). Smoking intervention within alcohol and other drug treatment services: a selective review with suggestions for practical management. *Drug & Alcohol Review*; 22:73 – 82.
- Bursac, Z., Gauss, C.H., Williams, D.K., & Hosmer, D.W. (2008). Purposeful selection of variables in logistic regression. *Code for Biology and Medicine*; 3:17.
- Campion, J, Lawn, S., Brownlie, A., Hunter, E., Gynther, B., & Pols, R (2008). Implementing smoke-free policies in mental health units: Learning from unsuccessful experience. *Australian Psychiatry*; 16:92-97.
- Carosella, A.M., Ossip-Klein, D.J., & Owens, C.A. (1999). Smoking attitudes, beliefs, and readiness to change among acute and long term care inpatients with psychiatric diagnoses. *Addictive Behaviors*; 24: 331–44.
-

- Commonwealth of Australia. (2007). Attachment A: *National Tobacco Strategy 2004-2009 - implementation by states and territories (New South Wales)*. Commonwealth of Australia: Canberra.
- Compton, M.T. (2008). Incorporating the Prevention Paradigm into Administrative Psychiatry. *Psychiatric Clinics of North America*; 31:73-84.
- Council on Scientific Affairs.(1980). Smoking and Health. *Journal of the American Medical Association*; 243: 779-781.
- Currie, S.R., Karltn, J., Lussier, D., de Denus, E., Brown, D, & el-Guebaly, N. (2008). Outcome from a Community-based Smoking Cessation Program for Persons with Serious Mental Illness. *Community and Mental Health Journal*; 44:187–194.
- Dickens, G.L., Stubbs, J.H., & Haw, C.M. (2004). Smoking and mental health nurses: a survey of clinical staff in a psychiatric hospital. *Journal of Psychiatric and Mental Health Nursing* 11: 445-451.
- Dickens, G.J., Stubbs, J.H., Popham, R., & Haw, C. (2005). Smoking in a forensic psychiatric service: a survey of inpatients' views. *Journal of Psychiatric and Mental Health Nursing*; 12: 672-678.
- Fiore, M.C., Jorenby, D.E., Schensky, A.E., Smith S.S., Bauer, R.R., & Baker, T.B. (1995). Smoking status as the new vital sign: Effect on assessment and intervention in patients who smoke. *Mayo Clinic Proceedings*, 70: 209-213.
- Fowler, I.L., Carr, V.J., Carter, N.T., & Lewin, T.J. (1998). Patterns of current and lifetime substance use in schizophrenia. *Schizophrenia Bulletin*; 24: 443-455.
- Freund, M., Campbell, E., Paul C., Sakrouge, R., & Wiggers, J. (2005). Smoking care provision in smoke-free hospitals in Australia. *Preventive Medicine*; 41: 151-158.
- Freund, M.A.G., Campbell, E.M., Paul, C.L., Wiggers, J.H., Knight, J.J., & Mitchell, E.N. (2008). Provision of smoking care in NSW hospitals: Opportunities for further enhancement. *NSW Public Health Bulletin*; 19: 50-55.
-

- Frochlich, K. (2008). Is smoking a disease? *Canadian Medical Association Journal*; 179: 880-882.
- Green, L.W., & Kreuter, M.W. (1991). *Health promotion planning: An educational and environmental approach*. Palo Alto: Mayfield Publishing.
- Grol, R. (1997). Beliefs and evidence in changing clinical practice. *British Medical Journal*; 315: 418-421.
- Hajek, P., Taylor, T.Z., & Mills, P. (2002). Brief intervention during hospital admission to help patients to give up smoking after myocardial infarction and bypass surgery: randomised controlled trial. *British Medical Journal*; 324: 1-5.
- Horvath, A., & Greenberg, L. (1994). *The working alliance: Theory, research & practice*. A volume in the Wiley Series on personality processes. John Wiley & Sons: Canada.
- Howell, D.C. (2002). *Statistical methods for psychology*. Pacific Grove, California: Thomson Learning.
- Hutchinson, D.S., Gagne, C., Bowers, A., Russinova, Z., Skrinar, G., & Anthony, W. (2006). A framework for health promotion services for people with psychiatric disabilities. *Psychiatric Rehabilitation journal*, 29: 241-250.
- Koplan, K.E., Regan, S., Goldszer, R.C., Schneider, L.I., & Rigotti, N.A. (2008). A computerized aid to support smoking cessation treatment for hospital patients. *Journal of General Internal Medicine*; 23: 1214-1217.
- Lawn, S., & Campion, J. (2008). *Smoke-free initiatives in psychiatric inpatient units: A national survey of Australian sites*. Adelaide: Adelaide University.
- Lawn, S., & Pols, R.G. (2003). Nicotine withdrawal: pathway to aggression and assault in the locked psychiatric ward. *Australasian Psychiatry* 11: 199-203.
- Lawn, S., & Pols, R. (2005). Smoking bans in psychiatric inpatient settings? A review of the research. *Australian and New Zealand Journal of Psychiatry* 39: 866-885.
- McNally, L., Oyefeso, A., Annan, J., Perryman, K., Bloor, R., Freeman, S., Wain, B., Andrews, H., Grimmer, M., Crisp, A., Oeybode, D., & Ghodse, A.H. (2006). A survey of staff attitudes to
-

- smoking-related policy and intervention in psychiatric and general health care settings. *Journal of Public Health*; 28: 192-196.
- McNeill, A. (2004). *Smoking and patients with mental health problems*. NHS Health Development Agency.
- Michie, S., Johnston, M., Abraham, C., Lawton, R., Parker, D., & Walker, A. (2005). Making psychological theory useful for implementing evidence based practice: a consensus approach. *Quality and Safety in Health Care*; 14:26–33.
- Mitchell, E.N., Hawkshaw, B.N., Naylor, C.-J., Soewido, D., & Sanders, J.M. (2008). Enabling the NSW workforce to provide evidence-based smoking-cessation advice through competency-based training delivered via video conferencing. *NSW Public Health Bulletin*; 19: 3-4; 56-59.
- Moeller-Saxone, K. (2008). Cigarette smoking and interest in quitting among consumers at a psychiatric disability rehabilitation and support service in Victoria. *Australian and New Zealand Journal of Public Health*; 32: 479-481.
- Mokdad, A.H., Marks, J.S., Stroup, D.F., & Gerberding, J.L. (2004). Actual causes of death in the United States, 2000. *Journal of the American Medical Association*; 291:10; 1238-1245.
- Nagle, A.L., Hensley, M.J., Schofield, M.J., & Koschel, A.J. (2005). A randomised controlled trial to evaluate the efficacy of a nurse-provided intervention for hospitalised smokers. *Australian & New Zealand Journal of Public Health*; 29:3;285-291.
- Nagle, A., Schofield, M., & Redman, S. (1999). Australian nurses' smoking behaviour, knowledge and attitude towards providing smoking cessation care to their patients. *Health Promotion International*; 14:2; 133-144.
- National Institute of Clinical Studies. (2008). *Evidence-Practice Gaps Report Volume 1: A review of developments: 2004–2007*. Canberra: National Health and Medical Research Council.
- New South Wales (NSW) Department of Health. (2002). *Guide for the management of nicotine dependent inpatients*. Gladesville, NSW: Better Health Centre.
-

NSW Department of Health. (2005). *Tobacco Action Plan 2005-2009: A vision for the future*.

North Sydney: NSW Department of Health.

NSW Department of Health. (2007). *Report on the evaluation of Nurse/Midwife Practitioner and*

Clinical Nurse/Midwife Consultant Roles. North Sydney: NSW Department of Health.

Ploeg, J., Davis, B., Edwards, N., Gifford, W., & Miller, P.E. (2007). Factors influencing best-practice guideline implementation. *Worldviews on Evidence-Based Nursing*; 4: 210-9.

Population Health Division. (2006). *The health of the people of New South Wales - Report of the Chief Health Officer*. Sydney: NSW Department of Health. Retrieved January 2008, from

<http://www.health.nsw.gov.au/publichealth/chorep/beh>

Prochaska, J.O., & Velicer, W.F. (1997). The transtheoretical model of health behaviour change.

American Journal of Health Promotion; 12: 38-48.

Reichler, H., Baker, A., Lewin, T., & Carr, V. (2001). Smoking among in-patients with drug-

related problems in an Australian psychiatric hospital. *Drug and Alcohol Review* 20: 231-237.

Rogers, E.M. (2003). *Diffusion of Innovations*, 5th ed.. New York, NY: Free Press.

SAS Institute Inc. (2000). *Version 8.2*. SAS Institute. New York: Carry, NC.

Silagy, C., Lancaster, T., Gray, S., & Fowler, G. (1994). Effectiveness of training health

professionals to provide smoking cessation interventions: systematic review of randomized controlled trials. *Quality Health Care*; 3:4; 193-198.

Steiner, J.L., Weinberger, A.H., O'Malley, S. (2009). A survey of staff attitudes about smoking cessation. *Psychiatric Services*; 60: 707-708.

Walsh, R.A., Bowman, J.A., Tzelepis, F., & Lecathelinais, C. (2005). Smoking cessation

interventions in Australian drug treatment agencies: a national survey of attitudes and practices.

Drug and Alcohol Review 24: 235-244.

Wensing, M., & Grol, R. (2005). *Determinants of effective change. Improving patient care: the implementation of change in clinical practice*. Eds R Grol, M Wensing, M Eccles. Chapter 5,

94-108. Edinburgh: Elsevier Butterworth Heinemann.

World Health Organization. (2001). *WHO evidence based recommendations on the treatment of tobacco dependence*. Copenhagen: World Health Organization European Partnership Project to Reduce Tobacco Dependence.

Wye, P., Bowman, J., Wiggers, J., Baker, A., Knight, J., Carr, V.J., Terry, M., & Clancy, R. (2009). *Smoking care policies and procedures in Australian psychiatric facilities*. *Psychiatric Services*, 60;1: 100 – 107.

Table 1: Characteristics of 123 public inpatient psychiatric unit managers that responded to a survey about patient smoking

	n	%
Current smoker (121) ^a	26	21
In current position more than 3 years (123)	39	32
Responsible for Smoke-free Workplace Policy (122)	113	93
Received smoking care training (123)	20	16
Interested in smoking care training (121)	74	61
Area Health Service [121]		
- Metropolitan	81	67
- Regional	40	33
Type of Unit [123]		
- Acute	89	72
- Non-acute	34	28
Security of Unit [120]		
- Locked	72	60
- Unlocked	48	40
Size of Unit [122]		
- Less than 10 beds	20	17
- 10 to 20 beds	54	44
- More than 20 beds	48	39
Proportion of Staff who Smoke [121]		
- No staff smoke	7	6
- 1-25% of staff smoke	73	60
- 26-50% of staff smoke	33	27
- 51-99% of staff smoke	8	7

^a Sample sizes vary due to missing data^b Smoke Free Workplace Policy

Table 2: Views of 123 psychiatric unit managers on the provision of nicotine dependence treatment

	Level of Agreement				
	Strongly Agree n (%)	Agree n (%)	Unsure n (%)	Disagree n (%)	Strongly Disagree n (%)
Smoking patients should receive interventions if they are ready to quit (122)	84 (69)	31 (25)	-	6 (5)	1 (1)
The provision of smoking cessation interventions should be an integral function of this unit (122) ^a	49 (40)	39 (32)	20 (16)	11 (9)	3 (2)
Smoking cessation advice is as important as other roles in this unit (122)	28 (23)	48 (39)	18 (15)	24 (20)	4 (3)
Most patients who smoke aren't interested in giving up smoking (122)	26 (21)	59 (48)	10 (8)	25 (20)	2 (2)
Patients usually have enough problems without worrying about smoking cessation (120)	16 (13)	44 (37)	18 (15)	38 (32)	4 (3)
Increased smoking bans and interventions would have very little impact on <i>patients</i> in this unit (122)	12 (10)	23 (19)	17 (14)	46 (38)	24 (20)
Increased smoking bans and interventions for patients would have very little impact on <i>staff</i> in this unit (121)	10 (8)	29 (24)	12 (10)	51 (42)	19 (16)
Sometimes it is useful for staff to smoke with a patient to build rapport/trust (122)	8 (7)	28 (23)	13 (11)	38 (31)	35 (29)

^a Sample sizes vary due to missing data

Table 3: Factors perceived to influence the provision of nicotine dependence treatment

Factor	Level of Influence			
	High n (%)	Medium n(%)	Slight n(%)	Nil n(%)
Patient Factors				
Patients request assistance to quit (121)	70 (58)	33 (27)	14 (12)	4 (3)
Patients receptive to interventions (121)	63 (52)	31 (26)	22 (18)	5 (4)
Patient health improved with quitting (121)	55 (45)	36 (30)	27 (22)	3 (2)
Patients were quitting only for the duration of their inpatient stay (119)	11 (9)	33 (28)	42 (35)	33 (28)
Service Factors				
Interventions were effective (121)	53 (44)	35 (29)	23 (19)	10 (8)
Availability of NRT ^b on the unit (121)	48 (40)	36 (30)	22 (18)	15 (12)
Staff who smoke were assisted to stop (121)	43 (36)	33 (27)	33 (27)	12 (10)
Better coordination of care (120)	32 (27)	49 (41)	29 (24)	10 (8)
Staff training (122)	33 (27)	47 (39)	30 (25)	12 (10)
Improved staff understanding of impact of smoking on mental and physical health (122) ^a	22 (18)	45 (37)	42 (34)	13 (11)
Limited disruption to unit routine (120)	19 (16)	46 (38)	35 (29)	20 (17)
Doctor requests intervention (116)	12 (10)	28 (24)	52 (45)	24 (21)

^a Sample sizes vary due to missing data^b Nicotine Replacement Therapy

Table 4: Significant associations between unit and respondent characteristics and respondent views*

			χ^2	p
	Regional	Metropolitan		
Sometimes it is useful for staff to smoke with a patient to build rapport/trust	46%	22%	7.1795	.0074
	Smoker	Non-Smoker		
Increased smoking bans and interventions would have very little impact on <i>patients</i> in this unit	50%	23%	7.1540	.0075
	Trained	Not Trained		
Most patients who smoke aren't interested in giving up smoking	45%	75%	6.8913	.0087
	Interested in Training	Not Interested in Training		
The provision of smoking cessation interventions should be an integral function of this unit	85%	51%	16.1509	.0001
Smoking cessation advice is as important as other roles in this unit	71%	47%	7.2154	.0072
Patients usually have enough problems without worrying about smoking	39%	65%	7.7848	.0053
	<25% staff smoke	≥25% staff smoke		
If there was limited disruption to unit routine, this would influence the provision of smoking care	45%	73%	8.3068	.0039
If interventions were effective, this would influence the provision of smoking care	65%	88%	6.8713	.0088

* All degrees of freedom = 1