

ASH-KAN Aotearoa: Assessment of smoking history, knowledge and attitudes of nurses in New Zealand.

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Key points

- Nine out of ten nurses feel it is part of their responsibility to advise clients to stop smoking.
- Nearly nine out of ten nurses would spend an extra five minutes with each patient who smoked if they could effectively intervene.
- Nurses' knowledge of the health effects of smoking was high.
- Gaps in knowledge of effective smoking treatments and a wide misunderstanding that nicotine causes disease may limit nurses' ability to intervene effectively. Nicotine is responsible for addiction. It is the products of combustion that have the greatest risk for disease.
- Over half of the respondents had not received training for effective evidence-based smoking cessation interventions.
- Three-quarters were interested in learning more to help their patients quit smoking.
- Overall, fourteen percent of nurses smoked in 2006. Twenty-nine percent of mental health nurses smoked (Census, 2006).

✚ Nurses and smoking

Stopping smoking is the best thing a person can do to reduce their risk of cardiovascular disease and cancer. Cigarette smoking is the leading cause of preventable death in New Zealand (Ministry of Health, 2004).

Nurses play a vital role in promoting and maintaining the health of the New Zealand population. They could be the largest workforce providing effective smoking cessation interventions, and powerful advocates for tobacco free homes and communities. Nurses have the potential to offer smokefree interventions in many settings, often over extended time periods. They work in primary care settings such as homes, schools, prisons and workplaces as well as in clinics and hospitals. Nurses can support family members who smoke to quit. Nurse-led smoking cessation interventions are congruent with an evidence-based approach to nursing care, and with the New Zealand Nursing Council's scopes of practice for nurses (Rice & Stead, 2004; The Nursing Council of New Zealand, 2004).

Some, but not all, nurses integrate smoking cessation into their everyday practice (McLeod et al, 2005; Town et al, 2000). This report describes the smoking prevalence of nurses in Aotearoa/New Zealand, and examines their smoking history, knowledge, attitudes, and practice related to smoking cessation and smokefree workplaces.

✚ Aims

1. To assess the knowledge, attitudes towards smoking, the provision of smoking cessation advice and treatment, and attitudes to and management of smokefree workplaces in a sample of nurses with practising certificates in New Zealand.
2. To describe the prevalence of smoking in nurses using the 2006 New Zealand census.

✚ Methods

Survey: Questionnaires were posted to a random sample of 1000 nurses (500 community-based; 500 hospital-based) from the New Zealand Nursing Council register of nurses with current practising certificates.

Census: Statistics New Zealand provided results from the New Zealand Census of Population and Dwellings, 2006, for nurses by gender, practice area and cigarette smoking status (Statistics New Zealand, 2007a).

FINDINGS

Survey results

Responses were received from 371 (37%) of the nurses. Most identified as female, New Zealand European, and had practiced for 6 years or more. Only 7% of the survey respondents were smokers, but most wanted to quit (Table 1). In total, 43% of the respondents said they had received some form of smoking cessation training.

Knowledge of the health risks of smoking was high. However, there was wide misunderstanding that nicotine caused cancer and heart disease. Most still believe that nicotine is the component of tobacco smoke that is primarily responsible for smoking related illness (Table 2). This belief could be a barrier for the use of effective smoking cessation medications. In fact nicotine is responsible for addiction and it is products of combustion that have greatest risk for disease (Royal College of Physicians of London, 2000; World Health Organisation, 1986).

Nurses were enthusiastic about and committed to including smoking cessation in their practice, and to learning more about helping clients who smoke. Nine out of ten felt that it was part of their responsibility to advise clients to stop smoking. Nearly nine out of ten said they would be happy to spend five minutes with each patient who smoked if they could effectively intervene. There were gaps in knowledge of smoking cessation services such as Aukati Kai Papa, a service reflecting Maori culture and identity (Table 2).

❖ **Table 1: Demographics, smoking status and cessation training**

Demographics	%
Female	95
New Zealand European/Pakeha	83
Registered nurse	93
Practising for 6 years or more	77
Smoking status	
Ex smoker	35
Current smoker*	7
Highly dependent (smoke within 30 minutes of waking in the morning)	40 [#]
Wish to stop smoking	88 [#]
Have received smoking cessation training[†]	
Providing brief smoking cessation advice	34
Use of NZ Guidelines for Smoking Cessation	14
Provision of nicotine replacement therapy	19

* Smoked 5 cigs/day (average) * % Current smokers only † Respondents could select more than one

❖ **Table 2: Nurses' knowledge, attitudes and practice**

Knowledge of health effects of smoking	% agree
Most people smoke because they are addicted to nicotine	91
Withdrawal symptoms are commonly experienced by smokers when they stop	97
Smoking is a known risk factor for:	
– Lung cancer	100
– Heart disease	100
– Emphysema	99
– Mouth cancer	96
Knowledge of effects of nicotine	
Nicotine is the main product in tobacco smoke that causes:	
– Cancer	63
– Heart disease	64
– Emphysema	63
Tobacco companies typically add chemicals to tobacco to improve nicotine delivery	57
Attitudes	
It is part of my responsibility to advise my patients to quit smoking	90
Barriers: – Most patients will not give up smoking even if advised to do so by a nurse	55
– Nurses do not have the necessary skills to help smokers to stop	23
– I don't have time to advise my patients about how to quit smoking	21
– Discussing smoking cessation harms my relationship with patients who smoke	9
Smoking cessation is the role of primary care	78
I would be interested in learning more about how to help my patients quit smoking	77
Would spend 5 minutes more with patients who smoke if could effectively intervene	87
Whether or not a nurse smokes is entirely her/his own business	45
Patients are less likely to take advice from a nurse who is a current smoker	72
Practice and smoking cessation	
I ask my patients if they smoke cigarettes	84
I advise my patients about the health risks of smoking	80
I advise my patients who smoke to quit	68
I advise my patients who smoke to cut down	71
I provide smoking cessation counselling to patients who smoke	39
I am likely to refer patients who smoke to Quitline	78
I am likely to refer patients who smoke to Aukati Kai Paipa*	44

* 27% had never heard of this service

There were gaps in knowledge of effective smoking treatments (Table 3). Nurses were more likely to know of nicotine patches and gum for smoking cessation than medications such as nicotine inhaler or nortriptyline. Treatments such as hypnosis and acupuncture were identified as effective treatments by some nurses but there is no evidence of long-term effectiveness (Abbot et al, 2006; White et al, 2006). There is currently insufficient evidence to determine the effectiveness of Nicobrevin and so it should not be recommended (Stead & Lancaster, 2006).

Table 3: Nurses' beliefs about smoking cessation treatments

Percentage of nurses who believe in the effectiveness of proven and unproven smoking cessation treatments for smoking cessation			
Treatments with proven efficacy	% of respondents who believe that treatment is effective	Treatments with unproven efficacy	% of respondents who believe that treatment is effective
Nicotine patch	79	Hypnosis	40
Nicotine gum	56	Nicobrevin	33
Bupropion	22	Acupuncture	30
Nicotine inhaler	14	St Johns Wort	4
Nicotine lozenge	12		
Nicotine microtab	11		
Nortriptyline	8		

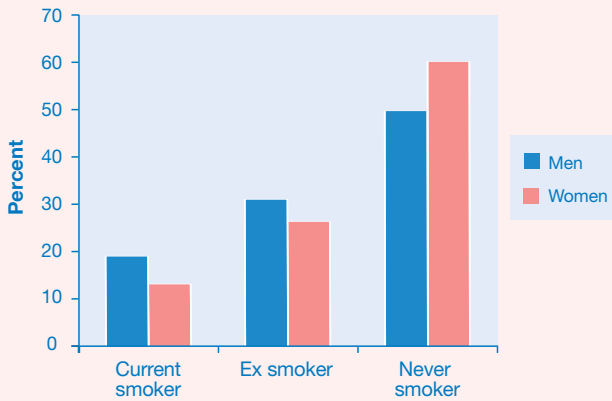
1% (n=4) thought none of the above 16% did not know

Smokefree environments

Nurses supported their smokefree work policies (96%). A fifth of those who reported having to enforce smokefree policy indicated that they did not have support to do so.

Census 2006 results

Figure 1: Nurse smoking status by gender, 2006 census

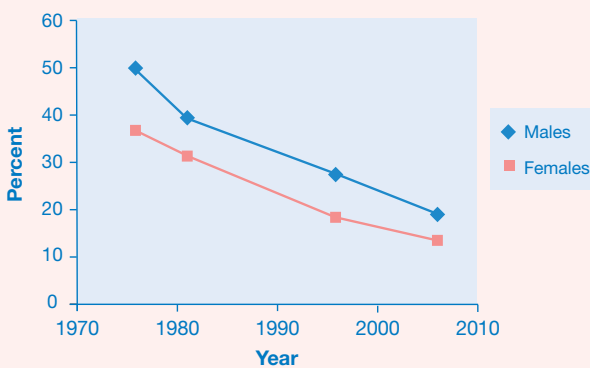


Fourteen percent of nurses identified as regular smokers in the 2006 Census. Males (19%, n=485) smoked more than females (13%, n=4,023) (Figure1).

Nurse smoking prevalence declined to 14% in 2006 (Figure 2).

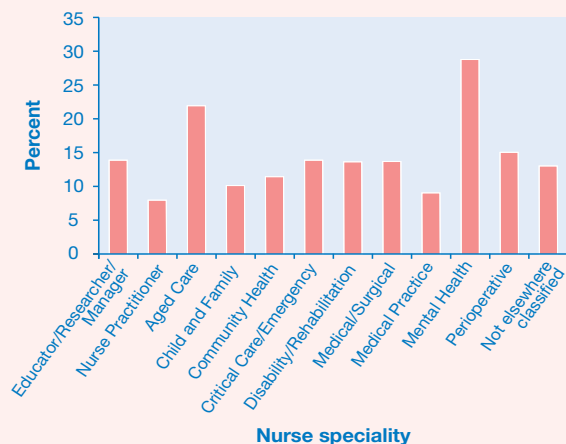
Twenty two percent of nurses who work in aged care smoke. Smoking rates in mental health nurses (29%) are higher than the New Zealand general population (21%, Statistics New Zealand, 2007b). This is of concern because the smoking status of nurses has been shown to affect their attitudes towards smoking and smoking cessation, and also has an impact on provision of smoking cessation advice (Padula, 1992). Smoking rates are below 15% for all other nurse specialties (Figure 3).

Figure 2: Census trends, prevalence of nurse smoking by gender



1976, 1981, 1996 data: Hay, 1984 & 1998; 2006 data: Statistics New Zealand 2007a

Figure 3: Prevalence of nurse smoking by area of work, 2006 census



Conclusions

Nurses have positive attitudes about helping smokers including giving brief advice and providing treatment. They are enthusiastic about expanding their knowledge and skills.

There are some common barriers that need to be addressed. They include gaps in knowledge which could impede the delivery of effective interventions. More education will improve knowledge of best smoking cessation practice for pregnant women, the role of nicotine, knowledge of specialist smoking cessation services, knowledge of effective smoking cessation treatments and

understanding that provision of advice to stop smoking can be delivered in as little as 30 seconds (Ministry of Health, 2007).

Nurse smoking rates are declining. However, resources and services to support smokefree mental health settings are needed to match the high levels of need in staff and clients in these areas. Nurses who smoke should be supported to quit (most want to stop). It is imperative that they receive the level of personal and institutional support they need to quit.

Recommendations

Nurses

- Support nurses who wish to stop smoking.
- Integrate brief advice to stop smoking in nursing practice. <http://www.moh.govt.nz>
- Include promotion of smokefree workplaces and client environments in nursing practice.
- Ensure the Nursing Council of New Zealand mandates smoking cessation training in all under-graduate, new-graduate and post-graduate courses for nurses.
- Acknowledge smoking cessation and tobacco control as a specialty nurse area of practice.
- Form a nurses' smokefree advocacy group.
- Conduct research and evaluation to inform smokefree nursing practice in New Zealand.
- Include nurse representation on tobacco control action groups.

Employers and Ministry of Health

- Support nurses who smoke to stop.
- Make provision for nursing staff involvement in smokefree practice.
- Prioritise upskilling the nursing workforce with smoking cessation training.
- Fund nurses directly to deliver smoking cessation treatments.

References

- Abbot, N.C., Stead, L.F., White, A.R., Barnes, J. (2006). Hypnotherapy for smoking cessation. *Cochrane Database of Systematic Reviews* (2).
- Hay, D.R. (1984). Intercensal trends in cigarette smoking by New Zealand doctors and nurses. *New Zealand Nursing Journal*. 77(10):7-9.
- Hay, D.R. (1998). Cigarette smoking by New Zealand doctors and nurses: results from the 1996 population census. *New Zealand Medical Journal*. 111(1062):102-4.
- McLeod, D., Cornford, E., Pullon, S., de Silva, K. & Simpson, C. (2005). Can Quit Practice: a comprehensive smoking cessation programme for the general practice team. *New Zealand Medical Journal*. 118 (1213).
- Ministry of Health (2004). *Clearing the Smoke: A five-year plan for tobacco control in New Zealand (2004-2009)*. Wellington: Ministry of Health. <http://www.moh.govt.nz>
- Ministry of Health (2007). *New Zealand Smoking Cessation Guidelines*. Ministry of Health. <http://www.moh.govt.nz>
- Padula, C. (1992). Nurses and smoking, review and implications. *Journal of Professional Nursing* 1992;8:120-132.
- Rice, V.H. & Stead, L.F. (2004) Nursing interventions for smoking cessation. *Cochrane Database of Systematic Reviews* (2).
- Royal College of Physicians of London (2000). *Nicotine Addiction in Britain*. A report of the Tobacco Advisory Group of the Royal College of Physicians. Available at: <http://www.rcplondon.ac.uk/pubs/books/nicotine/>
- Statistics New Zealand.(2007a). *New Zealand Census of Population and Dwellings, 2006*. Data supplied to Hayden McRobbie, Clinical Trials Research Unit, The University of Auckland. Reference Number: ROM13858.
- Statistics New Zealand.(2007b). *New Zealand Census of Population and Dwellings, 2006*. Data supplied to ASH, NZ. Reference Number: TRM17108.
- Stead, L.F. & Lancaster T. (2006). *Nicobrevin for smoking cessation*. *Cochrane Database of Systematic Reviews* (2).
- The Nursing Council of New Zealand (2004) *Scopes of Practice*. <http://www.nursingcouncil.org.nz/scopes.html>
- Town, G.A., Fraser, P., Graham, S. McSweeney, W., Brockway, K. & Kirk, R. (2000). Establishment of a smoking cessation programme in primary and secondary care in Canterbury. *New Zealand Medical Journal*. 113: 117-9.
- White, A.R., Rames, H. & Campbell, J.L. (2006) Acupuncture and related interventions for smoking cessation. *Cochrane Database of Systematic Reviews* (2).
- World Health Organisation. (1986) *IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans Tobacco Smoking* 38 International Agency for Research on Cancer: Switzerland.

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